Health Capital and Sustainable Socioeconomic Development



Edited by

Patricia A. Cholewka · Mitra M. Motlagh



Health Capital and Sustainable Socioeconomic Development

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Foreword

This challenging, wide-ranging, and multidisciplinary volume highlights health and development issues as diverse as famine, natural disasters, pandemics including HIV/AIDS, the war on drugs, psychosocial disabilities, forced migration, and the "brain drain" of health professionals. Many chapters draw attention to the human rights dimensions of these challenges, as well as other critical considerations, such as the place of these issues in international relations and how they relate to health systems.

Increasingly, these issues are demanding the attention of the international community, international agencies, universities, think-tanks, non-governmental organizations, and social movements. Moreover, in some cases, such attention is generating creative, innovative responses that aim to promote equitable development and improve health and well-being.

This book is an original contribution to the subject, not only covering diverse health crises around the world and analyzing their causes, but also providing insights into effective, pragmatic, and sustainable solutions. Encompassing theory and practice, some chapters highlight advocacy, participation, and the role of collaborative networks. Others explore the important role of human rights in enhancing equitable development, sustainability, accountability, and so on. Properly understood and applied, human rights can help to clarify what needs to be done and provide practical guidance on how to do it. The unifying theme focuses on how to promote sustainable socioeconomic development and well-being.

One of the particular strengths of this collection is its global focus and the worldwide provenance of its contributors who come from the Max Planck Institute, Columbia University, the London School of Economics, the Russian Academy of Sciences, CARE Perú, and elsewhere. The authors hail from countries as diverse as Australia, Belgium, Germany, Iraq, Peru, Russia, and the United Kingdom.

I hope this inspiring book will encourage readers to develop their own applied research in the area of sustainable socioeconomic development.

Professor Paul Hunt

Preface

This coedited book addresses an unmet need in the marketplace by posing management strategies from various international sources for improving healthcare outcomes. With the recent outbreaks of worldwide calamities such as famine, natural disasters, pandemics, proliferation of substance abuse, posttraumatic syndrome states, and other related disease containment concerns, there is increased international attention to disease detection, surveillance, prevention, containment, and treatment methods. There is also a growing realization of the important role that health capital plays in increasing the value of a nation's well-being, that is, on the quality of a nation's socioeconomic development. This concept has been referred to as the health capital of a nation.

The international community is paying more attention to mounting evidence showing the strong relationship that exists between human capital and sustainable socioeconomic development.

Because of the above and the increasing upsurge in health risk factors influencing quality of life, it is timely, necessary, and important that this book be published. This book contains chapters from interdisciplinary authors in the international health and sustainable development fields to advance this new discourse about the importance that population health has on psychosocial and economic viability and propose, for discussion sake, and the need for improving healthcare management policy as we progress through the new millennium. All those interested in maintaining their own good health status, students of international health, practicing professionals of various disciplines, public health administrators, and those who are just curious about how global health can affect their own well-being will be able to find useful information.

International development scholars and interdisciplinary healthcare practitioners from all around the globe were invited to submit original manuscripts addressing psychosocial and economic developments from a various range of disciplines including law, economics, medicine, psychology, nursing, and sociology.

Issues of development, environment, and health are closely related. Ill health hampers economic and social development by triggering a vicious cycle of

unsustainable resource use that challenges a country's economic stability. In addition, education for socioeconomic development is compromised by conditions and behaviors that undermine the physical and emotional well-being that makes learning possible.

Users of this book will be encouraged to

- Incorporate ideas into an educational program about global health.
- Implement new policies to improve healthcare services and improve the health capital of populations.
- Improve public administration of healthcare systems at the macro- and microeconomic levels.
- Compare other sources of information and foster intellectual debate and discourse.
- Discover, or investigate, new and previously unknown sources of information for the general public as well as healthcare professionals.
- Inform/educate interested non-healthcare professionals or those in other fields that have an impact on the healthcare sector.
- Stimulate research into these issues.
- Supplement knowledge already held or provide more in-depth information about these healthcare issues.
- Encourage a more curious attitude in some of the general public to learn more about these issues and improve the quality of their lives.
- Influence others to take a more active approach through professional education, political involvement, or financial contributions to healthcare activities.

The book targets an international audience working or studying in a large range of topics including healthcare, public health, medicine (including psychology, psychiatry, infectious diseases, etc.), and law (including international public law, human rights, international rights of the child, policy analysis, sociology, economy, etc.).

The various topics developed are illuminated in a readable, interesting, and pertinent manner. The reader will be able to understand the various politico-legal and macro- and microeconomic issues that influence the international healthcare sector in providing healthcare services and the influence this industry has on the life opportunities and well-being of world inhabitants and their societies.

This book presents a new and more comprehensive overview and perspective about this topic that has never before been presented. The intended audience needs this book to enhance present understanding of healthcare financing, management, and service provision and the effect that the efficient versus inefficient management of this sector exerts on the overall socioeconomic condition of the international community.

It also focuses on the importance of the effect of health capital on psychosocial and socioeconomic sustainability. It provides a more varied and comprehensive

international perspective by inviting participation from experts from around the world with a more in-depth basis for academic and political discourse.

This book has brought a wide-ranging group of specialists together to cover a major information void in fields associated with health and sustainable development. This book is not only anticipated by current stakeholders in the field of sustainable development including researchers, policy makers, and academicians, but also by a diverse readership with an interest in economics, health, mental health, law, and international development. With its international panel of authors and the quality of their affiliations (e.g., Columbia University, World Health Organization [WHO], CARE Perú, University of Cologne, etc.), this book is an indispensable reference as a scientific state of the art, a guideline, and a didactic tool on health and international sustainable development. It will also help the readers to better contribute to the development and progress of the nation's health capital.

Editors

Patricia A. Cholewka, EdD, MPA, MA, RN, BC, is a nursing professional experienced in medical—surgical healthcare provision, management, and performance improvement consultation for acute care, home care, and managed care environments. She is an assistant professor, Department of Nursing, at the New York City College of Technology (NYCCT) of the City University of New York (CUNY) and teaches the baccalaureate level courses. She holds a doctorate in international education development (EdD) from Teachers College, Columbia University; a master of public administration and policy (MPA) and a master of arts in informatics (MA) from New York University; and a bachelor of science in nursing (BSN) from Castleton State College. Her doctorate focused on identifying transcultural issues affecting the sustainability of performance improvement and economic management of healthcare systems.

Dr. Cholewka is board certified in both nursing administration and healthcare quality and is an elected member of two honor societies: Sigma Theta Tau International, Honor Society of Nursing, and Phi Delta Kappa, International Honor Society in Education. She is listed in the Sigma Theta Tau's *Media Guide to Health Care Experts* as well as in many of the *Marquis Who's Who* editions. She was awarded a 2007–2008 Fulbright Scholar Lecture/Research Grant to Lithuania by the Bureau of Educational and Cultural Affairs of the U.S. Department of State.

In addition to her professorial work at NYCCT, she has resided in the Middle East and Central/Eastern Europe (i.e., Austria, Bulgaria, Canada, Hungary, Israel, Lithuania, and Ukraine) while teaching, consulting, conducting healthcare research, or presenting at international healthcare conferences. She is an author and reviewer for leading healthcare publications, a member of various professional healthcare associations, and an international consultant for nursing and medical performance improvement.

Mitra M. Motlagh has served as a health and human rights officer for the World Health Organization (WHO) in Mozambique since early 2006 where she is involved in projects dealing with the integration of human rights in health development, with a particular focus on key health challenges.

Before joining the WHO she worked as a lawyer for Allen & Overy in Belgium. She also collaborated with the United Nations information centers in Washington DC and Brussels and with the International Criminal Court at The Hague in the Victims Participation and Reparation section. Her expertise covers international criminal law, public international law, and human rights with a special focus on right to health. She is a human rights lawyer with degrees from the University of Brussels and Georgetown University Law Center.

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SOCIAL AND CULTURAL ISSUES

Chapter 1

The Morality of HIV/AIDS: A Comparison of Russian Orthodox Church and Secular NGO Approaches

Jarrett Zigon

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1.1 Introduction

Increasingly, Russians are realizing that they are living in a country with the highest number of HIV (Human Immunodeficiency Virus) positive persons in Europe, and, according to a 2001 UNAIDS (Joint United Nations Programme on HIV and AIDS [Acquired Immune Deficiency Syndrome]) report, one of the fastest HIV growth rates in the world. And yet, prevention and treatment programs remain scarce and underfunded. What programs do exist can be seen as representing competing moral positions in the struggle against the HIV/AIDS crisis in Russia. This chapter is an attempt to disclose the moral assumptions behind the HIV prevention programs offered by, on the one hand, the Russian Orthodox Church (ROC) and, on the other hand, the secular non-governmental organizations (NGOs). This will be done by comparing and contrasting the moral discourse of each of these institutions and by providing examples of each from my fieldwork in St. Petersburg.

This chapter consists of two main sections. Because my research comes from the perspective of the anthropology of moralities, the first section provides a brief summary of the theoretical approach of my current project. In this section, I will outline the theory of moral breakdown that I suggest provides a coherent framework to the emerging, but yet, under-theorized, subdiscipline of the anthropology of moralities. In doing so, I will show how this theory provides legitimacy to the choice of the HIV/AIDS crisis in Russia for a proper study of local moralities. The second section provides background information on the HIV/AIDS epidemic in Russia, and then goes on to show how the ROC and secular NGOs have approached the crisis as a moral problem. Finally, I will make a brief conclusion about how the moral assumptions of each of these institutions affect the kinds of programs they offer and their ability to work together.

1.2 Moral Breakdown

The concept of morality has increasingly been invoked in the studies of anthropologists [1]. The use of this concept is seen by some as a way to bypass the complexities and contradictions of such traditional social scientific concepts as culture, society, and power [2]. Nevertheless, it is becoming increasingly evident that in many of these studies morality is used in a way that may be more reminiscent of the moral understanding of the social scientist than that of their subjects.

One explanation for why anthropologists continue to interpret their subjects' moral worlds in terms of their own is that anthropology lacks a theoretical basis for a systematic anthropology of moralities [3]. For those few anthropologists who have intentionally undertaken an anthropological study of local moralities, there is very

little agreement about what constitutes the moral. Even if this is finally, if not reluctantly, agreed upon, then there is even less agreement about just how it is we should go about studying it. Indeed, for many anthropologists in general, the very notion of an anthropology of moralities is quite strange. This is so because it is often believed that anthropologists in their innumerable studies of, for example, cultures and societies, religious and kinship systems, modes of exchange, and gender relations have been studying morality all along [4]. It is this belief, I contend, that has also led to a general disagreement among those of us who have attempted an anthropological study of moralities. Because we have no theoretical or methodological foundation for an approach to our subject of study, we anthropologists of moralities have thus far had to borrow our theories and methods from other anthropological studies.

In response to this lacuna, I have elsewhere suggested a theory of moral breakdown [5]. The theory of moral breakdown makes a distinction between morality and ethics. Morality is a kind of habitus or an unreflective and unreflexive disposition of everyday social life. Morality, then, is not thought out beforehand, nor is it noticed when it is performed. It is simply done. It is one's everyday way of being in the world. Ethics, on the other hand, is a kind of stepping-away from this moral habitus. It is brought about by a moral breakdown or problematization [6]. This occurs when some event or person intrudes into the everyday life of a person and forces them to consciously reflect upon an appropriate ethical response (be it words, silence, action, or nonaction). It is in the moment of moral breakdown, then, that morality itself becomes a conscious question or dilemma.

This theory forces the anthropologist to find moments of moral breakdown to study. It is no longer possible to simply speak about the morality of a person or group of persons, instead anthropologists of moralities must focus upon the problematization of morality. For it is at the intersection of morality and ethics, at this breakdown, that it becomes possible to see how morality plays a role in the everyday lives of the people we study. But how is it possible to find this breakdown? One answer to this question is by looking for those moments or topics around which morality is articulated in public discourse. Although this may prove difficult to find in the lives of individual persons, it becomes much more obvious in the public lives of institutions. It is with institutions in Russia, then, that I have focused my research on the moral discourse concerning HIV/AIDS.

1.2.1 Moral Breakdown in Post-Socialist Russia

For nearly the last 20 years, the Russian people have been living through a period of social and political upheaval and cultural and epistemological questioning—or what is often referred to as a period of transition. It has been argued that rather than bringing about a condition of increased homogeneity, globalization has brought about an increasing intensity of problematization [7]. It is my contention that like globalization, the so-called transition of post-Soviet Russia is also characterized by

problematization, or what I have called breakdown. One characteristic of this questioning is the struggle by individuals and institutions to articulate a coherent and widely acceptable notion of morality.

Although I would not go as far as some who have argued that Russia today has no moral limits [8], it is clear that Russia is characterized by the constant questioning of a moral breakdown, part of which consists of the struggle over competing moral conceptualizations. It was this cacophony of moral questioning that led me to do research in Russia between 2002 and 2005 on individuals' conceptions of morality [9]. While that work focused on individuals' personal experiences of the Soviet and post-Soviet periods and how these helped shape their respective moral conceptions, a topic that was quite pertinent in a society filled with constant questioning of morality, my current research, and the topic of this chapter, begins from a different perspective. By looking at the ways in which the ROC and the secular NGOs each provide a particular moral discourse surrounding the HIV/AIDS epidemic, my research considers how these discourses are articulated in the interactions between organizational staff members and those persons seeking help from these organizations.

I have chosen this topic not only because it is a topic of some importance and immediacy in Russia today, which it certainly is, but also because at a more theoretical level it is an example of what I have called a moral breakdown. Thus, the HIV/AIDS epidemic is the locus of, for example, debates about morality between the ROC, the secular NGOs and the Russian government, differing legislative, medical and support practices arising from this debate, and moral questioning both on the part of those who try to provide help and those who are receiving help. For this reason, then, the HIV/AIDS epidemic in Russia is an example of a moral breakdown and provides an opportunity for a focused anthropological study of moralities.

The HIV/AIDS Epidemic in Russia

Background 1.3.1

In the terminology of the international HIV/AIDS community, Russia is considered a second wave country. By this it is meant that the epidemic hit Russia relatively late compared to other parts of the globe. By the time the first case of HIV/AIDS was registered in Russia/USSR in 1986, many other countries, for example, the United States, had already experienced a full epidemic. It was not until ten years later, however, that HIV/AIDS began to spread rapidly, predominantly through injected drug use. The relative late arrival of HIV/AIDS to Russia is at one and the same time a blessing and a curse. While on the one hand, because the epidemic is at such an early stage "urgent, comprehensive, and effective measures can still dramatically impact further development of the epidemic and save many lives before it is too late" [10]. On the other hand, because the medical, socioeconomic, and political consequences of the epidemic have yet to fully manifest themselves, many Russians, including politicians, medical personnel, and at-risk individuals, have denied the problem. It is at the intersection of this hope and denial that many aid organizations fight their battle.

Since 2001, Russia and Eastern Europe have had the unsettling distinction of having one of the fastest growing HIV/AIDS epidemics in the world [11]. As of October 2006, there has been over 350,000 officially registered cases of PLWHA (people living with HIV/AIDS) in Russia, and in the first nine months of 2006, there has been a 5 percent increase of registered persons with HIV since the same period in 2005 [12]. This number of registered cases ranks highest among all European countries and accounts for 70 percent of reported cases in Eastern Europe and Central Asia. Outside of official statements by the government, however, it is almost unanimously agreed that the number is much higher. According to one estimate, it could be as high as 1.4 million. However, most tend to reference the UNAIDS/WHO (World Health Organization) estimate of 940,000 [13]. This estimate places Russia 13th in the world for the most cases of PLWHA, while if the high estimate of 1.4 million were true, Russia would be placed seventh on this ominous list [14].

One positive aspect of the epidemic thus far is that it is predominantly limited to certain areas of the country. By far the highest number of officially registered cases has been in the Moscow and St. Petersburg/Leningrad regions. As of October 2006, the Moscow and St. Petersburg/Leningrad regions had nearly 27 percent of the total number of registered cases in the country. To put this into perspective, the 54,000 registered cases in the Moscow region alone total more than the official cases in all of Germany (43,000), which ranks 66th in the world. As with the total number of cases in Russia, however, it is expected that the actual number of PLWHA in the Moscow region is much higher. Similarly, the 40,000 registered cases in the St. Petersburg/Leningrad region is expected to be much higher. Because the epidemic has hit the hardest in these two cities, the vast majority of funding and organizations working with PLWHA are located in the Moscow and St. Petersburg/Leningrad regions. This organizational focus on the two capitals of Russia follows a global trend in government and NGO responses to the epidemic. As Schoepf points out, in many of the African cases, because governments insist on controlling aid programs from the top-down, HIV/AIDS programs have "remained confined to the capital" [15].

Although Russia follows this trend of focusing aid and prevention programs in the two capitals, it differs significantly from most other countries in how the epidemic is spreading. In Africa, for example, the vast majority of the 27 million infected people became so through sex [16]. Conversely, in Russia an estimated 70–80 percent of PLWHA became infected through the sharing of contaminated needles [17]. Thus, the Russian context differs significantly from the other epidemic hot spots in terms of risk-groups, strategies for prevention, and education. For this reason, my research focuses on injection drug users as both a risk group and as

individuals living with HIV/AIDS, and the ways in which these individuals are offered and seek help from the two organizations, the ROC and a local NGO, with which I work. Because the overwhelming number of studies thus far conducted has focused on the epidemic as sexually driven [18], my focus provides a new approach to anthropological research of HIV/AIDS and its relationship to injecting drug use. Furthermore, to the best of my knowledge, there have been no anthropological studies of the HIV/AIDS crisis in Russia. In fact, in the very year that it was announced that Russia now has the highest rate of growth of cases in the world, Russia was only mentioned in one brief sentence in three articles on HIV/AIDS in the *Annual Review of Anthropology*. It should be added that this sentence did not say a word about the epidemic in Russia, but rather only told about African students being killed in Russia because of stigmatization as potential carriers of the virus [19]. Thus, I hope what follows will provide fresh insights from a local struggle against a worldwide epidemic.

1.3.2 Response by the Government

In late December 2005, the Russian Duma and Federation Council approved a new NGO law, which essentially limits the number, parameter, and income of these organizations. Soon there after, President Putin, to the disgruntlement of the European and North American nations, signed the law into effect. Because the majority of funding for the secular NGOs working on the HIV/AIDS crisis, as well as those programs run by the ROC, are funded by international monies, they may well be affected by this new law. As of the writing of this chapter, the deadline for the submission of reregistration forms by Russian NGOs has not yet passed so it is not clear yet what will occur. Nevertheless, the deadline for foreign NGOs has already passed and many of those who were unable to finish the lengthy and complicated paperwork in time have been temporarily shut down. This does not bode well for the Russian NGOs, and particularly those funded by international organizations. Because those organizations that focus on needle exchange have already been singled out by the Russian government for engaging in legally questionable activity, it is quite possible that they will be the first to feel the effects of the law. While it is expected that these secular NGOs will in various ways be affected by the new law, it is unclear whether the ROC's work with PLWHA will be also. In fact, it is not even clear if the activities of the ROC fall under the category of an NGO. This is particularly unclear in light of the special status given to the ROC in the Law on Freedom of Conscience and Religious Associations passed in 1997. It should be noted, however, that the Church-run rehabilitation and prevention programs are not actually funded by the ROC, but instead are primarily funded by international aid organizations.

It is also unclear precisely where the Russian government stands on the struggle against HIV/AIDS. On the one hand, there is much public rhetoric to the effect of

the government being increasingly concerned and willing to participate in the struggle. For example, in a message from President Putin printed in the *International Herald Tribune* on March 2, 2006, he claimed that one of the three central foci of the Russian Presidency of the G8 would be to fight against infectious diseases, especially that of HIV/AIDS. Similarly, there are already in place a number of laws meant to stem the propagation of the epidemic, as well as to guarantee the rights of those already infected and their families. Nevertheless, these laws are not regularly enforced, and thus are effectively not valid. Therefore, the lack of enforcement calls into question the legitimacy of this political rhetoric.

This question becomes even more pressing when it is noticed that at the local level the rhetoric is often quite different. For example, the head of Moscow's city health department "announced that there is no crisis in HIV treatment, since drug users do not need it" [20]. Similarly, it is reported that in private "Russian officials observed that the death of large numbers of undesirables did not seem a crisis, and informed drug users at hospitals that their lack of social worth made them ineligible for treatment" [21]. And in May 2005, the Moscow City Duma announced a public abstinence education campaign that declared "there is no such thing as safer sex," a slogan which if misunderstood could have negative consequences far beyond the further propagation of HIV/AIDS. Thus, the Russian government at various levels sends mixed messages not only to the general population and PLWHA, but also to the organizations working to stem the epidemic. How these various messages are heard, adhered to, and ignored have serious consequences for the future of Russia.

1.3.3 Two Institutional Approaches to the Epidemic

1.3.3.1 The Russian Orthodox Church

The ROC is a late-comer to the world of HIV/AIDS prevention, treatment, policy advising, and counseling. Indeed, it was not until October 2004 that the Holy Synod of the ROC approved "The Concept of the Russian Orthodox Church's Participation in Overcoming the Spread of HIV/AIDS and Work with People Living with HIV/AIDS." Nearly a year later on September 6, 2005, the Concept was publicly released to a roomful of reporters and other media members by several Church officials, with government and UNAIDS officials standing by their side, in Moscow's House of Scientists. The reaction by those present was mixed. Alexander Goliusov, an AIDS expert with the watchdog group Federal Consumer Rights and Public Well-Being, commented that "Federal authorities, those that deal with this problem, view the Orthodox Church as an extremely valuable and necessary partner in combating the epidemic" [22]. Interestingly, however, Mikhail Narkevich, deputy head of the AIDS coordinating council with Russia's Health Ministry, rebuked the ROC for their late response: "Unfortunately, this concept appeared [only] today – better late than never... Other confessions have been more efficient

in reacting to this problem" [23]. In a possible attempt to lay the ground for future collaboration, Bertil Linblad, the UNAIDS country coordinator for Russia, expressed the hope that the Concept would provide for the principles of tolerance and pragmatism that, so he claims, are at the basis of the Western approach to the epidemic [24].

While the Concept states that the ROC is prepared to work in partnership with the state and what it calls society (civil society), it also makes it clear that the "Church does not consider it possible to collaborate with those public forces, which by exploiting the theme of HIV/AIDS defend the way of life, behavior and ethical views that are unacceptable to Christian morals" [25]. In particular, it points out that it will speak against the simplified idea that sexual education is a panacea for all misfortunes. This seems to be a direct reference to the very secular NGO, such as UNAIDS, with which the Concept just one paragraph earlier claims to hope to work. Indeed, at the public presentation of the Concept, one of the Church officials chastised Western churches for their approach to the epidemic, claiming that in caving to the pressure of the liberal community, they took a position of social pragmatism that is tolerant of sin [26]. He went on to promise that the ROC will not make moral compromises in their efforts to fight the epidemic.

In fact, the ROC primarily sees this struggle as a battle for the moral rectification of the Russian nation. According to the Concept, the social and medical factors that many others see as the basis of the epidemic are secondary to the root cause of HIV/AIDS, which the Church sees as "the abundance of sin and lawlessness, and society's loss of fundamental spiritual values, moral foundations and orientation" [27]. Thus, the ROC's primary strategy for fighting the "propagation of the HIV/AIDS epidemic is strengthening the spiritual and moral standards of society" [28]. This is to be done through spiritual training. Although the Concept emphasizes that this training is particularly important for children, it says little about how this training will take place with PLWHA.

It is not surprising that the ROC sees sin and immorality as the basis of the propagation of HIV/AIDS. As one of the Church officials who presented the Concept stated, "society must not hide from the realization that there is a connection between sin and the disease" [29]. But yet, it is not entirely clear to which sin he is referring. For in The Foundations of Social Concepts of the Russian Orthodox Church, the ROC's public position on various social questions, it is stated not only that disease and illness are the result of sin, but also in particular it is the result of the sin of previous generations. Thus, disease and illness result from inherited immoral consequences.

it is important to remember that a genetic disturbance is quite often a consequence of the neglect of moral foundations, the result of a deprayed way of life, as a result of which their descendants suffer. The sinful damage of man's nature overcomes spiritual efforts; if from generation to generation vice rules in the life of the progeny with increasing strength, then the words of the Saints Writings will be realized: "a terrible end awaits the unjust family." And conversely: "The blessed man is he who fears the Lord and deeply loves His commandments. There will be great strength on the land of his family; the family will be rightly blessed" (Psalms 111, 1–2). In this way, research in the field of genetics only confirms the spiritual law which was revealed to humanity many centuries ago by the word of God. [30]

Thus, it is quite likely that the ROC sees not only the immoral behavior of PLWHA, for example, injecting drug use, extramarital and homosexual relations, and sex work, as the cause of infection, but so too the genetic past of these individuals. In fact, the Concept explicitly states that HIV/AIDS should not be thought of as a kind of payback for individual sins. Rather, it is the result of the sinful nature of humans. But the question must be asked: what does this nature consists of, to whom does it belong? In other words, when the Church and its volunteers work with PLWHA, do they consider them sinful persons because of their human nature, or because of their familial genetic nature, or because of their individual nature/behavior? More importantly, does the way in which they conceive of these individuals as sinners affect the way in which they offer them help?

Russian Orthodox Church Programs in St. Petersburg—In the St. Petersburg/ Leningrad region the ROC's programs to help in the prevention and treatment of HIV/AIDS are primarily an extension of their long established drug rehabilitation and palliative care programs. The former centers around two rehabilitation centers located about an hour outside the city and includes pre-rehabilitation psychological, medical, and spiritual counseling at the Alexander Nevsky Monastery, the diocesan headquarters located in St. Petersburg, and post-rehabilitation weekly group meetings at the Monastery. After rehabilitation one may also choose to go live for several months at a parish or a monastery located about 1200 km from the city, but only about 25 percent of rehabilitants choose to do so. The palliative care program centers on weekly hospital visit by a priest to the local AIDS center, where he holds a prayer service in a small church located on the main floor of the center. He also visits with those patients who are unable to come to the service, hears confession, provides literature to those who request it, and generally spends time and holds conversation with the patients.

About 60 percent of the rehabilitants at the two rehab centers are HIV positive. The percentage is about the same at the post-rehabilitation group meetings, although it should be pointed out that not all those who return from the rehab centers attend this weekly meeting. Indeed, only about 35 percent of those who attend the Church-run rehabilitation centers remain drug free. Of this 35 percent, an overwhelming number of them also chose to attend one of the parishes or monasteries for several months. Perhaps it is for this reason that the priest who

runs one of the rehab centers told me that "I suppose rehabilitation is possible without faith, but I have never seen it."

Here you see the crux of the ROC's position on both drug rehabilitation and HIV/AIDS—both are a problem of immoral behavior. Only when one stops acting in immoral ways, for example, using drugs, fornication, and sex work, can one properly become rehabilitated. But notice, rehabilitation for the ROC is not simply a matter of stopping this immoral behavior, more importantly it is a matter of inculcating rehabilitants with new moral ways of being. As the leader of the ROC's programs on HIV/AIDS in the St. Petersburg/Leningrad region told me, "sometimes a person getting HIV can be a blessing, because then they realize they need to change their ways." When I questioned her about this, she told me: "yes the Church does try to help people here in this life, but primarily we are concerned with helping people attain a blessed afterlife." Thus, in its struggle with the HIV/AIDS epidemic, the ROC in the St. Petersburg/Leningrad region sees conversion as its primary weapon. For from their perspective, HIV can only be prevented, or one who has already been infected with HIV can only be properly helped, with the assistance of God and the true belief and orthodox morality of the person seeking help. In other words, for the HIV prevention and treatment programs offered by the ROC to properly provide aid, the person must change themselves, their beliefs, and their behavior entirely.

1.3.3.2 Secular NGOs

Unlike the ROC's recent official concern for the epidemic, secular NGOs, both Russian and international, have been working on prevention, treatment, policy advising, and counseling since the mid-1990s. These organizations work at various levels and utilize different strategies in their struggle against the epidemic. While some of these organizations work primarily with the Russian government and health community to assure just laws and adequate medical attention for PLWHA, many other organizations work on the street-level in educating and treating both infected and at-risk individuals. For this reason, then, it is impossible to speak of these secular NGOs as united in their approach, works, or assumptions. Nevertheless, it is possible to discern a general moral discourse that emerges through their various public documents.

The most obvious moral position taken by these NGOs is that the only way to properly combat the propagation of the epidemic is by guaranteeing human rights. "There is a clear understanding throughout the world that guaranteeing human rights is an indispensable weapon in the fight against the epidemic. These include not only the rights of PLWHA, their family members, and representatives of highly vulnerable groups, but also the rights of the general population to have access to information, preventive measures and means, treatment and care, and protection against harassment and discrimination" [31]. These rights are seen as a way of empowering, on the one hand, PLWHA to participate in fighting the epidemic, and on the other hand, the general population by avoiding the propagation of the

epidemic. Examples of such rights are "the right to the best attainable standard of physical and mental health; the right to access to information and education; the right to privacy; and the right to participate in scientific progress and enjoy its benefits" [32]. Therefore, just as the ROC references human nature and the need to reconcile it with Christian morality, so too do the secular NGOs reference human nature as the starting point for the overcoming of the HIV/AIDS epidemic. When human nature can be fully realized and empowered by means of human rights, then the further propagation of the epidemic can be halted. Although it is often claimed that the notion of human rights is founded on a natural law theory, which at its most basic asserts that morality and governmental/institutional law are based on a shared human nature, Talal Asad has argued that human rights are better understood as the expression of a particular socio-politico-historical order [33]. In other words, human rights are the expression of a certain kind of power. Asad's point seems to ring particularly true when considering the list of human rights listed above.

One key aspect to the secular NGO approach is to overcome moral objections to prevention [34]. In other words, it is necessary to replace one morality with another. Thus, instead of stigmatizing drug users and sex workers, they should be given clean needles, condoms, and information [35]. Instead of ignoring the sexuality of young people or simply focusing on teaching them Christian morals and family values, they should be taught sexual education in schools [36]. Similarly, the moral and religious values underpinning censorship should be reconsidered in light of the potential benefit censored information could bring for fighting the epidemic [37]. Thus, it would seem that one of the unstated goals of the secular NGOs is to overcome a traditional morality that may hold some responsibility for the propagation of the epidemic, and replace it with another.

For the secular NGOs, then, just like with the ROC, the goal of ending the propagation of HIV/AIDS in Russia depends upon an absolute revaluation of morals. For both the ROC and the secular NGOs, the current moral standards of Russia are, if not the root cause of the epidemic, then certainly an impediment to overcoming the crisis. The problem, however, is that neither institution agrees about which morals are necessary and which are the problem.

An NGO in St. Petersburg—An example of one such NGO is Humanitarian Action (HA), which was officially registered in 2001 and is associated with Medicines du Monde, France. In the last five years, HA has established itself as one of the most active and significant NGOs working on the HIV/AIDS epidemic in St. Petersburg. In total, they oversee five programs throughout the city and region. These include a center for street children, a bus and minivan for mobile outreach and preventive care with injecting drug users and sex workers, a joint program with one of the city's infectious disease hospitals, and a training center to help insure best practices in the region and throughout Russia.

Each of these programs (excluding the training center) provides medical, psychological, and social therapy to at-risk persons. These include free testing for

HIV, Hepatitis B and C, and syphilis as well as pre- and posttesting counseling, needle exchange, condom distribution, medical consultation with doctors, opportunities to meet and talk with psychologists and social workers, and group therapy. Indeed, each of these services is considered by the staff members of HA as essential human rights for at-risk persons. As one social worker put it to me, "it is very difficult here in Russia for these people (at-risk persons) to get these services. Oftentimes they are denied any medical treatment at all, doctors just send them away. Or, for example, if they end up in a hospital they will have their blood taken for tests without consent. This is why I think it is a human rights problem." Such experiences were confirmed to me by the majority of injecting drug users and HIV positive people with whom I spoke.

Unlike with the services provided by the ROC, HA's primary concern is not the change of behavior of those with whom they work, but in providing assistance so that risks can be minimized. This does not mean, however, that the staff of HA does not at times attempt to convince persons at risk to take steps to stop injecting drugs or sex work. As one of the program coordinators of the joint program at the infectious disease hospital told me, when he used to work as a doctor on the bus that does work with injecting drug users, he would oftentimes talk to people about the dangers of using drugs, provide them with information about how they can get help, and even tell them that it is his medical opinion that they stop using. Nevertheless, in my observations of him and others at the joint program at the hospital, I never witnessed such interactions. Instead, the focus was on the exchange of needles and therapeutic work. When I asked him about this and told him that the priest who runs one of the Church rehabilitation centers told me that harm reduction programs (needle exchange and condom distribution) are the legalization and legitimation of sin, the doctor responded: "the Church does good work with its rehabilitation programs, but it only works if the person is prepared to change. Many people are not ready for this and someone has to help them too. That is what we do."

1.4 Some Final Words on an Is-Ought Distinction

This comment by the doctor at the joint program brings to mind the is-ought distinction in moral philosophy. This distinction, which at its most basic comes down to a distinction between descriptivism and prescriptivism, has been a central debate in 20th-century moral philosophy, and to some extent remains so despite Singer's well-argued claim that because an inevitable gap will always remain between the two, the debate is essentially trivial [38]. Although this may be true in the world of philosophy, it is far from true in the moral debates centered on the HIV/AIDS epidemic in Russia. Indeed, the difference between the two approaches discussed in this chapter can be seen as a difference based on is-ought assumptions.

According to the doctor at the HA joint program at the infectious disease hospital, some people are not ready to change. He went on to tell me that ideally

he would want them all to do so, but he knows this will not happen. So he must help them in the situation in which they are. For this doctor and other staff members of HA, as well as according to the general discourse of secular NGOs working in the field of HIV/AIDS in Russia, the fact is there are injecting drug users and sex workers who are at risk for contracting HIV. This fact—this "is"—demands, so the moral reasoning of these NGO workers go, a certain moral response. That is, it entails a moral responsibility not only on their part, but also on the part of the Russian government, medical personnel, and society in general. This responsibility is couched in terms of human rights, which are conceived as endowed by all human persons by the very fact of their existence, that is, by their very is-ness. As one HIV activist put it to a Russian Orthodox priest in a seminar on Church–NGO relations at the regional conference on HIV/AIDS held in Moscow in May 2006: "I respect your goals, but something must be done to help those who are unable or unwilling to stop using."

The response by the priest at the conference, echoing the comments above by the priest who runs one of the St. Petersburg area rehab centers, was that harm reduction programs promote sin. Although several people working within the Church structure on the HIV/AIDS problem have told me that they personally recognize the benefits of harm reduction programs, the official position of the Church is that expressed by the two priests. Because the ROC considers HIV the result of immoral behavior, the only proper orthodox prevention is the cessation of such behavior. The moral reasoning runs thus: to guarantee that one does not contract HIV, one ought to change their behavior. As the priest who runs the rehabilitation center told me, if one lives a normal life in marriage and without the use of drugs, it is nearly impossible to contract HIV. It should be recalled that in addition to this ought of changing behavior, this priest also told me that he has only seen people who have become truly faithful be able to stop using heroin. Thus, the ought is doubled for injecting drug users—one ought to change one's behavior and become an orthodox believer. Only in this way is prevention assured.

As I pointed out earlier, however, each position of this is-ought distinction, which is so crucial to the different programs offered by each of these institutions, rests on the assumption of an essential human being that demands a certain kind of respect. Although the NGO assumes a natural/social human being endowed with certain human rights, the ROC assumes a natural/Christian human being endowed with both the image and the likeness of God [39]. Each rely on certain conditions being met for the human being to become manifest. Each institution believes it is providing those conditions.

In the end, I suggest, it is not the is-ought distinction that prevents these two institutions from working together, for it would seem that some kind of mutual tolerance might be possible for each others' methods (remember that most of the people with whom I spoke in the Church structure personally support harm reduction). Rather, the difficulty lies in the starting assumptions of just what constitutes a human being. When HA and other NGOs are trying to provide

human rights to natural/social human beings, and the ROC is trying to save the souls of natural/Christian human beings; the moral starting points are completely different. In this sense, the fact that each of their goals happen to cross in the realm of the HIV/AIDS crisis in Russia seems to be mere chance. It is no wonder, then, that, as the seminar at the HIV/AIDS conference in Moscow showed well, these two institutions are much more adept at speaking past one another than with one another. In such a situation where the two main institutions working on the HIV/AIDS crisis are unable to communicate with one another (in fact, nearly every time I told an NGO staff worker that I was also working with the ROC they responded that they did not think the Church was doing anything on this issue), and the government does little more than provide mixed messages and inadequate funding, it is little wonder that the number of HIV cases continues to grow throughout Russia.

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Chapter 2

Health, Gender, and Religion in a Russian Province in Transition

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2.1 Introduction

In the last 30 years, in particular in Great Britain, the United States of America, France, and Germany, much has been said about a new perspective on health and gender in the social sciences* [1,2]. The influences of the women's movement, critical feminism, and medical anthropology on biomedical care have paved the way for a principle revision of methodological base and subjects of research. However, in Russia, the gender approach has only just emerged in the last 15 years. One can observe that the post-socialist transformation process in Russia is characterized not only by a political and economic crisis in many spheres of economic and social life, but also by the development of new discourses on gender. This development gave an impulse to reconsider the question of gender roles and the women question which was declared to be solved during the Soviet period. Today the nature of post-Soviet discourses on gender is similar to other discourses except that it is searching not only for new collective methodology, but also for personal identity.

It is known that health is a barometer and reflection of any society's socioeconomic development. A recent paper on gender and health by the World Health Organization (WHO) stated, "The 'natural' course of disease may be different in women and men; women and men themselves often respond differently to illness, while the wider society may respond differently to sick males and sick females. Women and men also respond differently to treatment, have different access to health care and are treated differently by health providers" [3].

The examination of health and disease, using the concept of gender, designates a critical approach to determining that which is implicitly present in terms such as "sex" or "sex differences." In discussions on gender issues, it is commonly understood (or implied) that the so-called women's nature cannot be any more defined and that gender is rather a historical idea or a social construct. However, the gender approach makes it possible to see the difference between gender and social roles and reveals the existence of complex relational systems. Sandra Bem[†] [4] outlined the concept of a lens through which societies understand health issues. She believes that these ideas are implanted in different social institutions, and through them, people conceive social reality and its arrangement. In that sense, they are connected to many social problems in a material world (e.g., inequality of salary for men and women), thus creating separate social realities. Bem describes three such lenses as follows: (1) androcentrism, or taking the men's experience, as a neutral standard or norm, and hence the women's experience becomes a specific notion related to sex. In that sense, man is considered as a human and woman as something different in comparison to him; (2) gender polarization that determines men and women as fundamentally different beings. This perspective is considered and utilized as an organizing principle of social life; and (3) biological essentiality which is used for legitimization of the first two views.

^{*} Anderson M., Voronina O.A.

Bem S.L. The Lenses of Gender. New Haven: Yale University Press. 1993, 2.

In Russia, until recently, the topic about gender and its relationship with health issues was considered through the lens of a social actor as well as hers or his independent fight for health. In general, statistics and the results of Soviet-era quantitative sociological studies conceptualized health as an object of social and political control and not affected by gender differences. Moreover, cultural and regional peculiarities had never been taken into consideration.

2.1.1 Background: Pre- and Post-Soviet Health Care System

In the post-Soviet era, radical decentralization of the public health care system in Russia has resulted in a rapid change of life strategies and behavior patterns concerning health issues and health care. The following main perspectives determined the Soviet-era system of heath care. First, the crucial idea of Soviet health care was the achievement of social homogeneity in terms of access to the public health care system. The idea of homogeneity was focused on giving to everybody a guaranteed minimum of social services, access to the public health care system, education, and the maximum of socialization. One can state that a relatively high level of social equality, at least in theory, had been achieved during the Soviet period. This was demonstrated in the disappearance of regional and social differences in population health and mortality indexes. Secondly, in the perpetuation of the low value placed on human life, not only in the eyes of the government but also in the eyes of the people. This means that the lack of stimulus for personal lifestyle change dominates present health care practices. And finally, the public health care system was aimed mostly at the eradication of exogenous death causes; and those causes that related to lifestyle and behavior were not taken into consideration [5].

The main idea of this article is focused on a critical view on the status of the so-called Siberian health and its transformation after the post-socialist change. Based on some preliminary results of my empirical research in the Russian province of Buryatia, I will describe the relationships between health care and gender within a cultural perspective among this urban population in Siberia. My research was based on questioning how gender and religious practices in this Siberian province influence an individual's strategy for health security. That is, how do Russian Siberians think about their "bad" and "good" health and how do they organize their concept of health care after the collapse of the Soviet public health care system?

2.2 How Strong Is Siberian Health? A Short Insight into Statistics

As a result of some negative inputs from the transition to a market economy and the inherited status of the Soviet-era public health system, Russia is dealing with increasing deterioration of physical, psychological, and social health in its

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population. Paradoxically, Siberia and the health of the Siberian people were always associated with natural, biological good health that was specific to this region. A popular Russian drinking toast related wishing everybody strong Siberian health. According to this popular stereotype, Siberians were very healthy and strong people who never got sick. However, the recently monitored population demographic information shows an opposite situation, namely, a high male mortality, a deterioration of female health, decreasing rate of reproduction, and a tremendous difference in male and female life expectancy (nearly 15 years difference between male and female). According to official Russian statistics, the Siberian federal district takes third place in the rate of mortality levels in the whole of Russia. The Siberian federal district (okrug) includes Altai region, Altai republic, Buryatia, Tyva, Khakassiya, Irkutsk, Kemerovo, Novosibirsk, Omsk, Tomsk, and Chita regions (oblast) [6].* In 2005, the general birth rate in Russia was 10.2 per 1000 persons, in Siberia it was 11.4, and in Buryatia it was 14.1. The general mortality rate in Russia was 16.1, in Siberia 16.5, and in Buryatia 15.7. The life expectancy among men was 58.8 and among women 72.3 in Russia, in Siberia 56.8 and 70.4, and in Buryatia 54.4 and 68.9 respectively. The lowest rate for life expectancy in Siberia was registered in Tyva with 51.0 among men and 62.4 years among women [6].

Generally, the health condition of the population is estimated through exponents of the population's mortality and sickness levels. As mentioned above, in the 1990s, men's life expectancy in Russia was less than women's by 15 years. But interestingly, women in all age groups have low personal health characteristics (e.g., prevalence of chronic diseases and disease pathologies). According to disease rate statistics, the Siberian district exceeds the average Russian index (whereas in 2004, it was 749.9 per 1000 persons and in the Siberian federal district, 776.6). The highest index was registered in the Irkutsk region with 837.8 per 1000 persons.

Further, toward the end of the 20th century, there was an increasing depopulation process throughout Russia because of disease, a decreasing birth rate, migration, and an increase in health risk behaviors. The number of deaths exceeded the number of births for more than 12 years—in 2005, the mortality rate in Siberia was 16.5, and the birth rate was 11.4. In comparison to Western European societies, the male and female life expectancy in Russia was less for at least 12–15 years among men and 9 years among women. Russia entered the new millennium with a significant low life duration (15–19 years for men and 7–12 years for women) much below that of the eight most developed Western nations. In Siberia, the number of births has decreased from 40 to 18 percent while the number of the geriatric population has risen. One can state that Siberia is characterized by a severe demographic crisis where the number of local population is decreasing and the number of immigrants is constantly increasing † [7].

^{*} The whole territory of ...

[†] Kaznacheev V., Akulov A., Kiselnikov F., and Mingazov I. Surviving of the Russia's population. The problems of "Sfinks XXI." Novosibirsk, 2002, 55.

It is well known that in each society, developed or underdeveloped, women's life expectancy is higher than men's. Exceptions are made for some nations like Bangladesh, India, Malta, and Nepal. It should be noted that men's health indexes exceed women's in all age groups by fundamental causes of mortality, for example, cardiovascular diseases, cancer, and accidents. Since the 1990s, the biggest problem is the high level of premature mortality.

Women often get ill and become invalids but their diseases are usually less dramatic than men's, according to L. Verbrugge, "Primarily, men and women suffer from the same diseases; gender differences are observed in frequency of problem's from the beginning to the end of life"* [8]. For example, results of American research indicates that cardiovascular diseases are one of the most basic causes of mortality among women older than 66 years and that they also are "the number one killers among 40-year old men."

2.3 Siberian Mortality and Alcoholism

I will start this gender analysis of the Siberian health condition with the level of mortality and life expectancy. In Russia today, it is still extremely difficult to obtain data from official statistics in spite of the fact that all diseases are continuously registered in numerous government institutions. Official statistics on population health and illness rely on registrations made after patients have visited a medical center and remain unreliable sources. People who have chronic diseases without acute symptoms rarely apply for any medical treatment. The most problematic issue for the societies under transition is that, because of decreasing level of medical services, this information source can lose its significance for any analysis of the health and illness of the population as a whole [9].

Today, the most important mortality problem in Russia, as well as in Siberia, is the high level of mortality among able-bodied men and women (Figure 2.1). An analysis of age indexes of both male and female life expectancy and mortality shows that for 82 percent of men and 86 percent of women, the decreasing life expectancy after 1990 refers to the increasing mortality rate in ages between 30 and 59. However, although the situation did improve in 2004, this improvement did not affect men and women between the ages of 15 and 44.

The mortality rate in able-bodied males and females is determined not only by a standard of lifestyle, but also by specific Russian cultural factors connected to lifestyle and social behavior. With reference to gender, we can differentiate the causes of mortality among Russian women and men according to a low standard of life at one hand and to specific Russian life risk factors on the other.

^{*} Verbrugge L.M. From sneezes to adieux: Stages of health for American men of and women. Social Science and Medicine, 1986, 22.



Figure 2.1 Territorial organ of federal agency of governmental statistic on Buryatia. Siberian Federal Okrug in data, Ulan-Ude. (From Rosstat, Siberian Federal Okrug in Data. Ulan-Ude, Russia, 2006, 11–14.)

At present, the post-socialist transformation period in Russia is characterized by the emergence of a sharp social inequality and non-sustainable health protection system that affects the growth of a psychological mindset concerning alcohol consumption among men and women. In Buryatia, the most important causes of mortality in all age groups are substance abuse and poisonings from alcohol. This is 58 percent higher than the average Russian level. This problem concerns men as well as women. Mortality among able-bodied people is mostly related to external causes. Economic hardship and social upheaval in Buryatia have resulted in the fact that the average life expectancy today is 61.1 years. This is less than in the whole of Siberia with its index of 67.3. This growth of mortality because of increasing risk behaviors and poisoning has an unprecedented character in Russia because this type of mortality takes second place in Russia in comparison to the rest of the world where it takes third place [6]. Thus, this mortality rate seems to take on dangerous dimensions. Dominant in the category of unexpected deaths in the whole world are suicides and traffic accidences, whereas in Buryatia, it is identified as death by accidental alcohol poisoning. Actually, these are socially conditioned diseases that can be prevented.

Since perestroika, there has been a dramatic rise in the mortality rate among the post-Soviet populations and the strongest risk factor is alcoholism. Even the economic crisis did not affect population health as dramatically as the incidence of drinking alcoholic beverages. The interesting fact is that this high mortality rate was also observed in the period between 1990 and 1994 in the most well-to-do post-Soviet regions such as Russia, Ukraine, Byelorussia, and the Baltic nations. At the same time, in the poorest countries of Transcaucasia and Central Asia characterized by harder economic crisis, the mortality rate did not grow as much [10]. Here it is appropriate to mention the new positive influence on local health behavior by existing and new religious organizations in Siberia. Some Christian sects preach abstinence from alcohol and drugs and, even in small Buryatia, this is identified as a positive influence. Furthermore, in Russia, this high mortality rate occurs not only

among the most economically disadvantaged age and gender groups, such as children and women, but also among the more economically advantaged group of middle-aged men. Even the slight rise of mortality among retired members of society is not significant in comparison to the group of middle-aged, able-bodied men. But at the same time, in other Russian provinces, for example, in poor and politically unstable regions like Ingushetia and Dagestan, it is observed that these populations have the highest life expectancy in Russia, reflecting the broader differences in the general health within different provinces. In these two provinces, the average life expectancy is estimated to be 70 years for men and 78 years for women. In contrast, in Russia, high mortality is found among the so-called strong, healthy Siberians and in particular, in the multi-ethnic regions of Tyva, Buryatia, Irkutsk, and Chita.

The relationship between alcoholism and high mortality rates in Russia has already been seen during the Soviet government-sponsored antialcohol campaigns from 1984 to 1987. In that period, 27 percent of declining alcohol consumption resulted in a decrease in mortality rate of 12 percent among men and 7 percent among women. Looking at the cultural aspects in alcohol consumption in different regions throughout Russia, it can be stated that the length and quantity of consumption are the most important factors in the high rate of mortality and low life expectancy rates. The inclusion of the gender perspective has revealed that women become alcoholics more quickly than men. In Russian society, a woman who becomes an alcoholic loses her social standing immediately, while a man can hide his behavior behind the mask of a "respectable family man" for quite a long time. It should be noted that in Russian society, the overwhelming majority of alcohol mortality victims are not considered real alcoholics, but rather ordinary citizens who used to drink strong alcohol only on holidays and weekends [11].

At present, an ongoing research of life expectancy in different regions shows that the lowest rate is among men in the Northwestern regions of Siberia, while for women, it is in Eastern Siberia and the far East regions. It is estimated that in the first third of the 21st century, if the situation does not change, Russia can drop from its present world position for life expectancy of 136 to 96 for men [6, p. 106].

2.4 Religion and the Return of Alternative Medicine

The main idea for this article is based on preliminary results of an ongoing qualitative research study conducted in Eastern Siberia on relations between personal health safety strategy, gender, and religious practice between 2003 and 2005. This project used a set of questions concerning the issue of gender roles and work division in urban families. The central question was focused on socially held conceptualizations of the Siberian health and how religious orientation and alcohol consumption influence an individual's behavior patterns concerning health issues. Differences between men's and women's behavior concerning traditional and

preferable practices and competing and Western-style health care models and treatments of diseases were studied. Looking at health from the perspective of a human capital issue, we try to reflect on local processes of gender policy, and in this way, reveal cultural factors in health care choice.

As in many Russian provinces, in Buryatia one can observe a growing group advocating individual choice of health care treatment models. In particular, we can see new alternative conceptions about human life and promoting healthy lifestyles and health care choices. This choice process is connected not only to the process of medicine commercialization and treatment methods, but also to the sociocultural context of the region. In Eastern Siberia, and in particular, in Buryatia, many different religious groups always coexisted, for example, Christian Orthodox oldbelievers, Buddhists, and Shamanists. This perestroika period is now characterized by a powerful revival of not only the traditional religions such as Buddhism, Christianity, and local shamanism, but also by new religious sects and Christian religious movements such as Seventh Day Adventists and Jehovah's Witnesses, among others. In other words, it is considered that the post-socialist transition has also changed the role of religion radically [12]. At least in Siberia, people have been transformed "from atheist to a deeply religious man."

2.5 Influence of Religious Belief on Health Care Practices

The above-mentioned religions possess particular views on the relationships between God, nature, and man. Different religions offer different perspectives and systems of interpretation about women's health care. The growth of religious diversity in Buryatia is characterized by its relatively peaceful coexistence in what indicates an interesting aspect of sociocultural transformation in the Russian province. The natives can simultaneously belong to the Buddhist community and apply for a shaman's service, or natural healers. According to my observations, the same people can combine different models of heath care within their moral belief system. They can change their religious affiliation without forgetting their traditional beliefs-based model by keeping their visits to shamanistic places of worship while using the modern technology offered through the national public health system.

Buryatia seems to be a unique place in Russia where both Eastern and Western systems of medicine coexist side-by-side. Along with the official, or established, European medical institutions, Tibetan medicine, Chinese acupuncture, and Indian Ayurveda are very popular among the local populations. Each religious movement holds particular beliefs, treatment techniques, and health care patterns. While popular folk medicine provides more psycho-social treatment and spiritual beliefs dividing the world into "evil" and "goodness," traditional Asian medicine brings with it its established medical knowledge focused on a holistic approach to the body and treatment of disease. The practice of Tibetan medicine in Transbaikalia was

spread in the 18th century with the Buddhist monasteries and their medical schools. Within the last two centuries, their treatment concepts and the practice of the Tibetan medicine were adopted to the local medical traditions of the local natives. And now these practices have been incorporated as important elements into the Buryat culture. Nikolai Rerikh, a Russian humanist, made an observation about Buryats and noticed their specific attitude to traditional healings. He stated that "Fortunately, encountering different ethnic groups you can see how sensitive they treat their heritage of many centuries. Yesterday two old Buryats came to visit me. They brought with them the only saved copy of a Buryat dictionary, which was absolutely important in terms of their traditional medicine. It was very touching how they articulated their wish to republish this book. They said, 'Without this book our youth cannot study. This book includes a lot of useful information. In the same way they take care of their knowledge in *yurta**. They are not against modern forms of reaching perfection, but they also devotionally keep the old knowledge" [13].

At the beginning of perestroika, local shamanism was revived and today this phenomenon is called "neoshamanism." In 1993, the Shaman Association was founded in Buryatia under the name "Shaman Belief." By consulting shamans, people believe in a rapid recovery through personal and family rituals of sacrificing. Problems are subdivided into different types related to economy, family life, child-birth, their education, career, health, diseases, and death. For example, "hayalga" is a very popular ceremony that promotes rapid recovery from disease. Healing is focused on bringing gifts to spirits by splashing wine, vodka, or in Buryat, a traditional milk dish called salamat. However, all these objects should first be cleansed by fire. In the case of severe disease, Buryats organize the "zahil" ceremony which includes the immolation of one or several animals. The most important element of the shaman's ceremonial practice is addressing the local family gods and spirits with the request to grant prosperity and avert evil.

2.6 Initial Results

In Siberia, in comparison to the central regions of the Russian Federation, the level of average income has drastically declined. This aspect is connected to a long tradition of specific economic distribution of family income in Siberia. According to some of my initial research observations, some Siberian husbands prefer women to coordinate the family budget. This unusual and new gender-specific role (actually a role reversal) happened as a result of having poor economic resources. Having a relatively small living budget, people are forced to rely on specific strategies to cover their life costs. It not only concerns the distribution of money but also the

^{*} Yurta—traditional dwelling of burayts.

[†] Rerih, N.K. Flame Up Your Hearts: (About Culture and Art). Moscow, Russia, 1990, 63.

time-consuming search for less expensive goods and the planning of expenses (budgeting). This role reversal does not comply with the traditional male role in the traditional sense of male authority and power. This new behavior affects the expenses for health supporting measures and care programs. In spite of the fact that men exhibit a high rate of morbidity and mortality, there are usually no expenses directed to health improvement. Probably, this situation is related to a still popular expectation of the right to free medical services and a wife who takes care of the family's health. Therefore, many Siberian men now have the opinion that all women should take care of their own health independently from men, although they do not seem to notice some women's health is damaged after childbirth.

Generally, research observations indicated that in the case of disease treatment, men and women increasingly apply to different religious treatment centers and healers because they hold different health care beliefs. As my observation implies, healing entails an element of faith and in this way the boundary between religious faith and medical treatment is blurring. The results of my research might give an idea about the correlation between health condition and the level at which people are involved in religious practice in the post-Soviet province of Buryatia.

2.7 Research Methodology

In September 2004, in Ulan-Ude, I interviewed 20 people—12 women and 8 men. These people were waiting to visit the doctor whose office was located in a Buddhist's tent. The interviews were conducted among people in ages that ranged from 35 to 50 years. Nineteen of these people had initially been diagnosed with a disease in a polyclinic. The interview questionnaire included ten questions that everyone answered by Dictaphone. One person interviewed was a Buddhist doctor.

The analysis of qualitative interviews, that included traditional, Western-style medical doctors and faith healers, showed that the positive opinion among ordinary people toward healers is increasing, in particular, regarding the statement that shamans and the healers' healing methods are less painful and humane than in hospitals and health care institutions. A Buddhist monk-physician explained in one interview that "Tibetan medicine tries to treat all diseases and, by the way, it also treats the cause and consequences of illness. This is the difference with European medicine, which treats only the illness..." [14].

According to the respondents, once having been diagnosed with a disease, people predominately apply for healers, thus postponing further visits to doctor in a polyclinic. A specific set of diseases has been revealed within the research study that local people prefer to treat with the help of traditional shamanistic medicine. These diseases include fractures, cancers, gynecological (women's diseases), cardiac diseases, and conditions that require surgery. It should be mentioned that experts agree about a high popularity of traditional medicine, especially among all interviewed women; whereas men prefer hospitals. There is no age difference among

women who prefer the traditional medicine. The tendency is that women also prefer to treat pediatric illnesses by these traditional methods. One interview with a middle-aged Buryat woman confirms this. She states, that,

when I was diagnosed in the gynecologic center with a "uterine myoma." They recommended that I undergo surgery. That meant that I would become an invalid at the age of 36 and to be only a "one half of a woman". My husband agreed with the suggestion to undergo surgery because he did not believe in herbs and powders. According to his opinion, only developed European medicine can help people to treat organs. But what would happen to me after the operation? My husband did not think about that. I passed all necessary examinations and started to prepare psychologically for the surgery, and at the same time talked to my friends and relatives. Having some hope to recover with the help of alternative medicine, I went to a healer. Keeping this idea from my husband, I secretly went to a Tibetan emchi-lama, and spent quite long time in a long queue. He inspected me by pulse diagnostic and gave me powders to ingest. Everyday I boiled them and drank them in the morning and in the evening for one month. At the same time I followed a specific diet and one month later I visited polyclinic doctor again for an ultrasound examination. The doctor looked carefully at the screen and found nothing that could have caused me to worry about my uterus. At that point I understood that only belief in alternative healing and recovering saved me from surgery. [14]

Apparently some radical changes happened in this woman's thinking and behavior that led to a definite gender asymmetry in expectations and decision-making for treatments with traditional methods. The woman's activity and her preference for the Tibetan medicine seemed to be based on a specific ideology, which was articulated in the narrative: "... only belief in alternative healing saved me from surgery." This might mean that the usual behavior model (i.e., to undergo surgery) had been denied by the woman with the substitution of her own behavior model. In this case, her husband did not believe in magic healing for recovering from an illness and interpreted, in his own way, that traditional healers apparently make a mistake in diagnosis.

The results of interviews testify to the popular belief that the differences in men's and women's behavior might be biologically determined. On the contrary, the understanding that gender-based aspects of behavior, especially toward health care choice, is a socially constructed phenomenon. However, this is inherent only for a very small number of interviewees.

Results of this field work in Summer 2005 [6], conducted among 25 Buryat women, showed that one half the number of these women interviewed considered

that being a "housewife" was more important than work and career. The remainder of the women thought that both family and a work career outside the home were important, while only one respondent noted the importance of a work career only as being important. The first group of women put being a housewife and a work career at the same importance of health care and of medical services. They mentioned a new situation concerning the emerging health care market where individuals have a choice for treatments, in particular, the rise of Tibetan medical centers in Buryatia [15].

The next point in the analysis of the interviews shows the changing behavior pattern in relation to religious practice. Adherence to a religious practice increasingly influences a person's behavior toward their own health condition. It does not matter whether respondents belong to a Buddhist religious community, practice shamanism, or follow Christianity, they stick to religious tenets only in extraordinary cases such as celebrations, holidays, or traditional life rituals like wedding or funerals. Nobody among the respondents brought religion into association with a better attitude about their own health care. In general, one can say that people start to pray only when they are already ill. All interviewees had an opportunity to take care of their health preventively but never did this through exercise or changing their lifestyle. This fact underlines the exchange of autonomy like a value on another value—expenses on treatment and choice between traditional and nontraditional health care methods.

A 42-year-old man described his change of attitude to healers in this sense,

My son fell from the 2nd floor window and sustained serious injuries. He was brought to the local hospital and had to undergo many operations. Doctors predicted that he would be an invalid. My son was only 9 years old. I then heard that there was an old healer who could help my son and I found him. At first I did not like him because he seemed to be rude and was always chanting his mantras. He ordered me to take my son out of the hospital at his own risk. Every day the healer came to our house. He stroked my son and murmured his mantras. Since I applied to this old man on the recommendation of my wife, I was quite skeptical about him. His healing process took about three months but then my son started to walk. Now I am sure about the meaning of folk medicine and that the healers provide our health. [14]

Concerning alcoholism, all women interviewed emphasized that the new social and economic order promoted a widespread alcohol consumption among youth and women. There is a high impact of new images and symbols in the mass media that are changing people's social behavior. Every day television advertisements offer a better and more glamorous lifestyle associated with a glass of beer or alcoholic beverage displayed being held in hand. This has resulted in a dramatic popularization of beer

consumption. It seems that some advertising for fruit drinks are just being replaced by beer. It should be noted that traditional religions do not forbid drinking alcohol, they consider alcoholics as just "lost souls." Only some Christian sects convince their adherents to refuse alcohol and follow a healthy, sober lifestyle.

Social and economic changes demand alterations in people's behavior under specific circumstances. But the changing process occurs differently in different spheres of life management. For example, in the sphere of education, people adapted to new conditions quite quickly. Education is not free of charge in Russia any more but households reorganize their income in favor of better education. However, it should be noted that health is a part of human capital and is similar with other parameters like education and career. It has an important impact on the behavior of employees in the job market and how they can effectively earn money to increase their income.

2.8 Conclusion

Comparing this data on different effects of human capital, in particular in the cases of education and health, it seems that under present conditions, the Russian labor market demands more educational preparation than health consciousness. Education, in comparison to health, is a much more profitable object for individual investment. Gender differences and their influence on health, quality of employment, and salary are very significant [16]. For example, men demonstrate a less elasticity in relation between health and work opportunities. This observed behavior might confirm that Russian men are characterized by low interest in self-control and self-care behavior. On the other hand, men get better access for jobs irrespective of their health state. This pattern leads to the suggestion that the lack of individual interest among men for health care increases social health investments by government and private insurance and creates institutional mechanisms on the side of employers for increasing payment for health care services. I believe that using a gender approach could acknowledge local concerns with high morbidity to underscore the growing problems of caring for disabled people and to highlight how women and men, mothers and fathers, need social supports and resources to allow their children (and each other) to reach their greatest possible life potential. These discourses would, furthermore, enable feminists to tap into Russian concerns with promoting the spiritual wholeness of people (meant here in the sense not of religious doctrine but of psycho-social harmony, the emotional health of individuals, and building of communities) [13].*

This new perspective would bring a better understanding of the cultural background that has an impact on constructions of individual and social understanding of diseases, their cause and treatment, and in doing so, we would be able to take the next step toward a deeper investigation of issues related to ethno medicine.

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Chapter 3

Collaborative Networks—A Beneficial Perspective on Health Care in Developing Countries

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3.1 Introduction

Health care in developing countries faces significant difficulties. To successfully meet the arising problems, the collaboration of many different providers needs to be enhanced. But because the successful formation and operation of collaborative networks bears certain challenges, their creation and implementation must be thoroughly planned. The main intention of this chapter is to discuss the central challenges with which collaborative networks are faced and to develop recommendations for overcoming these difficulties. Therefore, an approach for understanding the functioning of collaborative networks will be presented, which has proven its appropriateness in the fields of sociology and business administration. This framework can be considered particularly beneficial for health care practitioners and researchers in developing countries, because it offers a new perspective.

This chapter is structured as follows: In Section 3.2, a fundamental framework for collaboration in networks will be presented and general factors of success will be extracted. In Section 3.3, different groups of actors, which are relevant for health care in developing countries, will be introduced to specify the general perspective mentioned above. In Section 3.4, two examples for successful network collaboration will be presented. First, it will be exemplified how the perspective of collaborative networks can be applied to the specific domain of knowledge sharing systems (KSS) in the field of health care in developing countries. Second, an example for an effective public–private partnership (PPP) will be introduced. The chapter closes with Section 3.5, which summarizes the recommendations for building collaborative networks to improve health care standards in developing countries.

3.2 Collaborative Networks

Networks in general are structures made out of nodes and connections. Social networks are specific networks in which the nodes represent individual or collective actors connected by ties, which indicate their social relationships. In this context, a social relationship means that the actors know each other and interact with a certain frequency. Reasons for such interactions are numerous. On an individual level, interactions can occur because people regularly visit the same bar or attend the same fitness club. On an organizational level, occasions for interactions are offered by industry trade shows or human resource development workshops. Collaborative networks can be defined as social networks in which specific tasks shall be accomplished with joint forces.

In this section of the article, the essential elements of an effective network will be introduced. Three aspects will specifically be addressed: firstly, the nature of networks will be carefully looked at; secondly, the benefits of networks will be discussed; and finally, those factors that are considered essential for the facilitation of collaboration between the parties involved in a network will be identified.

3.2.1 Social Networks in Theory and Practice

The popularity of the social network perspective in social science has grown recently, particularly because it is providing a link between the micro and the macro level of sociological theory [1]. Because of this growing popularity, the scope of application of the social network perspective has been extended to the field of organizational research [2]. This development corresponded with the emerging importance of interorganizational partnerships in business practice, for example to collaboratively develop new products or enter new markets [3,4]. The reasons for the increasing popularity of networks are numerous. From an organizational point of view, there are two theoretical frameworks, which claim to explain why interorganizational networks are created: namely, the transaction cost approach and the resource-based-view of the firm.

The transaction cost approach deals with the question of whether certain transactions should be organized as autonomous markets, integrated in a hierarchical organization, or realized through collaborative network arrangements. According to transaction cost economics, the decision to organize a specific transaction within one of those alternative institutional arrangements should be based upon the evaluation of costs arising by implementing and maintaining these arrangements in that special case [5]. This approach has primarily proved its explanatory power for the design of vertical relationships between suppliers and buyers in routine situations and mature industries [6]. With health care in developing countries neither being a mature industry with routine situations, nor a field where a mere cost-based perspective is applicable, the theory seems to have less value for explaining network existence.

The second approach, called resource-based-view, proposes that an organization's performance is based on its ability to implement a strategy ensuring the most efficient use of its specific configuration of resources [7]. According to this basic assumption, organizations are seen as idiosyncratic bundles of resources [8] and their success is regarded as mainly depending on the appropriateness of the resource configuration compared to existing environmental opportunities and challenges. Organizational resources include all assets and capabilities owned by an organization and can be classified in the following categories: physical capital, human and organizational capital [7]. According to the resource-based perspective, collaborative networks of organizations arise when the internal resource configuration of a single organization is not sufficient to accomplish specific tasks [6]. This is exactly the situation faced by actors in the field of public health care. Traditional public health groups are usually confronted with limited financial resources and private forprofit organizations lack region- and task-specific knowledge to solve the problems autonomously even if they were interested in doing so [9]. According to the resource-based-view, actors who are aware of specific internal resource deficits, eventually attempt to compensate this internal resource deficit by collaborating with external partners. However, there are several factors, which have to be kept in mind, to make a collaborative network strategy work. These preconditions for forming and running a successful network will be described below.

3.2.2 Success Factors for Collaborative Networks

To achieve certain goals through a collaborative network, this network has to be formed and managed. Consequently, the first step is to identify partners who have access to the needed resources. It is then necessary to ensure that the required resources are provided by those external partners. Research suggests that several conditions have to be met to enable an exchange of resources in social networks. First of all, there must be opportunities for collaboration; secondly, partners have to be motivated to donate their resources for the purpose of collaboration; and thirdly, all parties involved need to possess the ability to collaborate [10,11].

Opportunities for collaboration emerge when relationships between the focal actor and the external partners are established and thus access to additional resources is given. Such relationships are not naturally given, but the product of a goal-oriented effort to create network relationships by contacting and attracting potential external partners as well as keeping the newly founded relationships alive. The strength of a relationship established between actors has been identified as an important factor when determining the network partners' motivation to offer their resources [12]. Research has shown that partners are more willing to share their resources, for example knowledge, when they are strongly connected [13]. Other important factors influencing the motivation to actively participate in a collaborative network are: the feeling of obligation toward other network members and the

network's purpose, the instrumentality of the network for reaching individual goals, or the expectation that non-collaborative behavior will be sanctioned [14]. The ability to collaborate is determined by different aspects. Not only must the donor have the ability to pass the resource needed by his partner, but the receiver must also have the ability to understand and integrate the resources offered to make it usable for the network's purpose. For these two preconditions of resource transfer in general, the existence of a shared language between the two partners is crucial. Such a shared language is usually developed in long-term interactions. Therefore, a history of former collaborations typically fosters the success of any further collaboration.

In summary, many aspects have to be kept in mind when actors rely on a network solution to fulfill tasks, which they are not able to accomplish alone. According to the resource-based-view of cooperation, first of all, partners need to be identified who are able to provide the resources needed to accomplish the network's purpose. Then opportunities for collaboration need to be created and partners have to be motivated to donate the resources necessary. Last but not least, the ability for collaboration has to be developed.

3.3 Actors in Health Care Networks in Developing Countries

In this paragraph, the general perspective on collaborative networks will be specified by introducing the groups of actors that are relevant for health care in developing countries. According to the stakeholder approach [15,16], relevant actors in health care in developing countries are all those who either have an impact on, or are affected by, the processes of health care. These actors' specific resources and goals will be described in detail in the following paragraphs to give an insight into the challenges of managing collaborative networks in health care in developing countries. Therefore, the actors will be divided in the following main classes: civil society, private sector organizations, and public sector organizations.

3.3.1 Civil Society

The central stakeholder of health care in developing countries is the population of the respective region [17]. Their primary goal is the improvement of public health standards. Generally, the achievement of this objective has to be estimated by considering how much time and effort it takes to achieve a certain state of health for a certain number of people [18]. The health of the population is of basic value inherently, and is also fundamental for the social and economic development of respective countries [19]. Therefore, the development in health care cannot be understood separately; instead the mutual interferences between a country's

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development in general and its development in health care have to be taken into account. On the one hand, enhancements in the wealth of nations correlate with enhancements of infrastructure and availability of scarce resources. This also promotes the development of the health care sector and the population's state of health. On the other hand, a population's poor state of health impacts the economy both by affecting expenses directly and by causing a loss of productivity [19].

When considering the resources necessary to improve public health in developing countries, one has to keep in mind that the population itself plays a central role in the improvement of health care systems. Without the full involvement of the population, the control of diseases cannot be executed effectively [18]. The people are the origin of the respective information. Also the people's behavior affects their state of health. Hence the relationship between health care workers and local inhabitants is especially important for success in this field [20]. Accordingly, efforts are made to motivate people to take over a more active role in the provision of health care services to the point that communities themselves act as coproducers and partners [21].

Private Sector Organizations

The private sector can be divided into profit-oriented business actors and nongovernmental organizations (NGOs).

3.3.2.1 **Profit-Oriented Business Actors**

One of the main goals of private firms is to realize profit. Therefore, they are often confronted with skepticism by actors of other sectors concerning their real motives to engage in partnerships in public health [9]. But by taking part in a PPP, private firms are often able to realize certain benefits such as enhanced corporate image, access to existing networks, and attracting desirable employees, which in the long run may lead to increasing profits [22]. Additionally, some private firms have already realized that social responsibility is a certain part of their corporate mandate. The resources profit-oriented firms are able to provide to collaborative networks in health care are financial capital as well as specialist management resources and capabilities. In addition, they are usually able to realize a higher operating efficiency than notfor-profit-oriented organizations and can therefore carry out tasks like the production of certain health care goods much more cheaply [23].

Non-Governmental Organizations

NGOs are organizations which are usually founded to encourage objectives of common welfare and do not intend to realize profits in their activities. They have

democratic decision processes and tend to use more informal coordination and fewer formal control mechanisms than organizations from the other sectors [22]. They have been growing in number, power, and influence since the 1980s [24]. NGOs' motives for engaging in the improvement of public health are stated as altruistic [25]. Thus, their main motive is assumed to be the support of common goals of health care in developing countries for its own sake. However, different NGOs operating in the same field and following the same fundamental goal may still differ in their beliefs of how this goal should be accomplished. For a good example on coordination problems and conflicts arising out of different perspectives, even when the partners share the same fundamental objective, see White's study of hospitals sponsored by the Roman Catholic Church [26]. Nevertheless, it is assumed that employees in nonprofit-oriented organizations are intrinsically more strongly motivated than employees in profit-oriented organizations, when striving for common welfare [27]. The resources NGOs can provide for networks in health care are diverse and difficult to describe, because the group of NGOs is very heterogeneous. The locally rooted ones can provide detailed information about problems and their causes in specific areas. Others, who act more internationally, can provide an overview of global activities in respective fields. Furthermore some NGOs can even offer considerable amounts of financial resources or management know-how.

3.3.3 Public Sector Organizations

The public sector generally consists of governmental agencies and bureaucracies. In the field of health care, these are for instance the ministry of health, local government officials, health councils, and boards of public hospitals as well as professional associations and agencies of restraint and enforcement [21]. These entities are concerned with the planning, coordination, operation, and control of activities. Typically, these institutions will have more strongly elaborated rule and reporting systems as well as more rigid hierarchical arrangements than NGOs [28]. They are usually not profit-oriented and sometimes feature lower operating efficiency than private organizations [23]. They act on the basis of authority and therefore have the opportunity to exclude actors from fields of action [27]. On the other side, they are the ones who are able to grant access to those actors willing to engage in health care projects in the respective regions. Therefore, governmental institutions are necessarily involved in networks for public health. In addition, and equivalent to what has been stated about NGO employees, it is assumed that the employees of public sector organizations are intrinsically more strongly motivated to engage in improving public health than employees in profit-oriented organizations [27]. Sometimes, public organizations feature lower operating efficiency than private organizations [23].

The diversity of resources and interests of the actors described in this section reveals some of the major challenges of collaborative health care networks in developing countries. First, it becomes clear that the participation of many different

groups of actors is necessary to reach the goal of improving public health in developing countries. Second, actors such as private, profit-oriented companies usually have to be motivated to participate in collaborative health care networks with the perspective of achieving benefits additional to the improvement of public health. In the following section, it will be described what network arrangements could look like to successfully encounter these challenges.

Applications 3.4

In this section, it will be demonstrated how the perspective of collaborative networks can be applied to specific domains in the field of health. First, and referring to the example of KSS, it will be shown how the challenges of opportunity, motivation, and ability might be addressed. Second, it will be shown how a collaborative partnership, which included actors from different sectors to fight a specific disease, was managed successfully.

Knowledge Sharing Systems 3.4.1

KSS are technology-based systems with the primary focus of supporting the exchange of knowledge within or between organizations. Whereas some sorts of knowledge can be transferred easily in codified form (explicit knowledge), the transfer of another kind of knowledge (tacit knowledge) is much more complicated, because the direct interaction of individuals is necessary [29]. KSS are designed to support both the transfer of explicit and tacit knowledge. For the transfer of explicit knowledge, the main advantage of using KSS is that pieces of information can be distributed easily over long distances and to many recipients at once. Whereas KSS support the transfer of explicit knowledge by providing access to data and documents directly, the advantage of using KSS in the case of rather tacit knowledge is that the search of those who know by those who want to know is fostered. In the case of explicit knowledge, KSS offer the opportunity to search for data or documents by properties like author, keywords, topic, and so on. In the case of tacit knowledge, KSS provide information about who possesses a specific kind of knowledge and about the attributes relevant for an intended knowledge transfer like where the person lives, how he can be contacted, and what languages that person speaks [30].

Potentials of KSS in Health Care in Developing Countries 3.4.1.1

Especially in the knowledge-intense field of health care, the access to information and knowledge is crucial for the performance of the system. The availability of explicit knowledge, like data about health indicators and the prevalence of illnesses, is a requirement for the successful planning of health care projects. Furthermore,

the exchange of explicit information about the success of ongoing projects is important for a better coordination of efforts. Here KSS allow the aggregation of health data across different regions and project databases may support the distribution of best-practice solutions between, and the coordination within, projects. Additionally, people working in health care in isolated fields in developing countries can be further educated by online tutorials as well as online platforms, where interpersonal knowledge exchange can take place. Moreover, KSS may foster the opportunity to exchange personal experiences, for example for those dealing with specific illnesses, which may be beneficial in addition to the exchange of mere data and treatment success documentations.

3.4.1.2 Recommendations for Implementing and Operating KSS in Health Care in Developing Countries

This section will analyze what has to be done to use KSS in health care in developing countries efficiently. The analysis follows the framework of the success factors identified in Chapter 3.2.2: opportunity, motivation, and ability.

To provide the opportunity to exchange information and knowledge via KSS, an adequate technical infrastructure is necessary. Therefore, the connection to electricity and telecommunication networks is essential for running KSS, but is not provided in many provinces of developing countries. Another important problem concerning the sustainable operation of KSS is the limited availability of spare parts for computer hardware in developing countries [31].

As mentioned before, the potentials of KSS to enhance planning and coordination capabilities support the common objectives in health care in developing countries. However, the motivation of actors to offer information via KSS is limited because of potential conflicts with individual or organizational goals. Increased transparency can conflict with the objectives of political, organizational, or individual actors in the field because transparent health indicators enhance accountability and may be used to adjust budgets [21]. In consequence, especially when failure and misallocation could become obvious, the adequate survey and exchange of health care information may not be beneficial to all participants. Another reason restricting the motivation of actors to share their knowledge is a potential loss of power. Especially for people living in developing countries, keeping their knowledge exclusive is an important success factor for their careers. Similarly, collective actors may try to secure their spheres of influence by not sharing relevant knowledge with others [32].

Because many of these individual objectives conflict with the common goal of sharing knowledge, the motivation of people to act according to the common goal has to be enhanced by certain actions. This can be addressed by connecting actor-specific incentives with the achievement of intended common objectives. For governmental agencies such a connection could be realized by granting general development assistance only when the knowledge generated in the supported

programs is made public. In private companies committed to the objective of improving public health, it may be necessary to motivate individuals to participate in KSS by granting monetary or other benefits. In contrast, no additional incentive should be necessary to motivate actors like employees of NGOs to act according to the common objectives of knowledge sharing for the sake of health care. Here, adequate feedback about the benefits generated by the use of these systems might probably be enough to enhance motivation.

Another ability-based problem of running KSS in health care in developing countries is that knowledge transfer requires an adequate level of cognitive match between participants. Without a minimal cognitive match, even the transfer of explicit knowledge is much more difficult. An opportunity to address this problem is the implementation of user adaptive systems, which automatically adapt the content provided to the capability level of the respective user [33].

The example of KSS pointed out how the perspective of collaborative networks can be applied to a specific domain in the field of health care in developing countries. The elaborated framework of success factors was used to identify the potential challenges of technology-supported knowledge exchange and to offer recommendations for planning, implementing, and operating such systems.

3.4.2 Public-Private Partnerships in Health Care in Developing Countries

PPPs addressing social issues are particularly important when the market fails to distribute health benefits to the people in need of them [9]. This situation especially occurs when the activities necessary to create health benefits are not economically profitable for private companies. In many developing countries, health care institutions cannot be run profitably because inhabitants are economically poor. But even in areas where a health care infrastructure is available, people are often lacking health care benefits because the development of vaccines against diseases like malaria, whose prevalence is locally concentrated on areas in developing countries, is not interesting enough for private investors [34]. In recent years, several initiatives have been founded addressing the lack of vaccines for certain serious diseases. Many of them have been financed by large foundations like the Bill and Melinda Gates, or the Rockefeller, foundations. But even when there is a financier for such initiatives, their success is not guaranteed.

3.4.2.1 Challenges for Collaboration in PPPs

Partnerships between actors from different sectors of society are usually confronted with certain challenges. These challenges usually either constrain their opportunity, motivation, or ability to collaborate properly. Crucial for the actors' motivation to spend their resources for reaching the collaborative goal is the creation of value [9].

The only way to secure the continuing interest of public and private partners to invest in a collaborative alliance is to provide benefits related to their respective goals. Besides, the development of a common and explicit vision of what should be accomplished by the collaboration is considered crucial for the partners' motivation [35]. This seems especially important, when taking into account the fact that the relationship between public and private or profit and nonprofit organizations is often characterized by mutual skepticism [22]. Closely connected to the issue of creating a shared vision about the purpose of collaboration is the establishment of a shared language. As shown in Chapter 3.2.2, a shared language is necessary to secure the partners' ability to collaborate. Not only is a shared language necessary for the transfer of resources, but the creation of efficient modes of interaction can also be provided under the existence of a common understanding. The establishment of a shared language among the different actors that are usually involved in PPPs typically takes time as well as a high frequency of interaction to stimulate continuous learning. But to make a collaborative PPP work, it is not enough to provide opportunities of interaction. Before the founding of a PPP, the actor who is willing to initiate a collaborative network has to choose and attract partners with the resources necessary to fulfill the alliance's purpose.

So far, the specific challenges of managing opportunity, motivation, and ability of collaboration effectively to ensure successful cooperation of private and public partners have been identified. In the following, the example of a successful PPP project will be presented to give practical insight in how these challenges can be managed properly.

3.4.2.2 The International Trachoma Initiative—An Example for a Successful Public–Private Partnership

The International Trachoma Initiative (ITI) was founded in 1998 with the purpose of fighting trachoma. Trachoma is a progressive disease usually acquired in early childhood, which eventually leads to blindness. If left untreated, repeated infections deform the upper eyelid, causing the eyelashes to distort and scratch the cornea, leading to blindness [36]. With an estimated 6 million people blinded by trachoma today, this disease is the world's leading cause of preventable blindness [37]. The disease is spread by contact with infected people and is mainly prevalent in poor countries, where people have limited access to sanitation. But there are ways to deal with this illness. The spreading of trachoma can be prevented by the improvement of sanitation standards and existing infections can be cured either with antibiotics or by surgery. Because of these different types of treatments, which are necessary to effectively fight trachoma, a multifaceted approach called SAFE (Surgery, Antibiotics, Face washing, Environmental improvements) was introduced [38]. This strategy to fight and control trachoma was adopted by the ITI, an initiative jointly founded by a profit and a not-for-profit organization.

3.4.2.2.1 The International Trachoma Initiative Partners

Two core partners were involved in the ITI founding process, which is described in detail by Barrett et al. [39]: Pfizer, a private for-profit company in the pharmaceutical industry and the Edna McConnell Clark foundation, a large private foundation. Both partners provided unique and complementary assets to the ITI. Pfizer brought in the financial and personnel resources, management skills, and Zithromax[®], an antibiotic, which has proven to be effective in curing trachoma [38]. The Clark foundation also brought in financial resources, but, and even more importantly, possessed long time experience in research on tropical diseases. As a result, the Clark foundation could contribute tropical disease experts as well as various network relationships with in-country organizations, local governments, and the WHO (World Health Organization). But not only were the resources of both actors joining the initiative diverse, but they also brought in significantly different goals and motives. Pfizer, as a private for-profit company, was clearly dedicated to operate profitably, but according to its stated value, the company is also committed to provide care to those in need. Clark, on the other hand, wanted to increase its social impact and was therefore interested in an improvement of its strategy to invest funds and know-how. Additional to these two core partners, several other actors were involved in the local ITI to support the project with management capacity and country-specific knowledge [37].

Taking a close look at the diversity of the partners and the partner-specific interest, the target of cutting down trachoma prevalence significantly was more than ambitious. Nevertheless, they managed to exceed all expectations [37]. The question as to how Pfizer and Clark successfully dealt with the challenges of collaboration will be addressed in the following section.

3.4.2.2.2 The ITI's Management of Collaboration Challenges

As shown above, Pfizer and Clark brought various goals into their collaborative relationship. To maintain the mutual motivation to participate in the project, both had to expect certain benefits. According to the goals introduced above, an important benefit for both Pfizer and Clark was the creation of social value, indicated by the reduction of trachoma prevalence. Other benefits were more specific to each partner. Pfizer was able to enhance its reputation (in terms of stakeholder image) by demonstrating strong commitment to improve the health standards of those in need. Additionally, the ITI offered Pfizer the opportunity to learn more about the effectiveness of Zithromax and helped to enhance the public awareness of the product and its benefits compared to other antibiotics. To Clark, the project was an opportunity to test a new investment approach to funding and to profit from Pfizer's knowledge in terms of managing investments. Moreover, it was an opportunity to institutionalize much of the research the foundation had conducted before.

When the ITI coalition was formed, Clark and Pfizer already had a history of interacting in smaller projects. As a result, both partners already knew each other. However, their ability to collaborate successfully in a large project, like the ITI, still had to be enhanced continuously. Especially, the ability to understand each other's interests and language had to be developed. Grounded on preexisting personal relationships, communication opportunities between members of both organizations were enforced through regular meetings. Additionally, remaining differences in interests and perspectives were taken into account when the organizational structure of the ITI was established. It consisted of two main structural components—a board of directors and an expert committee—both were given clear responsibilities and were staffed equally by Pfizer and Clark. Although the regular meetings were probably helpful to overcome differences and align perspectives, the clarification of roles and responsibilities within the formal organizational structure provided a framework for efficient and coordinated interaction.

The opportunity to set up the ITI collaboration was mainly grounded on previous interaction between Pfizer and Clark. Because of this background, both parties were able to estimate the value of each other's resources and competencies. But according to the lessons learned from prior experiences, Pfizer and Clark identified the need to establish a specific network of partners for each country involved in the initiative. The purpose of these local networks was to provide deeper insight into the specific situation of each country and to support the management of activities accordingly. Therefore, opportunities to assess the potential of candidates to support the project had to be created. While Clark certainly had the knowledge to guide a preselection of potential partners, opportunities for a closer assessment of the potential partners' competencies were created actively through a call for applications. Based on this call, governmental organizations and NGOs which had proved their capacity to foster the initiative in specific countries were selected [39].

With their remarkable success in fighting trachoma so far [37], Pfizer and Clark proved their ability to manage the major challenges of collaborating. During the initial stage of their joint project, they took different steps to deal with the challenges of opportunity, motivation, and ability for collaboration. They took care that value was created for every partner, established rules and a clear framework for interaction, and created opportunities to assess the aptitude of additional partners. This approach, in which every challenge is addressed by a specific arrangement, can serve as a guideline for managing collaborative networks, not only in the specific field of public health in developing countries.

3.5 Conclusion

The purpose of this paper was to present a framework which helps health care practitioners to better understand the challenges of collaborative networks for the improvement of public health in developing countries. Additionally,

recommendations for the design of successful collaborative networks were extracted from theory and examples introduced. Two main aspects for a network's success were extracted from the general framework. First, according to the resource-basedview, partners that provide the resources necessary for the network's purpose have to be identified. Second, the functioning of the network and the necessary resource exchanges have to be secured. To ensure this, the following three conditions have to be met: provision of opportunities for collaboration, motivation of the partners to participate in the network and to donate the resources essential for goal attaining, and the development of partners' ability to cooperate.

Actors, who are trying to solve problems in health care and need the support of others, require access to information about potential partners, their goals, and resources. Therefore, it is important to promote opportunities for meeting potential candidates for collaboration and to extend an infrastructure for the exchange of knowledge. To foster the motivation of actors to participate in networks for collaboration, strong connections between network members should be established. This implies that regular and frequent meetings should be facilitated where the common goals and visions are emphasized. Thereby, even ideological disputes and mutual skepticism between actors from different sectors may be overcome. Additionally, the specific goals of different actors should be kept in mind. Consequently, benefits, which correspond to each actor's idiosyncratic motive structure, should be provided. Here feedback may be a sufficient motivator for actors intrinsically motivated to work for the improvement of public health, but other actors have to be motivated by providing additional incentives. Finally, it has been shown that some facets of an actor's ability are crucial for the collaboration's success. In particular, a shared language is essential not only for the establishment of rules to coordinate collaborative activities, but also for the proper exchange of resources and especially knowledge.

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Chapter 4

Alcohol: Health Risk and Development Issue

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4.1 Introduction

Alcohol constitutes a double-sided problem in the developing world: on one hand, drinking is in many places a severe and additional burden to the poor and underprivileged, and on the other hand, we also see that new drinking habits, increasing consumption levels, and rising problems occur among a growing middle class in a number of countries. Often alcohol is used to symbolize the adherence to a Western, global culture and belonging to those who can afford such luxuries. Although consumption is stagnating or even decreasing in the Western world, World Health Organization (WHO) points out that the two regions showing recent and continuing increases in consumption are the South-East Asia region and the Western Pacific region [1]. Alcohol's negative impact on health is well accepted, but alcohol's role in the Global Burden of Disease might not be as well recognized. Alcohol is the number five risk to premature death and disability in the world. In some developing countries, it is the biggest risk factor [2]. This underscores the fact that alcohol is not just any other ordinary commodity [3].

"When I don't know how my children are going to eat tomorrow, I tend to get drunk whenever I can. It helps me forget my problems" says a man from Gabon in the World Bank sponsored Voices of the Poor study [4]. Alcohol can be viewed both as a consequence and a reason for poverty. Sometimes it is both. In another study, from Sri Lanka, part of the conclusion is that "Alcohol, and the consequences of alcohol use, influence greatly the every day life of poor people. Not only are the lives severely affected of those who drink, but perhaps even more, the lives of others such as their wives and children" [5]. We may ask if alcohol consumption and problems are just part of the framework of conditions within which development activities have to work, or are these patterns part of what development can and needs to change.

Alcohol is not a new substance. It has been in use in most societies throughout history. Normally, the use of alcohol has been regulated by traditions, social norms, and natural limitations. Sometimes, it was linked to particular festivals or times of the year. There were also often traditional norms concerning when, how, and by whom alcohol was consumed. In precolonial Africa, as in many other agricultural societies, alcohol consumption was often seasonal, linked to ceremonial festivities, and strongly associated with male elders [6]. Alcohol, whether palm wines, grain beers, or drinks made from other local agricultural inputs, fermented according to local tradition, would often not last for long. In the present world, these natural limitations are overcome by industrial distillation, bottling, and transport facilities, but in many locations, traditional production is still going on or has been developed into a cottage industry or even into an illicit production and serving place. Even with these limitations, or with cultural limitations being disregarded and natural ones overcome, too often we see traditional types of alcohol use representing an alcohol problem in the village or urban setting. This applies to legal or illegal home brews and homemade spirits as well as imported or domestic-licensed products. New types of alcoholic drinks and drinking patterns usually come in addition to already existing problems [7].

4.2 Health Risk

That alcohol drinking can be harmful is a well-accepted fact. Alcohol is the substance abuse problem that affects the highest number of people worldwide. Unlike other lifestyle-related health problems (tobacco, heart disease, etc.), alcohol kills and disables at a relatively young age resulting in the loss of many years of life because of death and disability.

4.2.1 Global Burden of Disease

Over the last few decades, a lot of research has given us a better understanding of how harm from alcohol is generated. There are several volumes which sum up the results of these studies for the interested reader [3,7]. Most of the data are of course from the Western world, but some studies have a global scope or focus on developing societies. WHO has compiled a lot of information in the Global Alcohol Database (GAD) [8]. As part of this growing body of evidence, more sophisticated measures have also been developed. WHO has been taking a leading role in this. It sponsored the Global Burden of Disease Study (GBD) which employs a measure for health status called Disability-Adjusted Life Years (DALYs). This indicator combines the impact of premature death and premature disability to measure the burden of disease and, through a comparative risk analysis, identify and compare the contribution of various risk factors to total DALYs from different causes. According to these studies, 1.8 million deaths (3.2 percent of total) and a loss of 58.3 million (4 percent of total) of DALYs are attributable to alcohol globally. Unintentional

52

injuries alone account for about one third of the 1.8 million deaths [1]. In all, for the countries with very high mortality patterns, unintentional injuries make up the greatest proportion of alcohol-related DALYs (over 38 percent) [9].

The figures from the GBD [2] show that globally alcohol is the number five risk factor for ill health and premature death. In the developed world, alcohol is the third leading risk factor for death and disability. In the developing countries with low mortality, that is those countries that have been able to combat the typical diseases accompanying poverty, alcohol rises in prominence to the top of the list of risk factors to health (Table 4.1). In developing countries with high mortality, alcohol is

Table 4.1 **Leading Ten Selected Risk Factors as Percentage Causes** of Disease Burden Measured in Disability-Adjusted Life Years (DALYs)

Developing	Developed Countries				
High Mortality Coun	Low Mortality Countries		(percent)		
Underweight	14.9	Alcohol	6.2	Tobacco	12.2
Unsafe sex	10.2	Blood pressure	5.0	Blood pressure	10.9
Unsafe water, sanitation, and hygiene	5.5	Tobacco	4.0	Alcohol	9.2
Indoor smoke from solid fuels	3.7	Underweight	3.1	Cholesterol	7.6
Zinc deficiency	3.2	Overweight	2.7	Overweight	7.4
Iron deficiency	3.1	Cholesterol	2.1	Low fruit and vegetable intake	3.9
Vitamin A deficiency	3.0	Indoor smoke from solid fuels	1.9	Physical inactivity	3.3
Blood pressure	2.5	Low fruit and vegetable intake	1.9	Illicit drugs	1.8
Tobacco	2.0	Iron deficiency	1.8	Unsafe sex	0.8
Cholesterol	1.9	Unsafe water, sanitation, and hygiene	1.7	Iron deficiency	0.7

Source: From WHO, The World Health Report 2002; Reducing Risks, Promoting Healthy Life, WHO, Geneva, Switzerland, 2002. With permission.

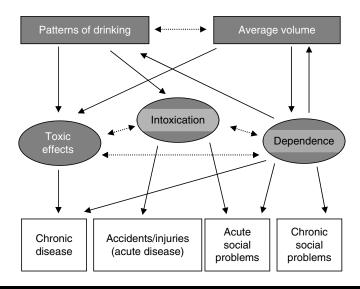


Figure 4.1 Relationships between alcohol consumption, mediating variables and short-term as well as long-term consequences. (Babor, T., Caetano, R., and Casswell, S., *Alcohol: No Ordinary Commodity; Research and Public Policy*, Oxford University Press, Oxford, England, 2003, Fig. 2.2, 20. With permission.)

not among the top ten risk factors (it is number 11) [2]. As socioeconomic development progresses, we can expect that alcohol will climb on the list of risk factors also in these countries, both because we have seen the link between development status and alcohol consumption and because rise in development status will lead to progress in combating other big killers like malnutrition, unsafe water, and sanitation which are linked with poverty.

Harm is generated from consequences of long-term use related to the toxic properties of alcohol and dependence that some users develop, as well as from unintentional injuries and violence occurring related to the acute effects of intoxication. See Figure 4.1 for the relationship between alcohol consumption and consequenses.

4.2.2 Health Problems

Alcohol is a toxic substance in the sense that it has negative impact on various body organs and systems. There is a causal relationship between alcohol consumption and more than 60 types of diseases and injuries [2]. Cirrhosis, haemorrhagic stroke, pancreatitis, and cancers of the oral cavity, pharynx, larynx, oesophagus, liver, and breast are among the diagnoses related to alcohol [10]. The effects on the

organs of the body are cumulative and the risk of experiencing these diseases increases with increased consumption over time.

The potential lower risk for Coronary Heart Disease (CHD) found to be related to regular light drinking has received a lot of attention. Still, the effect is limited to a drinking pattern which does not include heavy drinking occasions and has most effect for certain age groups, mostly middle-aged and older men in countries where CHD is a major risk. Calculating the net effect of alcohol on CHD, it was found to be minimal in most parts of the world [9]. General medical consensus at this point is that recommending higher alcohol consumption is not useful to health promotion, because the pattern of drinking that could bring health benefits is rare in most alcohol-consuming societies.

Heavy drinking by pregnant women can damage the foetus. The most extreme case of this is called Foetus Alcohol Syndrome (FAS), in which various forms of mental retardation, impaired motor coordination and malformation of various organ systems may affect the baby for the rest of his or her life.

Alcohol dependence refers to a state where the drinker is not able to stop or control drinking with various other alcohol-related problems occurring. Alcohol dependence syndrome is among several alcohol-specific diseases fully attributable to alcohol that are officially recognized in the International Classification of Diseases (ICD).

4.2.3 Problems Arising from Intoxication

Acute intoxication occurs when alcohol is consumed, particularly when large quantities are consumed. Short of alcohol poisoning intoxication can lead to a short-term state of functional impairment, affecting balance and movement, and reaction time and impairing judgement [3]. These effects increase the risk of accidents and injuries and are particularly dangerous in connection with navigating traffic and operating heavy machinery. In addition, intoxicated persons may experience emotional changes and decreased responsiveness to social expectations, resulting in violence, intentional self-harm, and social problems in families and communities. The literature often emphasizes that changes in behavior accompanying intoxication are a matter of cultural and personal expectations and understanding, in combination with the physiological changes caused by elevated alcohol concentration in the body [3,7].

4.2.4 Alcohol and HIV/AIDS

Risky sexual behavior often occurs under the influence of alcohol, and this contributes to the spreading of HIV/AIDS which has dramatic consequences in certain regions. The possible effects of alcohol on HIV/AIDS are not included in the

calculations of alcohol's contribution to Global Burden of Disease. Still there has been growing interest for the role of alcohol in the HIV/AIDS pandemic. The WHO report, *Alcohol Use and Sexual Risk Behaviour: A Cross-Cultural Study in Eight Countries** points out some key patterns of interaction between alcohol use and sexual behavior related to the following issues: the construction of maleness in terms of alcohol use, denial and neglect of risk as a way of coping with life, the use of alcohol-serving venues as contact places for sexual encounters, the use of alcohol at/during (first) sexual encounters, and the promotion of alcohol use in pornographic materials [11].

Across the sites studied in this project, drinking was manifested as a lifestyle and an indispensable part of social life, integral in development of personal partnerships, and functional in sexual encounters. In all the countries except India, alcohol consumption was believed to signify maleness. In South Africa, for example, "being able to hold one's drink and drink heavily were regarded as sign of masculinity," although resultant irresponsible behavior was an assertion and manifestation of masculinity in Romania. In most of the countries, being under the influence of alcohol was culturally accepted as an excuse for irresponsible behavior, including risky sex. Another study in Sri Lanka, though not related to HIV/AIDS, pointed to the role of alcohol consumption in establishing masculinity. Sex and suppressions of women, including domestic violence, were hot topics in drinking settings, and the men even boasted about hitting women as a way of expressing masculine norms and identity [12].

A recent population-based study on alcohol and high-risk sexual behaviors in Botswana concluded that alcohol use is associated with multiple risks of HIV transmission among both men and women. As many as 31 percent of men and 17 percent of women met the criteria for heavy drinking. Such alcohol use patterns were associated with risky sex among both men and women, including unprotected sex, sex with multiple partners, paying for sex by men and selling of sex by women. A dose—response relationship was seen between alcohol use and risky sexual behaviors, with moderate drinkers at lower risk than both problem and heavy drinkers. The research team concluded that the findings of this study underscore the need to integrate alcohol abuse and HIV prevention efforts in Botswana and elsewhere [13].

4.3 Development Issues

Alcohol does not only have health consequences, but it is also a social and economic issue. Poor people around the globe are vulnerable even to small changes destabilizing their daily hand-to-mouth economy. This situation is described by an Egyptian

^{*} The countries studied were Belarus, India, Kenya, Mexico, Romania, South Africa, The Russian Federation, and Zambia.

woman in the Voices of the Poor study: "We face a calamity when my husband falls ill. Our life comes to a halt until he recovers and goes back to work" [4].

Additional Burden 4.3.1

For those living under harsh circumstances, with few possibilities for relaxation, alcohol may seem an easy way out. This ties in with images often portrayed in alcohol promotions, that alcohol offers a taste of luxury, recreation, and entrée into a world beyond everyday worries. But the problems created by alcohol use are rather additional burdens for poor people.

The Voices of the Poor study points out that poor people see alcohol and drug use as a major consequence of poverty, but it also illustrates that alcohol use can be a cause for poverty. Groups in many places mention a pattern of male drunkenness, scarce money spent on alcohol and drugs, and domestic violence. Alcohol abuse is especially prevalent among men. A cause-and-impact diagram, resulting from several group discussions in Kuphhera, Malawi, shows how men's beer drinking often leads to promiscuity, disease, and eventually death [4].

As this study indicates, families often carry the burden of men's alcohol consumption. Domestic violence, broken families, neglected children, injuries, health problems, a breadwinner failing to bring income to the family, and money spent on alcohol instead of food, children's schooling, and other essentials are among the factors involved [7].

In an African context, Bryceson describes five main features characterizing heavy drinking cultures. First, drinking is accorded a major role in leisure activities. Second, drinking is used as a means of establishing a collective social identity and demarcating status. Third, heavy drinking cultures have a social tolerance for frequent or copious drinking and drunkenness. Fourth, there is a higher risk of mortality owing to alcoholrelated disease and accidents in heavy drinking cultures. And fifth, adverse socioeconomic consequences, including martial discord, family breakup, violence, and child welfare problems are frequent [6]. She argues that this drinking culture is part and parcel of larger processes of economic, political, and cultural marginalization.

4.3.2 Gender Issue

Women are less likely than men to drink around the world. Still within this pattern there are big variations, and neither the universality of gender differences in alcohol consumption nor the variations in them have been adequately explained [14]. In some areas of the world, both in parts of Europe and in some developing countries (such as Nigeria and Mexico), the gender gap in the prevalence of heavy episodic drinking has become small or nonexistent. Concerns are being raised in various parts of the world over diminishing gender differences in drinking, in the sense that particularly young women drink more (rather than the young men drinking less) [14].

However, elsewhere, such as in many countries in South Asia, persisting cultural values still contribute to a general pattern of drinking in which men consume more alcohol and cause more problems by doing so than women.

Alcohol is often reported to be a factor in gender-based violence around the world. In several studies, women report that their husbands have been drinking when violent incidences occur. Several studies also identify higher risks of being exposed to violence when the men or the women themselves have a drinking pattern of excessive drinking or have an alcohol-dependent intimate partner. Some of these studies support the conclusion that alcohol may play a direct precipitating role in domestic violence [1]. The nature of the association is complex and simplistic conclusions should not be drawn. Domestic, marital, and other forms of genderbased violence must be seen as a problem in itself. A study in Sri Lanka reported from qualitative field studies in nine locations in three different settings around the country. All the field assistants recounted stories of domestic violence, leading the researchers to conclude that the prevalence of domestic violence is clearly very high. They point out that the women see the connection between men's drinking and their violence very clearly [12]. In Latin America, intoxication reportedly provides an excuse for violent behaviors of men. If a violent man was not intoxicated, then wives, families, and communities would not tolerate his violence [15].

4.3.3 Children and Young People

The recent World Development Report focusing on youth makes abundant mention of alcohol use as a risk factor for young people. Other risky health behaviors highlighted in the report include tobacco use, drug use, risky sexual behavior, and inadequate diet and physical activity. "Such risky behaviours during youth can deplete the economy of productive human capital for many years into the future. [...] Heavy alcohol consumption and drug use reduce productivity and increase absenteeism and other health-related costs to firms and individuals" [16]. In the wake of increasing motor traffic combined with a lack of drink driving regulations or enforcement of such regulations, drinking and driving is drastically increasing the risk of traffic injuries to the point that such injuries are among the leading causes of death and disability in developing countries. The World Development Report points out that countries with higher rates of alcohol consumption among youth also report higher rates of motor vehicle deaths and suicides among youth. More than half of deaths because of homicide or traffic accidents in South Africa and Brazil had blood alcohol levels in excess of legal limits [16].

The study "Alcohol and Drug Use in Nepal" by Child Workers in Nepal (CWIN) found that more than one third of the children (under 18) interviewed identified negative effects from parental drinking [17]. These included domestic violence, loss of wealth, indebtedness, loss of social prestige, and bad relationships with neighbors. In the part of the study which included key informant interviews,

most of the informants reported that the use of alcohol in the family affected children's education as well as mental development. Because alcohol use often causes loss of wealth and increased debt, this in turn results in inability to pay for children's education. In addition, children face mental stress when parents drink excessively. Parental drinking is identified as a push factor for children running away from home. Adult perceptions in this study confirm many of the same social and economic impacts on children's lives.

Children are also vulnerable to domestic violence, as discussed above, while studies in Western societies suggest that physical abuse during childhood may be a risk factor for becoming alcohol-dependent in adulthood. This highlights the intergenerational effect and the complex relationship between violence and alcohol abuse [15].

4.3.4 Economic Burden

When alcohol is raised as a poverty issue, expenditures on alcohol are often high-lighted as an important aspect. A study in Sri Lanka found that over 10 percent of male respondents reported spending as much as or more than their regular income on alcohol [12]. In the qualitative part of that study, the researchers discovered that calculations of the expenditures on alcohol grossly underestimate the real costs. This was not only because of drinkers deliberately or unwittingly underestimating the amount of money they spend on alcohol. But also two other mechanisms came to light: first, heavier drinkers make others pay for their alcohol, using a variety of tactics. These expenditures are registered neither by those who consume nor by those who pay. Second, amounts spent during special occasions are seldom included. Weddings, big girl parties, and other celebrations can entail for large expenditures on alcohol; and although these were not included in calculations of average alcohol expenditures, people reported becoming indebted because of them.

The same study also pointed to the paradoxical role of alcohol in the development process. "The role of alcohol consumption in the development process is rather paradoxical or at least confusing. Governments, nongovernmental organizations and the public at large all want development and economic improvement. But to many, or maybe most, conspicuous consumption is the visible and ultimate proof of increased prosperity and modernization. Increased alcohol consumption, both in everyday life and on special occasions, has been made an inseparable part of the modernization process and the image of prosperity. To many young men in the villages, to be modern and to be developed includes drinking beer and arrack, and showing it off. Alcohol and other drugs easily serve as symbolic arenas in which to conduct and express the search for a modern identity."

"There is also good reason to believe that this new and modern drinking pattern does not substitute [for] the current patterns of alcohol consumption but adds to it. Thus the much cheaper kasippu continues to be easily available everywhere and to be consumed as before as well" [12].

Bryceson also points out alcohol's ambiguity in Africa. Over the last 20 years, rapid income differentiation and economic marginalization spurred production and consumption of alcohol. In many localities, an expanding supply of alcohol has led to drinking patterns that impinge on general social welfare. The widespread incidence of these circumstances coincides with the continentwide implementation of structural adjustment and economic liberalization policies, which Bryceson speculates may be related to increased drinking.

With the backlash in economic development on that continent from the 1980s, alcohol production has become a substitute economic activity for large numbers of people in both rural and urban areas. This is the situation not only in Africa. A study from Nepal also points out how poor people add to their income through alcohol production and sale. The poorer the household, the greater the possibility is that they produce alcohol at home for the purpose of selling it. In some localities and some ethnic groups, this has become the major source of income [17].

Bryceson concludes that "At the outset of the twenty-first century, alcohol in Africa is providing a valuable economic fuel and social lubricant during hard times, but it is an inflammable substance, harbouring the threat of individual tragedy and societal disarray" [6].

4.3.5 Industrialization of Alcohol Production

It is sometimes argued that investments in industrial alcohol production result in higher quality beverages, provide employment, and offer valuable technology transfers to developing countries. These arguments, though, are not always valid [18]. Room et al. point out that there may be health benefits from replacing cottage-produced by industrial-produced alcohol in terms of the purity of the product. However, these benefits should also be empirically verified, because they can easily be overstated [7]. Impact on employment is often low and sometimes negative. Although some new jobs may be created in new alcohol production facilities, mostly new breweries set up in developing countries are highly automated with few jobs. To the extent that industrialization of alcohol production replaces the cottage industry sector, the heaviest losers in terms of employment are often the women involved in traditional production. Industrial products may thus undermine the income of family enterprises or smallscale brewing industries [18]. To the extent that industrialized alcohol comes in addition to traditional alcohol production, it can entail an added burden for the society.

The argument that multinational investments will lead to technology transfer is also open to questions. Foreign control of production and marketing is likely to be high. Production is often supervised by foreign nationals and most product development is carried out abroad. Advertising is also usually part of the corporate profile and tuned toward managing the global brand identity of the product. The multinational companies will keep control over both the design (recipe) and the image of

the product [18]. Adverse consequences of industrialization may result when it leads to greater alcohol availability, more aggressive alcohol marketing, and higher alcohol consumption. What can be expected from the latter is increased rates of alcohol-related health and social problems [3]. Thus, the impact of industrialization of alcohol production on the economic development of a developing nation is at best uncertain, and may even be negative. The main benefit of such industrialization is that it makes it much easier to keep track of production and consumption and to collect taxes on alcoholic beverages.

4.3.6 Alcohol Revenue

Alcohol revenue is not only important for some families, but many poor countries are also dependent on it. According to one recent study in Nepal, national revenue from alcohol remained steady for the seven years preceding 2000, exceeding one billion rupees (6 percent of total government revenues). Alcohol contributed more than 50 percent of total excise duties in Nepal [17]. Thus, Nepal is an example of a country in a situation similar to many Western countries in the early 20th century, before the advent of the income tax, where alcohol is a major source of state revenue. Taxes, license fees, auctioning of licenses, and direct income from state-run outlets are among the various ways state revenue from alcohol may be collected. There are other examples of developing countries highly dependent on national revenues from alcohol. In some Indian states, alcohol makes up as much as 23 percent of government revenues. Cameroon in 1990 derived 42 percent of government revenue from taxes on locally produced beer and soft drinks, while 10 percent of Kenya's government revenues in 1985 came from alcohol taxes. In other countries, alcohol makes up a smaller proportion. Sri Lanka earned 4 percent of its revenue from alcohol taxes in 1996, while on average the 12 countries in the European Union (EU) drew 2.4 percent of revenue from alcohol taxes [7]. State dependence on revenue from alcohol taxes can easily be an impediment to imposing restrictions on the advertisement and sale of alcohol and strict enforcement of such restrictions. Countries may seek to maximize income from alcohol, but alcohol's social and economic costs are often overlooked. These include the direct costs of treating injuries and diseases as well as treatment and rehabilitation costs, property losses, law enforcement costs, and losses in productivity owing to absenteeism or loss of productive years of life. But the invisibility of these costs can combine with dependence on alcohol revenues to make Ministries of Finance look disfavorably on any attempts to reduce alcohol consumption.

4.4 Consumption Levels and Trends

Both poor people and those belonging to the middle class are affected by alcohol problems in developing countries. In addition to being an additional burden on the poor and underprivileged, new drinking habits, increasing consumption levels,

and rising problems occur among a growing middle class in a number of countries. As part of a globalized Western culture, Western drinking patterns are also spreading in the South. Although consumption is stagnating or even decreasing in the Western world, the WHO's *Global Status Report on Alcohol 2004* points out that the two regions showing recent and continuing increases in consumption are the South-East Asia region and the Western Pacific region [1]. This data hides differences in trends between countries within the WHO regions. In Central and South America where any regional trend is difficult to read from the statistics, country figures show that Brazil, Mexico, and Venezuela, the economically most successful countries, show fairly consistent growth in alcohol consumption, although other countries, particularly Argentina and Chile have seen a decrease [7].

As the figures mostly are based on recorded consumption, countries with a large proportion of unrecorded consumption are easily misrepresented. When FAO data is included to calculate fermented beverages and estimates of beer production locally from sorghum, millet, and other agricultural products, countries like Uganda, Nigeria, Swaziland, and Burundi climb among the top 30 positions of the list of per capita alcohol consumption [1].

The alcohol consumption level in a country (See Figure 4.2) as well as the dominant patterns of how alcohol is consumed (See Figure 4.3) affect the health of a population as a whole. Trends in development status and trends in alcohol consumption seem to correspond. This is pointed out by Room et al. [7] and is

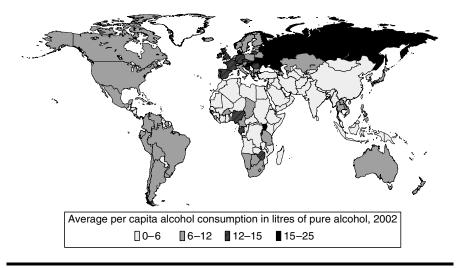


Figure 4.2 Average per capita alcohol consumption in litres of pure alcohol, 2002. (Map compiled by Jürgen Rehm based on the WHO Global Alcohol Database (GAD) 2002 figures. In this compilation what is different from the GAD figures, is that they include estimates of unrecorded consumption for each country. With permission.)

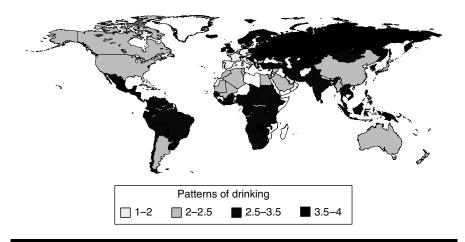


Figure 4.3 Patterns of drinking, 2002. (Map compiled by Jürgen Rehm based on the WHO Global Alcohol Database (GAD) 2002 figures. In this compilation what is different from the GAD figures is that they include estimates of unrecorded consumption for each country. With permission.)

indicated in the statistics from countries in both South East Asia and Latin America where economic recession seems to have delayed an upward trend in alcohol consumption in the 1980s and 1990s [1]. We can thus expect an increase in alcohol consumption to follow in the footpath of socioeconomic development. WHO points out as particularly worrying that the average volume of drinking is predicted to increase in the most populous regions of the world, for example, in China and India [1]. Other populous countries like Brazil and Russia already have substantial and well-documented alcohol problems [7]. Continued economic development could easily worsen these problems, if the connection between rising per capita incomes and rising alcohol consumption holds here as well.

4.4.1 Consumption Patterns

The predominant pattern of drinking in a population also influences the level of harm. Drinking to intoxication and recurrent binge drinking are the most harmful patterns [3]. Further, the proportion of the population who are consuming alcohol will influence the level of harm in a country. In countries with a high abstention rate, like India and Bangladesh where most women and a substantial portion of men abstain, the average consumption levels change dramatically when we change the perspective to consumption per drinker. For instance, in the WHO subregion SEARO-D, which includes India and Bangladesh, recorded consumption is 0.4 L of absolute alcohol per resident 15 and older, but the consumption per adult drinker is estimated to 12.9 L [3]. This has implications for expected harm in the drinking

segments and for the design of prevention efforts. The alcohol industry also views large populations of abstainers as untapped potential consumers. As rates of abstention decline, harms related to alcohol use may be expected to increase.

Various patterns of drinking exist around the world. They are often linked to the type of alcohol that is consumed as well as to legacies from traditional drinking occasions and settings. Bryceson points to traditional African drinking characterized by "temporal concentration which may well have had an air of abandon about it" [6]. Separating such drinking behavior from the rest of life through cultural timeouts like seasonal celebrations served to limit the harms to society of this heavy consumption. However, with alcohol consumption and availability increasing because of modernization and industrialization, and with drinking less and less tied to cultural and seasonal time-outs, this pattern has in many settings been transformed into a socially normative and constant pattern of heavy regular drinking, creating alcohol-related harm in many families and communities.

The Comparative Quantification of Health Risks and the Global Burden of Disease studies combined several components to introduce a measure of the level of risk involved with various drinking patterns. The studies ranked patterns on a scale from one to four, the higher number indicating greater risk. The variables measure heavy drinking occasions (with components such as the extent of daily drinking, the frequency of getting drunk, the usual quantity per drinking session, and the occurrence of fiesta binge drinking), drinking with meals, and drinking in public places (See Figure 4.3) [19].

Robin Room and his fellow researchers in a WHO-sponsored report point out an important dilemma: "As development occurs, in the absence of major mitigating influences such as religious prohibitions, alcohol consumption and resulting problems are likely to rise with increasing incomes" [7]. This rise is occurring in many of the countries that already have detrimental drinking patterns. Also, new drinking patterns tend to come in addition to old ones, often adding both to the frequency of drinking occasions, and heavy drinking occasions. For instance, in sub-Saharan African countries with a history of post-harvest drinking parties, such parties continue, but this general style of heavy drinking has also tended to become more frequent throughout the year, as alcohol has become more available [7].

4.5 Driving Forces for Harm

Although many traditional patterns of alcohol consumption still exist, the global brands of beer and spirits as well as wine drinking are expanding to every corner of the world. Globalization is characterized by a global market for consumer goods. These goods bring with them global brand identities, and inevitably globalizing cultural values. Drinking global brands of beer and spirits or serving wine can often be seen as a kind of conspicuous consumption where people spend their money on things that give them social credit and subtly communicate their newfound economic

status [6,12]. An increasingly global alcohol industry both benefits from and contributes to this trend as it seeks out new or underperforming markets.

4.5.1 Global Industry

Increased health awareness, aging populations, and the political will to implement evidence-based alcohol policy measures in the West have all contributed to stagnating or decreasing alcohol consumption levels in Western Europe and North America since about 1980. During the same period, the drinks industry has been going through a period of restructuring. New alliances and fewer and bigger companies are the result of this restructuring. Saturated markets in the West together with higher industry concentration and increased market power have led to the expansion of the international alcohol industry in what they term "emerging markets" in Africa, Asia, and Latin America. In numerous reports to their shareholders and in various market reports, success in these markets is portrayed as key to future profits.

The global market share of the international beer and spirits producers is increasing. The five biggest multinational brewers sell about 50 percent of all industrially produced beer in the world. When this development first was highlighted in 1985, it took 30 brewers to match this figure [7]. Global spirits brands comprise about half of distilled spirits sales worldwide. Almost all these global players are based in Western countries. This high degree of foreign control has important implications: keeping control of production, marketing and product image is important, and often this control remains with the mother company in the West. Although global spirits brands mostly are exported, beer companies are expanding through mergers and acquisitions both between themselves and by buying local companies and setting up new breweries in developing countries. They will usually keep control of the local brews, aiming at one segment, while their global brands are being marketed to a "higher" segment. These various brands give the appearance of competition, when often the same company owns or at least controls the distribution of multiple or the majority of brands available in a country. In Brazil, InBev, formed in 2004 in a merger of Belgian Interbrew and Companhia de Bebidas das Américas (AmBev), has an overall dominating position of 68.3 percent market share divided between two global brands and seven regional, national, and local brands. Including its ownership of Quinsa, it also has a dominating position in Argentina and almost monopoly in such markets as Bolivia, Paraguay, and Uruguay (figures from 2005) [20].

Particularly in the beer market, there has been great interest in the populous countries of Brazil, Russia, India, and China. During the last decade, the global brewers have been expanding aggressively in these promising markets. China has been the major growth markets for the global brewers the last few years, but gradually India is catching the interest of drinks executives. With a huge population and an annual growth rate in beer consumption of 7–8 percent, the brewers are eager to get a foothold. In Africa, SAB Miller has a strong standing. The new giant was formed

when South African SAB acquired Miller Brewing Company from Phillip Morris in 2002. The new company then captured the second position (by volume) among the brewers in the world.

The market power of these companies can sometimes spill over into political power. They are in a position to advise and influence the legislation in the sector they are working, and often portray themselves as "partners for public health." Industry lobbying in Sri Lanka was almost successful in changing the definition of alcohol to drinks with more than 5 percent alcohol (excluding most beers) when the parliament introduced the new alcohol and tobacco act with stricter regulations on sales and a ban on advertising in 2006 (National Authority on Tobacco and Alcohol Act). In the end, the definition was set to 1 percent after a hearing in the country's High Court. In India, the brewers are trying to move the politicians to change the taxation rates in favor of beer. The EU has launched a Word Trade Organizations (WTO) dispute on behalf of the European producers against India to bring down import duties on wine and spirits.

The policies promoted by the industry though are often those proven to have little effect (see Section 4.6). This is a great challenge for many of the developing countries who lack strong traditions of alcohol control or where the alcohol control policies that do exist are poorly enforced.

4.5.2 Social Aspects Organizations

In addition to the alcohol producers' own lobbying for drinks industry-friendly public health policies and alcohol policies, the influence of the alcohol industry is exercised through "social aspects organizations." These organizations are created and sponsored by the beverage alcohol industry to promote its interests, but are often presented to the public as impartial and objective bodies whose sole concern is to tackle the problems of alcohol misuse [21]. Social aspects organizations generally attempt to influence the alcohol policies and international governmental and intergovernmental organizations dealing with such policies. They seek membership in relevant alcohol- and nonalcohol-specific organizations and committees to broaden policy influence and respectability. One such example is their role in the Global Road Safety Partnership, where the president of the International Center for Alcohol Policies (ICAP), a Washington-based industry-funded body, held the first Vice Chairmanship, but promoted inefficient measures rather than high visibility random breath testing and lowering the legal limit of blood alcohol concentration which are measures that have a strong evidence base for being effective [21]. Social aspects organizations appear to have become a major influence on policy making at international as well as national levels. Compared to most non-governmental organizations (NGOs), social aspects organizations command huge financial resources and spend them to sponsor research, recruit scientists, host conferences, and promote high-profile publications. From being a phenomenon in the Western

world, social aspects groups are now being set up in a number of developing countries and regions along the patterns seen in Europe and America. During 2006, ICAP organized regional conferences for the Asia and Pacific regions in Tokyo and for the African region in Cape Town. The focus of the conferences was promoting self-regulation of alcohol marketing by the industry as opposed to government restrictions. The conferences invited researchers, NGOs, and government officials, and each conference issued a declaration. The Tokyo declaration was only signed by the organizers, ICAP, the Brewers Association of Japan, and the Japanese Spirits & Liquor Makers Association. In Cape Town, ICAP was able to recruit researchers and government officials to sign a declaration which commits to giving the alcohol industry a role in alcohol policy development [22]:

- Encourage government, industry, and public health partnerships on alcohol policy development.
- Encourage beverage alcohol companies and ICAP to support governments in the development of alcohol policies.

The industry focus on fencing off any restrictions on marketing is no surprise as this is their major tool in capturing new markets.

Global Marketing *4.5.3*

The characteristic of global alcohol brands is that they are marketing-driven. The product becomes a symbolic object to which the marketers attach a broad range of symbols. What is being marketed is not as much a product as a lifestyle—a brand with which the costumer may identify. Many of the global producers are far bigger economies than the countries where they operate. They have enormous resources and are able to launch sophisticated marketing campaigns, sometimes coordinated with global coverage and sometimes targeted with national or local themes. Alcohol marketing has greatly increased in complexity in the past decade, innovating and diversifying over a range of emerging media and technologies such as Internet, e-mail, SMS-communication, sports, and music sponsorships in recent years [23].

Throughout the world may be found examples of aggressive marketing both for local and international brands. Much of the lifestyle-oriented marketing is attuned to new user groups, particularly young people from the affluent middle class. This marketing connects the brand to a global youth culture. The paradox of the situation is that although the global producers in all their official communication emphasize that alcohol should be consumed responsibly and their various voluntary marketing codes typically feature clauses about not promoting excessive drinking, this marketing targets a rapidly spreading global youth culture of excessive drinking. Alcohol promotions tend to focus on the fun aspects of drinking, portray how drinking will make you socially successful, popular, and sexually attractive, and underline the strength or punch of the product (alcohol content). This probably reinforces the traditional drinking pattern of heavy drinking that exists in many countries in Asia, Africa, and Latin America and contributes to passing it on to a younger population. "The more you drink the bigger the chance of winning" type of competitions, like for Carlsberg beers where each collection of eight bottle caps is one entry to win substantial prizes in cash or in kind are also among such incentives for excessive drinking.*

The global youth culture lowers the barriers for young women to enter into the drinking population, targeting them directly and indirectly. Recently, the United Breweries Group in India recruited famous Bollywood movie star Shilpa Shetty as the brand ambassador for Romanov Vodka, which according to the company spokesperson Vijay K. Rekhi is the largest selling vodka in India, with a young consumer base [26]. Apple and tropical fruit line extensions of this vodka have also been launched. Flavoring and sweetening alcohol products is typical of efforts to extend marketing and alcohol use into young and female populations, as has been shown by the global efforts to promote "alcopops" [27].

Sponsorships of youth culture and sporting events can combine building brand loyalty and give the companies an image of social responsibility, but this is also an area where the companies frequently contravene their own self-regulatory codes restricting marketing related to sporting prowess and success, as well as their promises to refrain from targeting underage drinkers. The Danish brewer Carlsberg has portrayed itself as being "Part of the game" in football, with a long-running sponsorship of Arsenal football team and the FA Cup. The American beer brand Budweiser has spent huge sums to become the official beer of the latest Football World Cup tournaments. Both brands use these sponsorships to make their ways toward children and youth audiences in front of their television sets in every corner of the world. A special case in alcohol sponsorship, in light of alcohol's role in traffic crashes, is the sponsorship of Formula One auto racing by spirits brands Johnny Walker and Martini.

The global producers will target their various local brands at various segments of the population, using local religious, national and cultural symbols, local festivals and events some of which were not traditional drinking events. These campaigns sometimes focus on ethnic groups who traditionally did not drink. Poorer sections of the population are often targeted with cheaper brands, or industrially bottled traditional beverages owned by the multinational companies, like the sorghumbased Chibuku beer brewed by SABMiller in Malawi and several other African countries. Similarly, Carlsberg local strong beer Danish Royal Stout in Malaysia (8 percent alcohol) is according to the company's spokesperson more likely to be

^{*} See for example, Carlsberg's win your private jet campaign in Malawi and 14 other markets where you could win a free holiday for seven persons anywhere in the world for seven days with Carlsberg private jet plane [24], or Carlsberg Malaysia's celebration of its 160 years anniversary with cash prizes of 1,600,000 Malaysian Ringgits (USD 450,000) [25].

drunk by blue collar workers because it gives higher alcohol content for the money [28]. This beer has seen a new innovative addition, Danish Royal Stout Ginseng, which according to the company Web site is made with the finest quality Ginseng and which "revitalises anyone from deep within so that they can play hard and work hard. Danish Royal Stout Ginseng is an elixir of life for everyday heroes." The slogan is "Keeps you going" [25].

This illustrates how in some of these developing country markets, the international marketers use campaigns and tactics that would be unacceptable in their home markets and which break their own regulatory codes. Examples of this include the portrayal of a strong beer as an elixir of life, or the slogan used by Guinness in Sierra Leone: "Guinness... Reflects the Power in You." These fly in the face of provisions of selfregulatory codes used in developed country markets proscribing the use of claims of health benefits and enhanced physical performance as part of alcohol advertising.

Although the industry is in favor of voluntary codes of conduct for advertising, several countries also have various forms of advertising restrictions. Even where restrictions exist advertising will go on and take on a new face. India is among those countries which have a ban on alcohol advertising, but it is poorly enforced and the global beer and spirits producers blatantly ignore the ban by advertising such brands as Haywards 5000 Super Strong Soda, which corresponds closely in packaging and image with the SABMiller strong beer (7 percent alcohol) with the same name. Ingvar Midthun documents how surrogate advertising in India has almost become a science for an alcohol industry fighting for a larger share of a promising market where alcohol advertising is banned [29].

Policy and Intervention for Health 4.6 and Development

It is well established that when per capita consumption in a country rises, the harm from alcohol will also rise. The existing body of research regarding what is effective in preventing alcohol-related harms indicates that both total consumption of alcohol and harmful patterns of drinking should be addressed by population-based policy measures, at local, national, and global levels [7]. Based on an understanding from the existing science about how alcohol-related problems are generated and maintained, the following objectives could be proposed for intervention [10]:

- Reduce population consumption, including delay initiation of drinking among youth
- Reduce heavy alcohol use and minimize harmful patterns of consumption
- Change harmful behaviors associated with alcohol use

From an economic perspective, such public intervention to reduce alcohol use is justified because of market failures that dominate health behavior and cause

individuals to make inferior health decisions, both privately and socially. These market failures are magnified for young people. It is thus beneficial to restrict individuals' opportunities to make poor choices. The set of available opportunities may be altered by changing the availability of alcohol or of harmful opportunities directly, or by changing the prices associated with alcohol itself or with harmful activities connected to alcohol use [16].

The obvious owner of a national strategy is the state, and often this responsibility is placed in the Ministry of Health or Social Welfare. Developing or implementing evidence-based alcohol policies will need to involve several state actors, including law enforcement, the judiciary, and the Ministry of Finance.

4.6.1 Alcohol Control Policy

The first thought that often comes to mind when one realizes the existence of an alcohol problem in a community or society is to inform everybody about the dangers involved, presuming the consumers will reduce their consumption to safe limits, refrain from excessive drinking, and change the unwanted drinking behavior. Often liberal politicians will work to deregulate the alcohol trade, and claim that the potential for increased harm should be offset by public information campaigns. However, evidence indicates that the impact of such programs, whether they be school-based programs, media campaigns, warning labels, or low-risk drinking guidelines tends to be small at best and that most effects do not persist. This might also be why these measures are most commonly propagated for or even run by the alcohol industry. According to Babor et al., educational programs are expensive and appear to have little effect on alcohol consumption levels and drinking-related problems [3].

There are indications though that where there is popular support for control policy interventions the effect of regulations will be more effective. Thus, these information activities should be tuned toward increasing the understanding of the problem and increasing legitimacy of alcohol regulations. As a consequence of the alcohol-fueled violence described earlier, information campaigns should also aim at reducing the social permission to be aggressive and violent after alcohol use [10].

4.6.2 Taxation and the Price of Alcohol

Taxation of alcohol raises revenue for the state as discussed above. But much more than just being a source of revenue it also increases the price of alcohol and thereby reduces alcohol use and related problems. Babor et al. point out that raising alcohol taxes and prices has been by far the most popular of regulations. It is relatively easy to establish in law and enforce in practice [3]. Evaluation of the effect of raising alcohol taxes has proven this to be an effective intervention and has been the strategy with the strongest support from cross-cultural testing. Several studies show that

when other factors remain unchanged, an increase in price has generally led to a decrease in alcohol consumption, and that a decrease in price has usually led to an increase in alcohol consumption [3]. The special character of alcohol as a commodity presents this as an opportunity for raising revenue with health benefits as a side effect. Still most often there is a combination of raising revenue with a wish to regulate the alcohol market which is the rationale for increasing alcohol excise duty rates. Differential taxation according to alcohol strength is common. Stronger alcoholic drinks like distilled spirits are usually taxed more heavily per unit of alcohol than wine or beer. Some countries have also introduced particularly high rates for products that are considered to be more detrimental to health, or more attractive to vulnerable populations such as young people. One such move in several European countries has been to issue a special tax on the so-called alcopops, premixed, sweetened, fruit-flavored, ready-to-drink alcoholic drinks which tend to target young consumers and in particular young women.

Regulating Physical Availability 4.6.3

There is a substantial amount of literature on the effects and effectiveness of various alcohol control policies [3,7]. In general, evidence is strong for the effectiveness of regulation of physical availability and the use of alcohol taxes. The costs for implementing these measures are rather low, and Babor et al. also point out that they are applicable in most countries [3].

The most drastic way of regulating physical availability is a partial or total ban. This strategy has been tried at different places at different times. Some form of prohibition is a common feature in many majority Muslim countries, and this strategy was employed in the United States and some European countries in the early 20th century. More recently, bans have been tried in Andra Pradesh and other Indian states as well as in Nepal for some time in the 1990s. Common in these cases is that the ban was imposed following successful campaigning by popular women's movements protesting against the flow of alcohol fueling the drunken behavior of their husbands. In the short term, such bans usually bring about improvement in the situation the movements want to address, but they also have serious side effects in terms of lack of revenue for the state and a boost in illicit production and smuggling from neighboring states. There are more viable control policies that are more effective in reaching the objective of reducing alcohol consumption and related harm without these side effects.

A common way of regulating physical availability is by having a minimum legal drinking age, typically set somewhere between 18 and 21 years. There is strong evidence from the literature that having and enforcing a legal drinking age is effective for reducing problems. Numerous American studies have documented that increasing the drinking age in that country to 21 reduced alcohol consumption among the young and reduced traffic crashes and other adverse consequences

of alcohol use. In societies with lower prevalence of youth driving, the effects on other alcohol-related injuries and behaviors are more important. In addition, youth drinking is a concern as adolescence is a formative period where habits and behavioral patterns are formed, the adverse consequences of which may show up later in life [16]. Experience with this regulation suggests that banning sales, that is, making the seller responsible for not selling alcohol to minors, is more effective than a ban on purchases which leaves the responsibility solely with the young people.

Some countries and states have retail monopolies. At least 16 countries had a retail monopoly on spirit sales in 2002–2005 [8].* In addition there may be some lower administrative levels in some countries which are omitted from this statistic. For instance, some Indian and American states have such monopolies. Several studies have shown that elimination of government off-premise monopolies can increase total alcohol consumption. Babor et al. also point out that the evidence is quite strong that off-premise monopoly systems limit alcohol consumption and alcohol-related problems. This is related to limiting the number of outlets, the hours of sales, and the sales to minors. Removing the private profit motive makes enforcement of these regulations easier. In addition, the government can raise greater revenue by keeping a bigger part of the profit from sales of alcohol.

Even when the state does not control the retail sales of alcohol, regulating the opening hours will reduce the harm from alcohol [3]. If used strategically this could contribute to limiting the alcohol problems related to excessive drinking on pay days, or limiting weekend binges by closing earlier on Saturdays, etc. In many developing countries, we can expect that purchase, even at off-premise outlets, and consumption are close in time to each other. As this measure is likely to have the greatest impact on persons who do not keep a ready supply of alcohol, either because they cannot afford it or because they do not plan ahead, this could limit drinking sessions from becoming binges. Similarly, the evaluation of evidence indicates that limiting the number or density of outlets can influence consumption and problem levels [3].

The measures to limit the physical availability of alcohol mentioned above are cheap relative to the costs of health consequences related to drinking, especially heavy drinking [3]. If these changes are dramatic, they will of course have bigger influence on consumption and harm. When there is popular recognition of the problem and popular support for such interventions, the changes in availability can be expected to have larger effects. This is also the case when enforcement mechanisms exist. Most countries have some sort of license system to sell or serve alcohol, and a control authority which can swiftly impose fines and revoke or suspend licenses in case of violations will increase the effect. The most adverse effect may

^{*} These were: Belgium, Bosnia and Herzegovina, Cambodia, Canada, Colombia, Finland, French Polynesia, Iceland, Kyrgyzstan, Malawi, Maldives, Mauritius, Mongolia, Norway, Sweden, and Turkey.

be a rise in illicit alcohol trade. Studies mostly show that this will not be sufficient to make up for the reduction [3].

4.6.4 Dealing with the Illicit Alcohol Trade

Very often those opposed to implementing a coherent alcohol policy will argue that curtailing alcohol sales or increasing prices will only lead to an increase in illicit production and consumption. If we want to address alcohol problems, both licit and illicit alcohol should be addressed. Illicit production cannot remain endorsed forever as something impossible to change in today's corrupt world [30]. The shift is not one to one. By neither addressing licit nor illicit products, the competition between them usually leads to additional alcohol use rather than a substitution of one for another. As always, multiple strategies that address more than one issue will be more effective. Dealing with illicit alcohol is often related to other issues such as limiting corruption and developing good governance. Where measures are taken to limit law enforcement officers taking bribes to turn a blind eye on illicit alcohol, effects of regulations will be better. The existence of a large illicit component in the alcohol consumption in many developing countries may complicate the matter. Still, this should be an argument for adapting alcohol policies to the local situation, rather than a justification for doing nothing.

4.6.5 Drinking and Driving Countermeasures

Drinking and driving is a big killer. Here, there is often a discrepancy in terminology as some would like to focus on "drunk" driving—leaving out those drivers who have consumed alcohol but who do not consider themselves drunk. In recognition of the fact that coordination and reaction and thereby driving skills are reduced even with a fairly low Blood Alcohol Concentration (BAC), the term drinking and driving is the preferred term. Globally, BAC limits vary from 0.02 to 0.10 percent, and some countries do not even have regulations against drinking and driving. The most common limit is either 0.05 or 0.08 percent [8]. Deterioration in performance becomes quite marked between BAC levels of 0.05 and 0.08 percent, but performance may be impaired even when a driver has a BAC lower than 0.05 percent [3].

Another effective intervention is the establishment of random breath testing checkpoints. Their impact is more on raising the awareness and attitudes toward drinking and driving as a deterrent rather than actually removing individual perpetrators from the roadways as a consequence of being caught. The higher the visibility and the greater the frequency of checkpoints, increasing the risk of being caught if drinking and driving, the higher the effect. Such measures can reduce risks considerably. Swift punishment in the form of administrative license suspension or fines can also increase the effectiveness of checkpoints. In the setting of a developing

country, alcohol-related traffic crashes are often a considerable risk, but the cost of breath analyzing equipment can be beyond the relevant budgets. In such cases, earmarked fines can help finance necessary equipment. Some countries also have good experience with graduated licensing for novice drivers, because inexperienced young drivers have increased tendencies both to be involved in crashes and to experiment with heavy or binge drinking [3].

4.6.6 Restrictions on Advertising

As mentioned above, alcohol is being advertised heavily all over the world. This advertising has increased dramatically over recent decades. The traditional argument is that advertising is not intended to make people drink more, but to switch to a different brand. There is a long-running discussion over the impact of alcohol advertising on youth. In the United States, it has been documented that alcohol companies have placed significant amounts of advertising where youth are more likely per capita to be exposed to it than adults [31]. Thomas Babor and his team also point out that the research they have presented indicates that exposure to repeated high levels of alcohol promotions inculcates pro-drinking attitudes and increases the likelihood of heavier drinking. Advertising has been found to promote and reinforce perceptions of drinking as positive, glamorous, and relatively risk free [3].

A recent American longitudinal study on the effects of alcohol advertising exposure on drinking among youth concludes alcohol advertising contributes to increased drinking among youth. Youth who saw more alcohol advertisements on average drank more, and youths in markets with greater alcohol advertising expenditures drank more [32].

The drinks industry has, as mentioned above, consistently advocated that advertising is best regulated by industry self-regulatory codes, but Babor et al. also conclude that the range and sophistication of marketing influences are not adequately addressed by industry codes of self-regulation. Self-regulation has been shown to be fragile and largely ineffective [3]. Casswell and Maxwell argue that a new statutory framework is required to enable the monitoring and control of the full marketing mix in ways that match the sophistication of the marketing efforts themselves. Especially, pressing is the monitoring and control of marketing activities in emerging markets and societies in transition to market economies, in which voluntary codes are unlikely to be well enforced [23].

Some countries have imposed restrictions on advertising. The WHO Global Status report on alcohol policy has analyzed data from 118 countries responding to a survey. The results indicate that advertising on television and radio is more restricted than in print media and on billboards, with legal restrictions, total or partial, ranging from 44 (beer on national radio) to 60 percent (spirits on national television). Sponsorship of sports or youth events are regulated by statutory controls in 24 percent of the countries, while a few more have some sort of voluntary

agreements with the industry (15 percent for youth events and 8 percent for sports). The WHO report concludes that although much of the research on the impact of alcohol advertising is not conclusive, increasing evidence can be found that exposure shapes positive perceptions of drinking and can increase heavier drinking. Therefore, it seems that restrictions on advertising and sponsorship should be part of a comprehensive alcohol policy, especially when this advertising is targeted at young people [1].

4.6.7 Best Practices

In conclusion, evaluation studies have demonstrated that measures that restrict and channel sales and consumption of alcohol can be effective in holding down or reducing rates of alcohol-related problems [7]. Taxation as a measure to influence the price of alcohol, limits on physical availability, and drink driving countermeasures are usually deemed as effective. Based on thorough review of the scientific evidence, the following ten policy options stand out as best practices: minimum legal purchase age, government monopoly of retail sales, restrictions on hours or days of sale, outlet density restrictions, alcohol taxes, sobriety checkpoints, lowered BAC limits, administrative license suspension for drinking-driving, graduated licensing for novice drivers, and brief interventions for hazardous drinkers [3]. The World Development Report adds total advertising bans to their list of measures proven successful for reducing health risks from tobacco and alcohol for young people. Partial advertising bans on tobacco and alcohol on the other hand are considered unlikely to be successful [16].

Although research evidence indicates that educational campaigns have little or no effect on the consumption level of individuals, such campaigns could be used to generate awareness of and acceptance for policy-oriented measures [33]. Thus, comprehensive strategies to address alcohol problems should include both alcohol control measures and information and education, but information campaigns can never replace alcohol control policies as a means to reduce alcohol-related harm.

4.6.8 Need for Global Leadership

In the context of the level of harm documented by the GBD there is a great need for global leadership in developing strategies for action. The present developments where increased harm can be expected in many developing countries, and the complexity of the countermeasures available underlines this. WHO is the obvious candidate to take forward the international strategies on preventing harm from alcohol use. In 2005, the World Health Assembly (WHA) passed the resolution 58.26, "Public health problems caused by harmful use of alcohol" [34]. This is the first WHA resolution focusing solely on alcohol since 1983 [35]. This does not mean that WHO has not been involved in alcohol during this time, but the 2005

resolution gives a new impetus for action. One major problem for WHO is inadequate funding for the alcohol program. With the ongoing globalization of the alcohol trade, there is a need for a global focal point that can counterbalance this development. To do that, WHO needs to be adequately resourced.

Another challenge, even in the wake of a success in the process of the new initiative following the 2005 resolution, is the counteracting developments in other international processes. Any progress achieved in WHO and in national strategies could easily be offset by decisions in WTO/GATS (General Agreement on Trade in Services). With the free trade mantra, the WTO-system is pushing to liberalize trade in all aspects. If alcohol is considered an ordinary commodity, the result will easily be the dismantling of effective alcohol control policies. In the trade negotiations, countries which do not have a developed set of regulations or who are not taking reservations for the regulations they have, can easily find themselves in a future situation with increasing harm from alcohol, but with trade-related proscriptions on developing effective countermeasures. Developing countries can easily get their hands and feet tied in WTO-settlements that stop them from building an effective policy response in the future.

4.6.9 Community Action

Community action can be used to address problems associated with alcohol use. In a Western setting, community action or mobilization would be considered a harm reduction strategy—trying to influence the drinking patterns where no or few policy interventions are possible. Experience is that such mobilization can be highly successful at reducing aggression and other problems related to on-premise drinking. However, the challenge is to sustain the achievements over time [3].

In a developing society setting, I have earlier mentioned examples of how women's movements have curtailed alcohol problems in South Asia. Such mobilization has aimed at more than just changing behavior. It has also targeted the supply side of alcohol, which has been demonstrated above to be an effective approach. Thus, in a discussion of strategies to address alcohol problems, Professor Diyanath Samarasinghe has included "appropriately restricting availability" in a list of what such strategies could include. Very often community action springs from a wish to address a problem one has identified in a community (or even a country). Samarasinghe argues that such action should be guided by analysis of the determinants of alcohol problems in the relevant setting [10].

"Reducing the attractiveness of the image of alcohol" is one such strategy which involves questioning the aspects that make alcohol look specially appealing or desirable. The attractiveness is enhanced by the symbolic value placed on it, and is strengthened by various advertising messages. For young people, alcohol is generally seen as an adult activity and it gives many a notion of social success or belonging to a particular group. The attractiveness is also closely tied to permission

to transgress social norms. "Reducing the unfair privileges attached to alcohol" could thus be a second strategy for intervention. Baklien and Samarasinghe point out how the norms discouraging domestic violence are relatively weak in Sri Lanka [5]. Holding the perpetrator responsible even when drunk would be a good step to address the violence problems related to alcohol. In addition to violence, removing the excuse function of alcohol could have positive impact on risky sexual behavior.

Another element in the increasing role of alcohol in contributing to adverse health and safety consequences is alcohol's penetration into social situations which were not previously viewed as drinking occasions. Preventing such alcoholization of all social events and activities could be a useful strategy for a community wanting to address alcohol problems. Samarasinghe has developed a set of such strategies which could be employed by active community agents [10]. Often such community action is taking on some organized fashion, whether in community-based organizations or action taken on by more established NGOs. For such action to yield sustainable results, it should also encourage implementation of useful policies, locally and beyond. This is the role of NGOs as actors in civil society—to advocate for changes which will benefit communities.

Recommendations for Development 4.7

Alcohol consumption and problems are not just part of the framework and conditions within which development activities must work. Many developing countries carry a heavy burden of alcohol both on health and socioeconomic development. According to trends and tendencies, the role of alcohol problems in developing countries is expected to be even more important in the future as they tend to increase with rising incomes. Thus, it is paramount that alcohol problems be addressed as part of development initiatives. Based on the evidence presented above, it is possible to make some recommendations. Alcohol should be addressed as a health issue, but not only that. In addressing traffic development, the role of drink driving as a risk should be addressed. In relation to countering the great challenges raised by the HIV/AIDS pandemic, the role of alcohol use in risky sex and the resultant spread of the infection needs closer attention. To regulate alcohol will also pose challenges to law enforcement and warrant focus on good governance as well as fighting corruption. Dealing with free trade ideologies, it is necessary to advocate that alcohol is not an ordinary commodity and that special measures need to be taken. This also applies to how the alcohol trade is dealt with. The global alcohol producers and their social aspects organizations would often offer to be a partner in development of public health policies, but the advice they offer should be measured against the strongly established evidence base regarding which policies are effective. On the global level, there is a strong need for a lead agency to develop strategies and make recommendations for action. WHO should be given both the mandate and the resources to continue and further develop this role. In the alcohol field,

there are also challenges both for non-governmental development agencies and for other NGOs, most obviously in the public health sector, but alcohol could also be considered relevant for those involved in consumer interests, international trade issues, youth matters, and others.

Alcohol and its problems are thoroughly researched, but still most of the research has been done in developed countries like Europe and North America. There is a lot of research to be done in documenting the effects of alcohol that are specific to developing societies. There is also a need for further research in developing countries on such issues as alcohol's role in the HIV/AIDS pandemic and in gender roles and oppression. Measurement of alcohol consumption in the face of a large illicit sector needs attention from researchers, and dealing with this sector should also be addressed. Policy development in developing countries gives a good opportunity for research on the impact in a development setting. Such changes should therefore be followed by appropriately designed studies. This will extend the evidence base to guide others who follow.

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Chapter 5

Right to Health and Sustainable Health Development: Improving Psychosocial Strategies in HIV-Related Stress

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5.1 Introduction

The right to health has been, for a long time, a major concern for countries and international organizations. However, numerous important facets of health management have been forgotten in the implementation of strategies to attain the highest level of health. The implication of psychological and social factors is commonly acknowledged in the development of disease. That is why the consideration of these factors is a major component in the establishment of sustainable health strategies. Because of various reasons, the majority of efforts that have been considered for the past 20 years focused mainly on the biological aspects of the management of disease.

In this chapter, we will initially propose to the reader a series of recent figures concerning health in the African region. We will then focus on mental-health problems and their interactions with HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome). Indeed, although the physical aspects remain the principal target of HIV-therapeutic programs, we will sensitize the reader to the fact that it is useless to try to develop therapeutic strategies according to an approach only centered on the physical well-being. In light of recent scientific developments, we will highlight the close relationship between psychosocial factors and the course of the disease. We will demonstrate that the psychosocial factors are canalizing the expression of HIV-associated symptoms. We will then insist on the fact that the various ways of managing the stress associated with the disease play a key role in its morbid evolution. The concept of mental health will be, therefore, developed to better understand its deep integration inside the HIV/AIDS condition. After explaining how HIV/AIDS is likely to mimic psychiatric syndromes, we will focus on the fact that being HIV positive can involve several behavioral consequences such as suicidal ideations or drug use or abuse. These consequences also lead to a serious interference in the disease evolution. Using relevant scientific literature, and in light of previous experiences, we will point-out certain tracks likely to bring more light than heat to the debate concerning mental-health integration inside primary healthcare of HIV/AIDS patients. Human rights literature will be consequently considered to understand health as a fundamental human right and understand how States could interact with communities in the implementation of a complete and pragmatic health approach involving available human resources. Indeed, several international treaties refer to the right to health as a human right. Many mechanisms have already been put in place to help States fulfill obligations deriving from those documents. Moreover, steps taken by countries to improve the right to health will also have an impact on development. Indeed, health and development are closely related, so that sound health programs and policies will also have an impact on development from community to country level. Countries that have ratified those international instruments have the obligation to progressively implement the right to health. For countries facing human and financial resources constrains, this could also mean involving the community.

Therefore, a community-based approach involving not only modern but also traditional medicine at district level will be considered to propose an approach in which every aspect of health is considered, and where every community worker is involved.

5.2 HIV and Mental Health: The Other Side of the Mirror!

In Western Europe, life expectancy at birth (LEB) is around 75 years for men and 80 and more for women. This difference between men and women seems to be a classic figure. By looking at LEB in the southern African region (also considered as a holiday destinations for European tourists), we are immediately surprised by the decrease in LEB and also by the tendency to erase the differences between men and women. This tendency even seems to be reversed in some countries (e.g., Zimbabwe). In South Africa, the LEB is 47 years (men) and 49 years (women); Mozambique, 44 (men) and 46 (women); Democratic Republic of Congo, 42 (men) and 47 (women); Zambia, 40 (men) and 40 (women); Swaziland, 36 (men) and 39 (women); Zimbabwe, 37 (men) and 34 (women) [1]. This low LEB, especially for women, will have terrible consequences for the future of these countries. When combined with HIV prevalence among adults aged 15-49 years, the situation is even more dramatic in the African region: Swaziland (38.8 percent), Zimbabwe (24.6 percent), South Africa (21.5 percent), Zambia (16.5 percent), and Mozambique (12.2 percent), and democratic Republic of Congo showing an optimistic 4.2 percent. Major efforts have been consented in the coverage of antiretroviral (ARV) combination therapy for people with advanced HIV infection [1] but differences are still existing: Swaziland (31 percent), Zimbabwe (27 percent), South Africa (21 percent), Mozambique (9 percent), Zambia (5 percent) and Democratic Republic of Congo (4 percent). However, in the world projection of major causes of death, HIV is still increasing. Therefore, physical intervention (ARV combination therapy) seems to be insufficient, even considering the medical progress to be made in the following years. Other options, in association with physical interventions, should therefore be seriously considered.

The influence of psychosociological factors in the progression of the HIV pandemic is a very relevant topic that is located at the border between psychology and immunology. However, when looking at this very complex subject, that covers the interactions between body and mind, where HIV is concerned, we can see that this subject is still largely under-studied. Nevertheless, the general model that helps explain the relationship between stressful events and health is remarkably simple: it implies the perception of a stressful event, a reaction to that stress that will lead to neuroendocrinal modifications, followed by some anomalies in the immune response, and the appearance or the aggravation of symptoms [2].

However, although the chain of events seems well known, the understanding of potential consequences remains unknown. At the beginning of the 1990s, researchers had integrated the fact that the initial psychosocial situation only plays a minor role in the development of future symptoms [3]. For example, although poverty creates an environmental context that facilitates the transmission of HIV, as underlined by some authors [e.g., 4], HIV/AIDS is not a consequence of hunger or mediocre living conditions [5]. Therefore, it is by looking at the way patients react to the consequences of their illness that one can understand the differences in the morbid evolution of the illness.

As proposed by Balbin et al. [6], the clinical and immunological evolution of HIV/AIDS can be directly associated to psychosocial factors. Liu et al. [7] clearly demonstrate that more outpatient visits, depression, ARV drug interruption, recreational drug use, and less social support were significantly associated with lower mental health summary score. Moreover, this score is suspected to be correlated with the evolution of the disease. Shor-Posner et al. [8] even highlighted the relationship between psychological distress in HIV-1 disease and hypocholesterolemia. The association between HIV/AIDS and stress is beyond any doubt a major element in the evolution of the disease.

Moreover, the perception of stressful events can not only influence the morbid evolution of HIV/AIDS, but also play a major role in behaviors that are dangerous for the transmission of HIV [9]. In fact, this phenomenon is already known by patients. In a very pertinent study performed in three southern African communities, Kalichman et al. [4] showed that people living in one of the highest HIV prevalence communities in the world do not experience AIDS as unique among social stressors. The psychological and psychosocial factors are therefore susceptible to influence not only the dissemination of the illness, but also its morbid evolution among infected patients. The situation of HIV patients is therefore quite complex and implies, when results are wanted, coordinated therapeutic actions that take into account physical and psychosocial variables.

The occurrence of mental disorders is also very concerning in people living with HIV/AIDS. Among the major mental health conditions typically associated with AIDS, there are mood and anxiety disorders [10], psychosis [11], depression [12], bipolar disorders [13], mania [14], and substance abuse [15]. Mental disorders can be considered as already existent in various forms before the infection and HIV/AIDS could precipitate their morbid expression. However, psychiatric complications of HIV/AIDS may appear as acute or chronic organic brain syndrome, or mimic functional psychiatric diseases [13]. For example, increased levels of kynurenic acid in cerebrospinal fluids of HIV/AIDS patients seems to be associated with psychosis [16], while it is also hypothesized that AIDS-related mania and agitated psychosis may be related to increased intracellular free calcium [17].

Suicide is also a major HIV/AIDS-associated consequence that should be seriously considered, especially if one knows that psychiatric complications can increase the risk of suicide attempt in HIV/AIDS patients. Shelton et al. [18]

showed in a sample of 54 HIV-positive men that 59 percent of the sample reported ever thinking about suicide, and 50 percent of those individuals reported attempting suicide at some point in their lives. It has also been demonstrated that suicidal ideation is also present in HIV-positive individuals without psychiatric comorbidities [19].

Use and abuse of psychotropic substances is also a worldwide common feature that can seriously complicate the management of persons with HIV. In western Kenya, Shaffer et al. [20] showed that hazardous drinking is common among patients with and without HIV/AIDS, while in Russia (St. Petersburg), Krupitsky et al. [21] showed that alcohol diagnoses of abuse or dependence were present in nearly one-half of hospitalized HIV-infected patients. Alcohol or drug use or abuse can be associated with decreased humoral and cellular immune responses, thereby seriously limiting the ability to be protected from certain infectious agents [22]. As showed by Kuljis et al. [23], it can also induce an increase in the density of neurons containing nitric oxide synthase in the cerebral cortex of patients with HIV-1 infection and therefore underlie some neuropsychiatric manifestations. Drug use and abuse is also associated with significantly higher sex-risk behaviors and higher drug-risk behaviors [21]. As stated by Moore et al. [24], risky sexual practices may also reflect modification in sexual behavior following the acquisition of HIV disease.

Personality, and therefore personality disorders related to HIV-infection, seems to be a key issue in the management of HIV-associated mental-health problems including addiction. Indeed, Parsons et al. [25] indicated a significant relationship between the use of several substances and the sexual behaviors that put partners at greatest risk for HIV transmission. Also, in observing trends of death in the literature, Brody et al. [26] showed that excess mortality was mostly accounted for by homicide, suicide, drug and alcohol toxicity, and AIDS, with AIDS deaths occurring in prostitutes identified as injecting drug users. Addressing alcohol use in HIV-infected persons may improve ARV adherence and ultimately clinical outcomes [27]. However, as showed by the same author, even a multicomponent intervention to enhance adherence among HIV-infected individuals with a history of alcohol problems was not associated with changes in medication adherence, alcohol consumption, or markers of HIV disease progression [28]. Therefore, country-adapted interventions should be investigated.

Like in many other pathological conditions, it is obvious that HIV patients need to face a set of stressors associated with the illness. In turn, the way they deal with these factors is susceptible to considerably influence their health and their immune functioning [29–31]. The way individuals react to stress factors can therefore partly explain the observed variations in HIV-related symptoms evolution. This set of data available in the literature enabled researchers to understand that a significant proportion of variance in immunological and clinical course of HIV/AIDS is related to psychosocial factors [6]. This conception leads to taking into account of psychosocial factors for the handling of HIV-positive patients. However, methods of intervention vary dramatically from one continent to another. On one side, patients

have a perfect access to treatment where therapeutic handling is concerned; on the other side, patients who are informed about their seropositivity (which is already considered as progress) have little hope to access an optimal mental healthcare system. There is a large set of causes that delays the handling of patients diagnosed with HIV. However, these causes should definitely not slow down the implementation of programs aimed at facilitating access to health. Nevertheless, Collins et al. [32] reviewed a large number of studies and demonstrated the need for methodologically sound studies of mental health throughout the evolution of HIV. They encourage investigators to study the impact of mental-health interventions in HIV service settings [32]. As stated by Freeman et al. [33], the integration of psychiatry and psychosocial intervention in HIV service settings should benefit both mental and physical health of the patients. Kelly and Freeman [34] insisted on the awareness of mental-health problems faced by people with HIV/AIDS. The authors consider that the recognition of the mental-health support needs is a major step in the inclusion of mental health within HIV/AIDS therapeutic programs. They highlight the necessity to adapt guidelines and advocacy tools, and to develop country-specific resources. They also insist on the fact that strategies solely based on professional experts are unlikely to be effective and that there is a need for mental-health program that should be conducted by nonspecialists such as primary healthcare nurses and community health workers in primary-level facilities [34]. The HIV/AIDS handling in areas where therapeutic options seem limited would be more credible if, like Kalichman et al. [4] highlight it, one insists on the fact that the HIV infection is a social problem and that communities can help to solve it.

Right to Health: When States Meet Communities 5.3

5.3.1 Health as a Human Right

Although no one questions the existence of human rights and the need to put mechanisms in place to ensure their implementation, sometimes the content of those rights might seem unclear. We know that international laws concern the relationship between governments and groups or individuals within their jurisdiction, and that they provide protection against actions interfering with fundamental freedoms and human dignity. But what are those rights and freedoms? Although some of them are obvious (right to be free from torture, slavery, discrimination, etc.), others seem to be less popular and do not always make it to prime-time news. Therefore, their content and the way to implement them might seem blurry. The right to health is probably one of those rights. Although the right to health is a fundamental right and we need it to be able to enjoy other human rights, people still raise their eyebrows when they discover that technical agencies such as the World Health Organization (WHO) include a human rights approach to health, especially at regional and country level.

The right to "the highest attainable standard of health" first appeared in the WHO constitution [35], and was also included in the United Nations' (UN) Universal Declaration of Human Rights of 1948 [36]. The World Health Assembly (WHA) later declared in 1970 that the right to health is a fundamental human right [37]. The right to health was then mentioned in various documents at international and regional level (Alma Ata [38], African Charter of peoples' rights [39], etc.). However, important developments mostly occurred in the past 20 years.

Right to health and right to development are also closely related. Indeed, it is recognized that health can be improved by applying a rights-based approach to development. It has already been established that poor-health indicators are often a sign that basic human rights that are vital for development are violated [40]. Therefore, for the past 20 years, it has been recognized that development programing must be consistent with human rights [41]. The UN common understanding of the Human Rights Based Approach to Development Cooperation [42] highlights that "Human Rights standards contained in the universal Declaration of Human Rights and other international human rights instruments should guide all development cooperation and programming in all sectors and in all phases of the programming process" (2nd principle). The relationship between human rights and developments policies can be very complex as development policies can help the fulfillment of some human rights, and also, in some circumstances, violate others in the way they are drafted and implemented.

This implies that international human rights, including the right to the highest attainable standard of health, should be incorporated in development plans and policies. The importance of the right to health and its link to development is particularly highlighted where poor and vulnerable populations are concerned. Indeed, ill-health will prohibit them from working and earning the required resources for a good living [43,44]. This could possibly affect the economic structure of a whole community. Therefore, governments acknowledge more and more that health, human rights, and development are closely linked to each other and ask for technical assistance not only in the field of human rights in general, but also on the right to health in particular [45].

5.3.2 Ratification of Health-Related Obligations

The responsibility to implement the right to health has not been directly granted to individuals. This task lies on the States. It is important to highlight that all States have ratified at least one treaty that comprises health-related rights. National constitutions often refer to them as well. This means that, where the right to health is concerned, States have the obligation to ensure availability (of healthcare facilities), accessibility (for everyone), acceptability, and quality (of the service provided) [46]. Of course, States are required to realize this progressively. As mentioned by Mary Robinson, former High Commissioner for Human Rights,

the principle of progressive realization of the right to health means that the States' obligation to respect this right does not imply that "poor governments must put in place expensive health services for which they have no resources" [47]. But there are some aspects that can and have to be implemented immediately, such as the freedom from discrimination. That means that although States do not have to realize the right to health overnight, they still have to take the appropriate steps to move forward.

Mechanisms are already in place to help them implement the right to health. Committees of independent experts monitor efforts made by States and make recommendations to help them improve. For example, the most authoritative interpretation of the right to health lies in article 12 of the International Covenant on Economic, Social and Cultural Rights [48]. Furthermore, the Committee on Economical, Social and Cultural Right also adopted in 2000 a General Comment (known as General Comment 14) [46] to clarify the nature and content of this right and States Parties' obligations. Although the covenant has only been ratified by 153 countries (May 2006), it gives a better understanding of what the right to health comprises. A special rapporteur on the right to highest attainable standard of health has been appointed by the UN. His role is to help States better promote and protect the right to health. He will also clarify the scope of this right, and help identify good practices for its implementation at international and regional levels, and also within the community. The special rapporteur also goes on country missions to assess how a specific country plans to implement the right to health, or to focus on specific health issues. Finally, specialized agencies, such as the WHO, also provide technical assistance to countries to help them achieve their obligations, and implement the recommendations. This assistance will include a human rights-based approach to public health. This approach does not aim at replacing health promotion strategies but helps meet "priorities human needs defined through the language of human rights" [41].

In these documents, it is recognized that the realization of the right to health is also closely linked to other important human rights, considered as underlying determinants of health, such as right to food, housing, work, nondiscrimination, and so on. Therefore, tackling the violation of other human rights also helps improving the right to health. This is why right to health and right to development are so closely related. Indeed, the right to development will help highlight how human rights contribute to health outcomes [41].

The purpose of this approach is not to stigmatize States that have troubles fulfilling obligations. Instead, it will provide an additional framework that will help identify, analyze, and respond to the underlying determinants of health [49]. Indeed, because human rights norms are created and adopted by governments themselves, through a consensus process, they provide a reliable standard to assess health policy and practices. Also, as human rights are considered as crosscutting activities since the 1997 UN reform, a broad range of partners are able to work together toward the realization of these rights.

5.4 From States to Communities

Some might say that human rights have nothing to do with health and that only a public-health approach could help improve the health indicators [50]. However, a good collaboration between human rights and public health could be the key to success [51]. Indeed, a human rights-based approach to health could help provide tools to analyze and address health challenges, and to reach vulnerable population groups. This is particularly true in the African region. Difficulties to access healthcare facilities are a reality in many African countries. The implementation of the right to health does not stop at adopting relevant laws or reporting to the treaty bodies. It refers to the daily improvement of people's lives as well. It also helps prioritize the needs of vulnerable or marginalized population groups. As mentioned, governments and public authorities are expected to put in place concrete plans and actions, within the available means, to help respond to violations of this right. Although the wide nature of the right to health and the broad margin left to States to ensure the progressive realization of this right is often seen as a weakness [52], this should also be considered as a good opportunity to introduce new ways to implement this right. As an example, countries facing an important lack of resources (human and financial) have to consider new types of solutions. We know that traditional healers and other community workers play a very important role in helping people facing illnesses. First and foremost, they help disseminate information in the local languages and in simple ways. Also, people occasionally turn to them because they are not aware of available treatments, because they do not have the financial resources, or because they are just afraid to go to the hospital. Sometimes, strong cultural beliefs will also lead people to seek the help of traditional healers first. In 2003, WHO had estimated that over 80 percent of the population in the African region had depended on traditional medicine for their health needs [53]. Therefore, we can see that active and informed participation of individuals and communities is crucial for the right to health.

The UN common understanding of the Human Rights Based Approach to Development Cooperation [42] states that "people are recognized as key actors in their own development," and that "participation is both a means and a goal." This should be taken into account when devising plans and actions aiming at improving the right to health. It is important to let communities have their say in defining their needs and even the scope of the health services available to them. Indeed, this element can respond both to the financial and the human resources problem that many African countries face. Community-based care can relieve some of the increasing burden faced by hospitals while ensuring that basic rights, such as access to healthcare, are respected. Indeed, studies have already shown that community-based care can sometimes be as valuable as hospital services [54,55]. Their activities can also dramatically help improve the coverage of health services. Strong collaboration with local-health workers by healthcare services is particularly relevant in rural areas where there is very limited access to specialist services [56]. Therefore, more and more

developing countries try to develop healthcare initiatives involving community-health workers [55].

It is therefore obvious that the role of the community can even go beyond disseminating information or providing basic healthcare. Community-based health interventions will enable to reach the most vulnerable, and, as a consequence, help reduce overall poverty, and improve the level of health. This is particularly true where mental health is concerned. For example, local-health practitioners can easily provide mental support to people diagnosed with HIV at low costs. This, of course, will not solve the problem of access to treatment, but this should ensure a better life to those people, which is also one of their human rights. Indeed, this counselling is often crucial to help them face their condition as we already mentioned in this chapter.

5.5 The Right to Health: A Keystone for an Integrated and Sustainable Health Development

In the preceding paragraphs, we underlined a series of arguments to show that the right to health was likely to allow a better integration of the psychosocial factors in primary healthcare systems in the African region. Initially, we sensitized the reader with the dramatic evolution of the HIV/AIDS pandemic to subsequently follow with concepts such as the psychosocial factors, HIV-associated stress, mental-health comorbidities, and its consequences. In light of an abundant and recent literature, we detailed the importance of psychosocial factors not only in the evolution of the disease, but also in the associated risky behaviors likely to contribute negatively to the dispersion of the disease. These psychosocial factors, including HIV-associated stress, and more particularly, the coping strategies developed by the patients play a predominant role which must be considered in the therapeutic strategies. In addition, we insisted on the occurrence of mental disorders among HIV/AIDS patients. Indeed, these neuropsychiatric complications, which can be precipitated or consecutive to the acquisition of the disease, involve behavioral consequences, from substance use/abuse to suicidal tendencies, likely to interfere with the management of the patients.

As we already mentioned, HIV should be considered as a social problem, and experience showed that a country-strategy only based on specialists' experience is not sustainable. The involvement of nonspecialized practitioners like nurses, community-health workers, or even traditional healers should be considered as a viable alternative at the front line. These considerations must be translated/adapted in every country considering the available resources, and the implementation of the right to health seems to be a good framework in which the protection and promotion of human rights can have a definite impact on health. Indeed, while most States have ratified instruments referring to the right to health and have the obligation to implement it, communities also have a very important role to play. This central role is particularly obvious for patients with HIV/AIDS.

South Africa already provided us with a good example. Indeed, the State recognized that community-health workers play an important role to assist implement the plan of action to help patients with HIV/AIDS. This community-based care involved counselling and treatment adherence support [57]. It is therefore important, for example, to promote the growth of traditional medicine as a health-care solution so that more people can have access to and afford quality healthcare. Putting emphasis on community-based care does not mean that we take away the responsibility from the State's hands (usually referred to as the duty bearer), but we shift the attention to the beneficiaries (also called the right holders). By improving the quality of life of those patients, the community will also help local development.

Those community-based intervention services involving nonspecialized frontline workers under supervision should also help reduce the stigma that is usually associated with mental-health problems [58]. These approaches will encourage the response of people to the needs of people and help them to be key actors in their own sustainable development.

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Chapter 6

The Community and Its Telemedicine Program: Mutual Sustainability Issues with a Focus on the United States and Russian Federation (RF)

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Introduction 6.1

Worldwide, deployment of advanced telecommunication capabilities is facilitating broadening access to health-related information and enhanced health service delivery across geographic, cultural, and socioeconomic barriers. Universal access to healthrelated information will make it possible to (a) rapidly disseminate new discoveries, (b) enhance the diffusion and adoption of standards for diagnosis, treatment, and practice, (c) promulgate new healthcare-related tools such as pharmaceuticals and diagnostic/treatment equipment, and (d) enable new services. Beyond information access and sharing are applications designed to promote and improve health: "...the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health, and health administration" [1].

The several processes leading toward a world relatively undivided by national, social, economic, environmental, technological, and cultural barriers have been termed "globalization" [2,3]. Opinions differ about whether the effects of globalization on individuals and societies are positive or negative when applied on a worldwide scale. However, when viewed within national limits, there is compelling logic for creating nationwide services undivided by geographic, social, economic, environmental, technological, ethnic, or cultural barriers. A driving force for equalizing service opportunities is the ongoing revolution in both the technology and the accessibility of telecommunications and information. "With astonishing speed, the Internet has evolved from an obscure communications environment for computer science researchers to an essential element of the communications infrastructure used by virtually all segments of society" [4].

Advanced telecommunication and information dissemination enhance universal knowledge of what is possible in many areas of endeavor, including healthcare. Telemedicine/tele-health, for example, uses medical information exchanged from one site to another via electronic communications to improve patients' health status and to address issues of distant health education, healthcare, diagnosis, monitoring, management, and research. That disseminated knowledge can then drive individual and societal expectations as well as the identification of goals that target both what can and should be achieved. Development and achievement of these goals in turn depend upon addressing barriers that include policy, economics, law, education, culture, technology, and labor.

Addressing mutually encountered problems may require nationally unique solutions to deal with unique national issues and barriers. However, most technical and distribution barriers are not unique, transcend national boundaries, and can be addressed cooperatively. Our purpose here, in themes relevant to the United States and the Russian Federation (R.F.), is to explore some of these common problems, potential tele-healthcare solutions, the barriers impeding their implementation, and potential collaborative approaches to overcome those barriers. For simplicity in this paper, we use the word "telemedicine" in its Russian sense, to include the activities encompassed in the United States by the terms "telemedicine," "tele-health," and "e-health."

6.2 "Remote" or "Rural," the Problem Is Access

6.2.1 The United States: Rural Health Issues

According to the National Rural Health Association, 25 percent of the U.S. population resides in rural areas where only about 10 percent of physicians practice [5,6]. These facts mean that rural Americans have significantly limited access to many healthcare services. Most rural healthcare providers practice general or family medicine. Specialists tend to be concentrated in metropolitan areas, frequently in medical centers.

Complicating the lack of specialty providers, additional key barriers to accessing care in rural areas include distance, geography, finances, and limited knowledge of resource availability [7]. In fact, the Rural Healthy People 2010 survey ranked access to quality health services the top health priority for rural Americans [8].

Nationally, access to health insurance is known to be less in rural than in urban areas [9], especially for older people [10]. Lack of health insurance coverage is related to lower levels of preventive services, a higher incidence of diagnosis at later stages of disease, and less effective management [11].

Healthcare insurance in the United States has government and private components. Coverage components in 2004 were reported as follows: Government—Any plan 27.2 percent, Medicare 13.7 percent, Medicaid 12.9 percent, Military 3.7 percent; Private—Any plan 68.1 percent, Employment-based 59.8 percent, Direct purchase 9.3 percent. 15.7 percent of the population had no insurance coverage. Also in 2004, 12.7 percent of the U.S. population (8.6 percent White, not Hispanic; 24.7 percent Black; 9.8 percent Asian; 21.9 percent Hispanic) were living below the poverty level and 15.7 percent were medically uninsured (11.3 percent White, not Hispanic; 19.7 percent Black; 16.8 percent Asian; 32.7 percent Hispanic) [5].

Thus, when compared with their urban brethren, rural populations experience lesser care of known diseases and disparities at the point of initial disease diagnosis that include the following: (a) poor access to healthcare services, in particular specialty services; (b) limited geographic and financial access to new, effective therapies and technologies; (c) minimal transportation options; (d) low participation in health promotion programs; (e) limited knowledge, particularly in terms of early detection; and (f) lower educational levels [12].

National, state, and local governments and healthcare systems face these issues on different levels, but all believe that communities and community leaders must be involved/committed to successful program development, especially if services for the indigent are to be included [8]. According to Rural Healthy People 2010, educational and community-based programs rank sixth among rural health priorities. To address these needs, rural hospitals frequently collaborate with providers, community organizations such as churches and civic clubs, and employers to pool resources to fund and staff programs and services. However, even then, if only local resources are relied upon, rural communities are less likely to develop successful and sustainable health-related programs because they lack readiness, resources, and technical expertise [13].

6.2.2 Russian Federation: Communities Remote from Central Medical Centers

Since the October Revolution in 1917 and until perestroika, healthcare system in the R.F. was centralized and dependent on the Minister of Healthcare. The Union of Soviet Socialist Republics (USSR) was comprised of 15 republics, one of which was the R.F. When the USSR ceased to exist, the R.F. persisted. Then, as now,

the R.F. is a single country comprised of several states, some of which are called "republics" as they have their own government, language, and culture.

All documents, protocols, and financial flows were controlled in Moscow. Since 1990, however, healthcare and other national systems are attempting to deal with the process of decentralization. In the R.F., there are 89 regions, each with varying degrees of autonomy. Initially, each was challenged to balance responsibility for both funding and delivering healthcare while simultaneously trying to design and implement a new system of health insurance [14]. They then had to reverse the process in parallel with more recent efforts at central government reform [15]. Although the economic and social status of the population is a priority task for the government of the R.F., new and evolving models for healthcare delivery and financing must face the reality of finding new ways to work.

In the current Russian healthcare system, a significant portion of the total medical organizational structure continues to be federal [16]. Each of the several federal healthcare organizations carries out all activities in the sphere of healthcare for the members of its organization. The properties required for carrying out these tasks are also federal—including buildings, medical equipment, and staff. These federal healthcare organizations are connected to regional health facilities and governments for referrals, and for the development of policies that work in each particular territory. Regions also have responsibility for a portion of the healthcare system that is independent from the central authority (federal government) in terms of finances, and to a large degree in terms of policies, but regional, local, and private healthcare providers are also simultaneously responsible for being consistent with federal and regional policies.

Almost all rural healthcare providers are members of branches of the state/republic healthcare infrastructure. Insurance is divided into mandatory/obligatory, and voluntary. Mandatory/obligatory is required of each individual. Voluntary is optional and depends on the individual's diseases base or the program of healthcare services in which he or she chooses to participate.

Currently, ongoing reorganization in the R.F. healthcare system is heavily oriented toward investment in the acquisition of technology and its integration into the overall healthcare system. Organizational changes are directed at increasing the effectiveness of using existing potential without additional monetary investment [17].

Rural communities in Russia have the same issues, including a shortage of specialty physicians, as are seen in the United States, but in the R.F. the local community does not control local healthcare because of its centralization to the state level of healthcare government. So all benefit calculations and planning negotiations must be conducted on the state government level.

6.2.3 Universal Issues in Rural, Remote Healthcare

Our overall view of healthcare in this paper embraces two perspectives: (a) health status of the population and (b) care of the individual. From this vantage, we believe that the United States and R.F. have many healthcare-related issues that are in

common with each other as well as with the rest of the world. Our view of these universal and common issues concerning healthcare of populations resonates with the description of Amadio and Hathaway [18]: "...not...sophisticated communication technology and infrastructure connecting medical centers around the world....[T]his...already exists....[I]nstead, [what are needed are]...the monumental improvements...that would occur for...millions of people...through better access to clean drinking water, nutritious food, and safe vaccinations....
[Then,] the basic healthcare needs of the entire world would be met....[I]nformation...communication technology is...a necessary part of a more connected world....[but i]t alone is not sufficient to deliver radical change."

Our view does include accepting and exchanging information and knowledge about standards of care relevant to remote access to new and sophisticated healthcare diagnostic and management tools. However, we view as more fundamental the need for universal adoption of a common health promoting socioeconomic environment where fundamental health education, screening, and prevention resources and practices are standardized and accessible, but grafted onto both local, regional, ethnic, cultural, and religious traditions as well as national requirements. Further, although we believe that the information sharing and distributing capabilities of telehealth technologies are extremely valuable for accomplishing these goals, we recognize that only a small portion of the world's population can read and write, and therefore access to available information is limited, even if the technological infrastructure is universal [19]. As von Lubitz et al. [20] point out, "... over 83 percent of the world's population appears to have either limited or no direct . . . accessing [of] the wealth of health related information available on the Net." Dramatic international efforts in education, as well as technology access, will be necessary to overcome this deficiency, especially in the Third World and the socioeconomically disadvantaged populations of the First World.

We also believe that many barriers to healthcare access are not purely technical or educational, but are fundamentally related to national policy, legal, labor, economic, and governmental issues.

Historically, because the healthcare sector has invested far less in information technology than have other major sectors of the business economy [21], the ability to use tele-health approaches to overcome barriers to improved community and individual health is impaired. However, even if these investment practices were to change, simple investment in the physical deployment of technology that can create connectivity and access, disseminate information and best practices standards, and overcome geographic barriers is neither a local, regional, national, or global panacea. Unfortunately, there are numerous examples of telemedicine networks that have failed to become self-sustainable once grant and government subsidies expire.

There is an important lesson here. Government, insurance payers, providers, hospital systems, policymakers, credentialing organizations, and ultimately consumers must collectively determine whether and how quickly these technologies will be employed and their benefits realized [18,22]. Governments must align tax, tort,

and insurance laws while ensuring safety nets, reconsidering entitlement programs, and realigning incentives [22]. Policymakers and credentialing bodies must recognize the intensely personal and thus extremely variable nature of healthcare purchase decisions [18]. W.H. First issued a fundamental challenge to all segments of the global healthcare industry when he pointed out that we have never fostered the kind of competition in the healthcare economy that has led to success in other industries [22].

6.3 Telemedicine: Background

The American Telemedicine Association (ATA) defines "telemedicine" as the use of medical information exchanged from one site to another via electronic communications to improve patients' health status. The Russian Telemedicine Foundation defines "telemedicine" as "a method to provide healthcare services, where distance is a critical factor, by all clinical specialties using information and telecommunication technologies to receive information necessary for diagnosis, treatment, and prevention of diseases" [23]. Initially, products and services related to telemedicine are often enabled by large information technology investments by governments and healthcare institutions for other purposes, on which the telemedicine applications ride.

When seeking common ground for discussion and collaboration on tele-healthcare issues, however, important terminology differences among potential partners must be recognized. The ATA, for example, defines the word "tele-health" as a term closely related to "telemedicine," and often used to encompass a broader definition of remote healthcare activities that do not necessarily involve direct clinical services [24]. These include, but are not limited to, patient education and the monitoring of patient physiologic parameters that assess chronic disease management and progression. The U.S. Office for the Advancement of Telehealth attempts to take a more generalized view and includes what others call "telemedicine" in its definition of the word "telehealth": "... the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, *public health* and health administration" [1]. A third commonly used term "e-Health" is very broad and encompasses the many healthcare-related activities that use the Internet such as administrative functions, clinical care, and education of patients, their families, and professionals.

These distinctions are not usually made in the R.F. where all electronic healthcarerelated activities and uses of electronic health information transfer are included in the term "telemedicine."

6.3.1 U.S. Telemedicine

In the United States, large financial investments to improve health outcomes tend to be directed at the technology of healthcare (new methods, drugs, and medical devices) [25].

No longer a purely experimental field, telemedicine has proven its effectiveness as a tool to overcome distance, cost, and patient mobility issues in numerous clinical scenarios. Many end-user technologies are available for delivering diagnostic, therapeutic, management, training, and education services to individuals with access limitations of any cause in any location. However, bandwidth availability is not universal, especially in rural areas. Bandwidth utilization must be matched to service need: for example, lower bandwidth for videoconferencing in patient homes or for mental health services, and high-bandwidth systems when high-resolution video and medical peripherals are used (digital stethoscope, ophthalmoscope, otoscope, etc.). Store-and-forward technologies (for X-ray, ultrasound, pathology, etc.) can maximize the efficiency of bandwidth use when real-time interaction is not necessary and time can be taken to transmit data files.

Telemedicine programs encompass three general purposes: (a) clinical service (video-consultations, home monitoring, store-and-forward images from medical devices, case management, etc.), (b) professional and patient education (especially for rural constituencies) and training, and (c) administration (meetings and collaboration).

Telemedicine has a long history of implementation in rural areas. Rural Healthy People 2010: A Companion Document to Healthy People 2010 (volumes 1, 2, and 3) cites nine models for practice using telemedicine technology [8], and telemedicine has been employed successfully in rural areas of many U.S. states where its role is documented in numerous healthcare areas: for example, mental health, stroke, primary care, emergency medical services, long-term care, education and community-based programs, etc.

Even so, telemedicine programs are not as widely used as might be expected, given the potential, the promise, and the clinical success of these technologies [26].

Historically, the success of telemedicine programs has been limited, for example, by the short duration of federal, state, and foundation start-up grant funds [24,26–29]. Telemedicine programs were started in many states in the 1990s using federal or state dollars. However, in a few years, when grant funds were exhausted, most of them closed. Georgia was one of these states. In 1995, the Georgia State Telemedicine Program (GSTP) was one of first and largest U.S. specialty consultation tele-health programs [30,31]. Clinically successful for more than five years, when telecommunication subsidy payments to the rural sites ceased and they assumed full responsibility for those costs, they one-by-one withdrew from the network. Similar experiences were repeated in other states [24,27–29,32], but some programs sustained themselves with research grants, local funding, business contributions, and through Public Health Department support [33].

To varying degrees, there now are significant telemedicine programs providing acute care consultations, scheduled chronic disease management, or ambulatory disease monitoring in every U.S. state. Telemedicine provides a significant fraction of U.S. prison healthcare services. The U.S. Department of Veterans Affairs has implemented the nation's most comprehensive electronic medical record system.

Insurance companies have begun creating their own state-based consultation networks. Several federal agencies promote the development of telemedicine support infrastructure or the services that run on them: for example, (a) U.S. Department of Health and Human Services Health Resources and Services Administration [34], (b) Federal Communications Commission Wireless Telecommunications Bureau, the U.S. Department of Agriculture Rural Development Rural Utilities Service, and the Federal Communications Commission Joint Federal Rural Wireless Outreach Initiative [35], (c) U.S. Department of Health and Human Services Office for the Advancement of Telehealth [1] and the Federal Communications Commission Rural Health Care Pilot Program [36].

6.3.2 R.F. Telemedicine

Several characteristics of the R.F. and its healthcare system demonstrate the potential value of telemedicine for that country:

- Level of available diagnostic and treatment options is substantially different in major national cities (e.g., Moscow, St. Petersburg), regional city centers (e.g., state/oblast capitals), and rural medical facilities. Federal support tends to be given to major academic medical centers and research facilities that tend to be located primarily in major national cities and secondarily in state capitals.
- There is a general lack of affordable transportation for patient and healthcare specialist travel in a population separated by huge distances.
- R.F. researchers describe a "Strong need to raise corporatism of physicians and their expertise level...." [37].
- R.F. is currently embarked upon the aggressive development of broadband telecommunication access that will enable the potential of providing telemedicine services to remote communities.
- Knowledge of information technology by potential R.F. end users is not something new; there is widespread use of computers on a day-to-day basis.
- "Computers and digital communication channels become cheaper and transportation/living costs tend to rise" [37].
- There is an aggressive existing market for telecommunications, videoconferencing, telemedicine equipment, and software.
- "The new economic structure in Russia has influenced every segment of Russian society. While the shift to free-market enterprise has created many opportunities for businesses and industry, it has also provided many challenges for health-care facilities, which are trying to maintain satisfactory public health-care services with dwindling state support and an increased emphasis on local community support" [38].

The most successful existing network is Moscow-Russian regions. Its participants use videoconferencing technology for consultations and education using Integrated

Services Digital Network (ISDN) lines. There are more than 40 current participants with a geographic footprint that covers six different time zones. Participating consulting sites include the Bakulev Scientific Centre for Cardiovascular Surgery, the Moscow Scientific Institute for Pediatrics and Children's Surgery, the Russian Government Medical Centre, and the Burdenko Scientific Centre for Neurosurgery. Consultants from other federal medical centers participate by invitation [39]. The level of available diagnostic and treatment options is substantially different in major national cities (e.g., Moscow, St. Petersburg), regional city centers (e.g., state/oblast capitals), and rural medical facilities. Federal support tends to be given to major national cities and state capitals.

The Russian Ministry of Railways implemented its own fiber-optic backbone connecting the main Russian railway stations throughout the country. "This Ministry has its own healthcare institutions rendering services to the railways workers and this corporate backbone is also used for teleconsultations and distance medical education" [39].

Store-and-forward e-mail consulting is widely practiced and not really regulated. For example, the Centre of Telemedicine for Children in Moscow consults through e-mail with any Russian physician or patient. These consultations are provided free of charge for all state medical institutions [40].

All these examples connect remote communities to central federal medical centers. There are few efforts to connect rural healthcare providers into their own networks.

6.4 Role of Telemedicine in any Country's Community Sustainability: U.S. Perspective

Healthcare can be viewed from two perspectives: (a) care provided to individuals, including responsibility for personal compliance and chronic self-care and (b) maintenance of community environments that are sanitary, safe, and health promotional by means of programs for active prevention, screening, and education.

The intimate interaction between a patient and a clinician is a core element in individual healthcare. It is initiated when an individual seeks medical services; it is paid for by the individual or the individual's private or governmental insurer. Many argue that it is therefore intuitively obvious that individual healthcare services are locally provided activities. The evolution of healthcare and healthcare delivery systems appears to have affirmed that view [41]. Others identify this presumption that healthcare services must be provided locally as a root reason for the continual rise in the cost of medical care [42].

On the other hand, individual care occurs in the context of, and is greatly influenced by, the individual's health environment: clean water, sanitation and pollution control, health screening, immunization, workplace safety, and child and maternal health. This context requires socio-technical systems that are not usually

initiated by individuals, but rather by collaboration among national and international health organizations through which minimal and optimal standards are set. The stakeholder organizations then work in collaboration with governments to implement the standards. To the degree that telecommunication and information technologies become increasingly important components of healthcare, it is critical that nations share their experience in these contextual areas, and do so respecting regional differences.

With widespread adoption of the Internet and World Wide Web (WWW) in the mid-1990s, it became apparent that telemedicine had the potential to distribute health-related information and increase its accessibility, as well as contributing to individual healthcare access by the geographically and socioeconomically underserved and the physically challenged. Further, telemedicine offered the opportunity to develop, promote, and contribute to the delivery of uniform worldwide expectations for basic community health.

In 1996, Hoben proposed several areas in which the Internet could be used for healthcare. He included continuing medical education, online collaboration, broad distribution of standardized clinical practice guidelines, collection of disease management outcome information and healthcare trends, health services planning, patient record access, and consumer access to health-related information [43]. Each of these is at least a partial reality today. The Internet's communication power has the potential to globalize medical knowledge and best practices, increase research collaboration and sophistication, and facilitate rapid adoption of new medical discoveries.

However, reaping the benefits of this potential will require core changes in individual attitudes, healthcare systems, and governmental policies [44] because of persisting healthcare disparities based on socioeconomic status, geography, gender, physical ability, race, and ethnicity [45]. Access to health information and services is critical for health promotion, disease prevention, and medical therapy, but the strongest predictors of population health are income levels, education levels, and gender equality [46], all of which can be strongly influenced by universally available communication capabilities.

6.4.1 Telemedicine Program Sustainability Issues in any Country: U.S. Perspective

If one tries to diagram the life of a telemedicine program (Figure 6.1), start-up often depends on one funding resource. Start-up expenses are critically important because required equipment represents a large investment for rural sites [33]. In the past, program leaders or participants focused on start-up and began to think about sustainability too late to ensure program survival after start-up funds were exhausted. Lack of focus on sustainability is now known to be one reason for high rates of telemedicine project failure [29]. Lagging evolution of reimbursement regulations

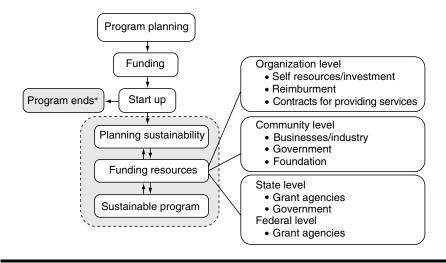


Figure 6.1 Life stages of a telemedicine program. (*Many programs end when external funding ends.)

that have failed to keep up with developing technical capabilities also have impaired program sustainability. As a result, a telemedicine program might achieve favorable medical/healthcare outcomes, but ultimately not be financially sustainable [47]. Planning for sustainability must begin at a minimum at the start of the program's life, but preferably when program planning and start-up funding development are initiated [32]. Potential sponsors and contributing users should be identified, recruited, and included in this planning before any project gets underway [48]. A complete circle of planning, revenue searching, and program assessment can lead to sustainable programs. Start-up funds must be committed to program development and evaluation, as well as to infrastructure building, so that program operation will generate data that can be used in pursuit of long-term sustainability [32].

Opinions differ about the possibility of short-term documentation of telemedicine program cost-effectiveness. Some say it cannot happen [49] and that projects must focus on demonstrating long-term cost-effectiveness, health benefits, and business models for sustainability [48]. We believe that it is as difficult to develop and document a profitable telemedicine program as it is to develop and document any public service program not driven by the profit motive. An important reason for this belief is that in terms of immediate benefits to be derived from telemedicine programs, the parties reaping the health (patients) and financial (reduced patient travel costs, consulting physicians and medical organizations, insurance companies) benefits are not usually the parties responsible for building and maintaining the required infrastructure (within clinical service entities that host hub and remote facilities). However, we believe these programs serve important long-term health and social needs, that these outcomes have major but difficult to document beneficial

outcomes, and that the inclusion of these elements is a key factor in the quest for sustainability [50].

If a community sees the need to develop or participate in a telemedicine program to service its needs, it locally initiates funding or the search for funding, and if local providers include the program in community business and organizational strategy planning, sustainability will be possible, and even likely.

Local Buy-In: Resources leading to a sustained rural telemedicine program must start within the community (Figure 6.1). Local human and financial investment in the program is an important element for success [51]. For example, personnel salaries for a Rural Minority Geriatric Care Management Program (Charleston, SC) are paid by the rural health center to keep the program going after grant funding [18]. The Medical College of Georgia supports the development of its REACH Telestroke program for rural hospitals in Georgia and South Carolina [52] and in turn increases admissions. The CEO of Jefferson Hospital (Louisville, GA) stated that the hospital would financially support a telemedicine program if physicians believed it important and insisted on its existence. No systematic literature discusses the general and community-specific circumstances that would encourage and justify community self-investment in telemedicine programs.

Insurance and Contracts: Many telemedicine services are now reimbursed by private insurance, Medicare, and Medicaid. The Fairview University of Minnesota Telemedicine Network expects its program to be sustainable after the grant period based on ongoing changes in reimbursement and facilities fees [53], but to adopt this approach one must make certain that services provided by the program are individually approved for reimbursement by each insurer's policies. Contracts are also used to support telemedicine programs. Prison healthcare is a prime example. Because of prisoner transportation and escort costs, many state prison systems (New York, Arizona, Georgia, Texas, and others) use tele-health technologies [54–58]. Similar opportunities exist with local law enforcement.

Business/Industry Investment: Another important potential source of community support (Figure 6.1) is local business/industry interest in sponsoring programs, possibly through local, state, or national foundations. Local governments also can facilitate. For example, the Miles for Smiles Mobile Dental Clinic (Colorado) Program provides oral health in rural communities. The local healthcare facility is responsible for the program's daily operation. Local community and healthcare facilities are responsible for ensuring continued community support partnerships, and local financial sustainability. Key community players in such an effort include local advisory boards, sponsoring organizations, local health professionals, and local coordinators. There also must be someone, perhaps a volunteer organization or a civic group, responsible for marketing, outreach, and public awareness [59].

Government and Foundations: Finally, based on successful outcomes, resources for sustainability can be sought at state and federal government levels (e.g., Federal—OAT (Office for Advancement of Telehealth), HRSA (Health Resources and Services Administration), Medicare; State—Georgia Technology

Authority, Medicaid, Indigent Care Trust Fund) as well as from private foundations. Government can optimize the use of existing commercial and government-run communication infrastructures and find ways to offset the costs of operating this infrastructure [60]. Government can facilitate the financial participation of local banks, industries, and system users. As a last resort, governments can impose taxes to support telemedicine [50].

External funding may well be necessary for telemedicine until it has been fully integrated into the fabric of a country's healthcare system, but local commitment to, and participation in, pilot projects will always be essential [50]. There is no one answer for funding. For example, the depressed economy in southeast Alaska makes support through fees for services unrealistic, so grant and foundation support are the only practical alternatives [61].

6.4.1.1 Barriers to the Sustainability of Rural Telemedicine Programs

There are many barriers to sustainability of rural telemedicine networks, and these negative factors must be carefully considered by the participating rural partners. Telemedicine profitability in rural areas may not be possible as a free-standing enterprise, and so the indirect value of its contribution assumes major importance [50]. The cost-effectiveness of any healthcare service is sensitive to the number of patients served, and in traditional hub-focused tele-consultation networks, even when the consulting hub is busy, individual rural-spoke sites tend to have a low number of tele-consultations [27,62], in part because of a limited number of providers available to tele-refer [63]. Cost savings, partial reallocation of savings, and local retention of health-related expenditures in the rural community may be the only ways for telemedical services to be sustainable until workloads exceed a site-specific threshold number [48,64,65].

Another important barrier to rural telemedical program sustainability is the documentation of program outcomes required for effective evaluation analysis. Rural sites lack the time and resources needed to collect and analyze the data that will document how telemedicine works for them in their community [27]. At least initially, telemedicine always adds cost to healthcare system, and direct savings are difficult to identify [49]. When decision makers do not see the value of telemedicine, they do not see sustainable business models for telemedicine. As a result, they tend to think more about the financial minuses than the outcome pluses resulting from the use of telemedicine.

6.4.1.2 Requirements for the Sustainability of Rural Telemedicine Programs

Sustainability will occur when the resources required for telemedicine are no longer considered special—when telemedicine is an accepted component of a community's

healthcare delivery package [49]. There are numerous internal and external factors that require consideration or accounting:

Internal:

- When undelivered community needs are carefully defined, the potential utility of telemedicine is usually clear.
- Partnerships of clinical, administrative, and technical professionals are necessary at all stages of telemedicine program life [66]. Partnerships require local governance structures [67].
- Each program site needs a local "physician champion" who believes in, and can educate fellow medical staff about the telemedicine process, programs, and advantages. Sites will not be successful without broad physician participation [53].
- Local marketing and promotion of the telemedicine program is important for generating the financial support required for long-term sustainability [66].
- Business model is the key to a rural telemedicine program's sustainability [60,68], and it must be reevaluated annually. The business case is more dependent on the community's healthcare needs than on the chosen network and equipment [54].
- Outcome evaluation provides definitive answers: satisfaction (clinician, patient, and manager), community needs addressed, and financial benefits (revenue, cost saving, and cost avoidance).

External:

- External assistance/partnership is valuable to support change, guide the gathering and organizing of information about a community's healthcare system, and provide technical assistance in the planning and implementation of system improvements [69].
- Before a telemedicine program can expect wide acceptance, local administrative decision makers, clinicians, and the community at large must be educated about its potential benefits, including definitive information about cost [32].
- Technology must be safe, modern, and user-friendly [48], but technology is not as critical for a telemedicine program as is good management [49].

Cost-effectiveness ultimately depends on [58,62]: patient volume, number of clinician users, minimized equipment and telecommunication cost (use Internet technology for the basic infrastructure), revenue (reimbursement, local retention of health-related expenditures), cost sharing (multiple uses for the system), increased personnel efficiency, and the indirect savings resulting from decreased cost of travel and lost patient productivity. Definitive telemedicine cost-effectiveness continues to be discussed [26,50,70–72]. Based on this literature, the services coming closest to

cost-effectiveness are office/hospital-based specialty consultations, store-and-forward applications, and home-based programs. The most cost-effective specialties are psychiatry, dermatology, radiology, and diagnosis/management decision making [26,72].

The first steps in economic evaluation include basic cost analysis and primary observational data on nonmonetary benefits. Next is long-term assessment of general health outcomes and specific economic impact [32]. However, it must be recognized that initial funding is never long enough to enable the telemedicine program to reach maturity, become fully integrated into the healthcare system, and provide definitive long-term clinical or business impact data [49]. Projections will always be necessary.

6.4.1.3 Mutual Influences on Sustainability at the Community Level

Rural economic development is dependent on a reliable workforce that is itself dependent upon access to necessary healthcare services that are frequently not locally available; telemedicine facilitates that access [27]. Studies reveal that without telemedicine, rural residents must often seek healthcare outside their local communities, thus taking needed revenue away from local economies [69]. Telemedicine alters these patient flows to the benefit of the local community (Figure 6.2). Using telemedicine, more residents remain in the local setting. Telemedicine avoids the need for many in-person referrals and replaces them with telemedicine referrals. Telemedicine also reduces the incidence of noncompleted referrals (dropouts)

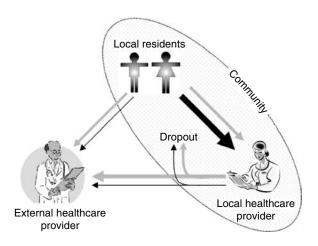


Figure 6.2 Telehealth reduces flows of patients out of community and enhances local retention (←without telehealth, ←with telehealth).

caused by patients' inability to arrange or pay for necessary travel. Further, in terms of residential care for the homebound, telemedicine increases local provider productivity by reducing provider travel to patient homes.

The ultimate goal of community-based programs/collaborations is to improve the community's health through a comprehensive approach that includes education, prevention, screening, and treatment. Such activities are particularly important for special, difficult to reach populations—rural, undereducated, physically challenged, economically disadvantaged, or minority groups. The long-term challenge for telemedicine programs, particularly in rural and medically underserved areas, is sustainability in an adverse financial environment [28].

We believe that if the initiative to create a telemedicine program comes from the community itself, there is less chance that its life will be limited to the period of grant funding. In general, hospital collaborations with community organizations will mutually desire to improve community health or deal with threats to hospital sustainability. Of course, community-based programs require a diverse group of participants representing a cross-section of socioeconomic sectors, age groups, genders, and racial/ethnic groups. Further, involvement of all members is necessary at all program stages—needs assessment, resource identification, program implementation, outcome evaluation, and governance. This ensures that the multiple factors affecting the population's health are considered and incorporated into interventions. Rural businesses may benefit from a healthier workforce with reduced healthcare costs, less absenteeism, and increased productivity, but continued support from businesses will require tangible, concrete, and quantifiable evidence of program benefits. Challenges include both difficulty recruiting and retaining active participants, and a frequently low-level of initial community involvement in addressing community health problems. Leadership, expertise, personnel, and evaluation are all critical to the sustainability of both partnering and innovative program interventions, and rural communities are thought to have a shortage of leaders and expertise. Grants, a significant means for initial funding of community-based programs, are not dependable long term. Program evaluation throughout the various program stages, including development, can keep sustainability on course. Community collaborations that draw simultaneously on the efforts of schools, worksites, healthcare facilities, public health, and other community organizations to provide comprehensive programs and services are essential to the protection of the public's health, and may help rural communities address both healthcare cost increases and resource limitations [73].

Four focus areas are important for the sustainability of a community health partnership: (1) strong leadership—a driving leader, a key staff person, and effective leader training; (2) phasing success—identify an early success and make that success visible to maintain excitement; (3) maintain commitment—keep organizations at the table, aggressively address turnover in member organizations leadership, and reduce turf defense or competition; and (4) assemble funding resources—garner funding from multiple sources, manage existing resources effectively, and attract

member organizations with significant resources. A study of 20 innovative programs confirmed these sustainability-essential elements: leadership, community involvement, existing infrastructure, marketing, outcome measures, financial self-sufficiency, shared vision, and utilization of behavioral change principles [13,74].

6.4.2 Economic Efficiency of Telemedicine in the R.F.

Resources currently available for financing the development of telemedicine programs in the R.F. include the federal budget, regional budgets, budgets of medical organization, and large industries such as the Russian Railroad Company and GasProm (natural gas delivery and distribution company). Investment in telemedicine by private clinic practices or insurance companies is also possible, but not now evident.

Reimbursement for telemedicine consultation in the R.F. comes from patient self-payment and insurance company reimbursement. "The cost can range from 2500 Rubles to 5000 Rubles (80–160 US\$). Pricing structure is based on case complexity and status of consulting physician" [75].

Trials considering the financial viability of telemedicine are underway in the R.F. For example, Selkov reported a study demonstrating that patients save money using tele-clinic services instead of traveling to the consultants' location. He therefore suggested that small-scale investment in a tele-consultation center could be profitable. Performing a market assessment of what services are needed identifies the "real market demands of these services..." and guarantees the availability of "... real money for development innovative technologies in regional medicine. Our research has shown that tele-consultations centers are economically feasible" [76]. There are several literature reports of cost savings through use of telemedicine.

However, no centralized financing for telemedicine equipment and last-mile connectivity has emerged in the R.F. Recently, in 2003, the Russian Ministry for Communications and Informatization financed the creation of several telemedicine sites in Tcheboksary and its environs under the federal program "Electronic Russia." These sites provide real-time tele-consultations for childhood diseases. The financial model involves the site that receives the consultation purchasing both the equipment and the last-mile connectivity, as well as paying the consulting site both the cost of telecommunication traffic and the professional fee of the consulting physician. The patient who receives the consultation reimburses the traffic costs and the professional fee of the consulted physician. For real-time tele-consultation using videoconferencing technology, the total cost varies from \$100 to \$300. This is a very large amount of money for many Russians, but not when compared to the total costs of, for example, round trip air tickets to Moscow, Moscow housing, and the professional fee of consultants. However, as in the United States, local R.F. physicians are not happy to lose the patient and the income derived from his or her care, "... So the question of telemedicine financing is very hot (in Russia) now" [39].

As the price of computers, communication systems, and service lines decreases, and as Russian hard- and software is increasingly available, the highest medical and social benefit from telemedicine's diffusion in the R.F. will occur with relatively low-capital investments. For example, while the estimated equipment cost for the workplace of a doctor who wishes to start using telemedicine is several thousand U.S. dollars, parts of that equipment (computer and scanner) can be used for other purposes, thereby lowering the investment risk.

There are multiple ways of estimating the economic efficiency of telemedicine: (a) a comparison of costs of obtaining a consultation in a distant federal medical center in the usual way and those associated with using local telemedicine capabilities—of course, the farther a patient lives from, for example, Moscow the more money he saves; and (b) an estimate of the time to recovery of technology investments in telemedicine. Thus, introduction of filmless radiology into clinics is economical because film expense is eliminated, and because there is a more efficient distribution of labor resources.

However, although they are very important, evaluation of economic efficiencies cannot be restricted to such business practice approaches alone but should also include effects on the healthcare structure and long-term outcomes in terms of population health. Worldwide preliminary evaluation of telemedicine predicts improvement of medical care quality through elevation of the diagnostic—therapeutic process and more prudent use of the labor and physical resources. The latent potential is high here. For example, three years of tele-consulting for only three clinical categories (congenital heart disease, surgical tuberculosis, and oncologic hematology) in the Irkutsk region (Siberia) brought an economic benefit of almost 5 million rubles as a result of the reduction of the period of treatment and hospitalization, and the more appropriate expenditure of the federal quota [38].

In the R.F., eventual acceptance of telemedicine is assured by the current fact of nonuniform distribution of medical professionals and resources, a situation that is present to varying degrees in all countries. It is believed that in the near future these trends will become even stronger [77]. For this reason, telemedicine services like tele-consultation and distance education will be increasingly demanded by both providers and consumers alike.

An R.F. federal budget investment created a program called "Children of North" that established telemedicine connectivity for diagnostic consultations between Moscow and the northern regions of Russia in 2001–2002. Its aim was to determine the social and economic effects of disbursing federal budget funds for the necessary implementation: Provision of Diagnostic Medical Equipment and Machines to Telemedical Centers and Provision of Children's Medical and Educational Institutions with the Drinking Water Cleaning and Disinfection. A 2004 report concluded that "... investment of federal money in telemedicine is expedient and efficient, because with its help significantly increases quality of healthcare services for population, with significant decrease in its cost" [78].

There are obvious savings for patient access to needed healthcare services not available in a region. However, because the indirect cost saving is realized by the federal budget, regional budgeting for telemedicine is not developing rapidly. Insurance companies also do not experience direct cost savings. However, ultimate success requires that all participants invest in telemedicine: federal and regional budgets, insurance companies, private healthcare providers, and patients [79].

Telemedical Education:

It should be noted that the basis for the development of tele-education throughout the rural and remote districts of the country is the understanding of economic efficiency of information technologies for cutting the costs associated with training process of each doctor. Our research has shown that tele-education's centers are economically feasible. The main result of the research was the fact that telemedicine education and consultations centers in small cities and villages are a good return on small investments. For the local population such a centre provides an access to the world leading specialists, while the expenses of the individuals needing such studies and individual consultations are significantly lower than the ones they have to incur for traveling to a training center or clinic. Our colleagues from the Central Siberia assert that, each tele-lection for specialist from remote village is forty times cheaper than the same one in regional training center. [80]

However, in the R.F.'s current economic situation, the use of telemedicine is really possible only if maximally effective technologies are used, decreasing the expenditure of budgeted healthcare monies when compared with the cost of traditional healthcare services. For example, offline (store-and-forward) consultation can replace 60 percent of consultation by videoconferencing [81].

6.4.2.1 Social Impact of Telemedicine from the Rural Perspective in the R.F.

Telemedicine should

improve the quality of medical care, contribute to strengthening of the structural and functional links within the system providing healthcare services to the people of Russia, and expedite achievement of the state of the art technological level and integration into international networks. The governmental agencies should demonstrate their commitment to forwarding telemedicine by participation in, among others, long-range

planning of development of telemedicine and associated areas of social life including healthcare, education, communication and technology and budgeting at different levels, and to draw up and adhere to a complex program of telemedicine diffusion into the regional healthcare systems. There should be incentives for medical employees, students, and physicians to learn and practice telemedicine technologies, and specialized research programs to inquire into the role of human factor in telemedicine maturation and assimilation. A matter of importance is to make a structure that will design and validate hard- and software for use in telemedicine systems, and oversee compliance with requirements to the quality of services, confidentiality of medical data and interoperability of telemedicine applications. [82]

At the end of 1980, 12–15 million patients per year came to Moscow for medical expertise. In 1997, only 1 million came, and this reduction, based largely upon financial issues, continues today. With appropriate technology deployment there are tens of millions more whom telemedicine can help [83].

Rural Perspective: Since perestroika, it has become necessary for the R.F. to maintain the standard of living, including healthcare specifically, in all communities. But as in the United States, healthcare providers and technologies available in cities are not always accessible in rural communities. Even regional healthcare organizations have opportunities to connect with federal medical centers using broadband that is not available to rural healthcare providers. However, the Internet is now in almost all remote R.F. areas and e-mail is being used to exchange medical data and get advice from regional specialists. For example, in northwest Russia, ten rural healthcare providers attempted to improve the management of patients with a significant R.F. disease, tuberculosis, by using e-mail communication with the Arkhangelsk Regional Tuberculosis Center for second opinions. E-mail sped up communication and increased the availability of specialist advice: 64 percent of patients were saved a round trip to a specialist center, and in 51 percent of patients the correct treatment was initiated from one to four weeks earlier than would have been possible without e-mail access [84].

Healthcare Provider: "The regional physicians are not very happy to refer the patient having money to their colleagues in Moscow or another city" [39]. Data has been collected to document that only 10 percent of people currently coming to Moscow medical centers for adequate medical services would need to travel if telemedicine access was available throughout the R.F., 90 percent could have their needs addressed while staying in their home region and use video-consultations to access medical expertise [85]. This development would serve patients, help the local provider with increased knowledge from second opinions, and allay their concerns by keeping their clients in their practices. It would also support the development of new work places and job opportunities by guaranteeing a more healthy workforce that is subject to fewer absences.

Patients and Their Families: Telemedicine allows the patient to be treated locally without the need for travel to Moscow. "The farther a patient lives from, for example, Moscow the more money he saves, particularly on tickets" [85]. Only a very few patients receive reimbursement for medical travel expenses from regional or federal budgets, because the amount of available money for this purpose is severely limited. As a consequence, many patients can have access to medical expertise only by using telemedicine because some are not transportable and many simply cannot afford to pay for travel to Moscow plus the fees for medical services. In addition, there are some clinical situations where there is no time to wait for in-person consultation. Using telemedicine to shorten the waiting period will save lives. Another aspect of the R.F. situation where telemedicine will benefit patient health is where there is a need for continuous monitoring and consultation by medical experts, a healthcare service that would be impossible given travel requirements without telemedicine.

Telemedical Education: "Providing their citizens with equal access to high-quality education independent of the distance of their location from large centers of science" is an important societal problem that telemedicine allows the R.F. to address through "the post graduation training of doctors in regional clinics" [80,86]. The authors present data to show that 600 lectures were given by leading Russian experts in important areas of medicine such as cardiac surgery, children's surgery, and others for more than 35 regions ranging from Central Russia to East Siberia. Realized advantages include financial savings for the region, high-level expertise and knowledge shared throughout the country, and the process of education does not interrupt care of patients. Another study has shown that for the region of Central Siberia to organize and sponsor a lecture by an expert from a federal medical center for rural and remote healthcare providers is 40 times more expensive than a comparable tele-lecture [80]. "It should be noted that the basis for the development of tele-education throughout the rural and remote districts of the country is the understanding of economic efficiency of information technologies for cutting the costs associated with training process of each doctor. For the local population such a centre provides an access to the world leading specialists, while the expenses of the individuals needing such studies and individual consultations are significantly lower than the ones they have to incur for traveling to a training center or clinic" [80]. Preliminary evaluation predicts improvement of the quality of medical care through intensification of the diagnostic-therapeutic process and more prudent use of both labor and physical resources [87].

Telematics is supposed to essentially improve the quality of medical care, contribute to strengthening of the structural and functional links within the system providing healthcare services to the people of Russia, and expedite achievement of the state of the art technological level and integration into international networks. The governmental agencies should demonstrate their commitment to forwarding telemedicine by

participation in, among others, long-range planning of development of telemedicine and associated areas of social life including healthcare, education, communication and technology and budgeting at different levels, and to draw up and adhere to a complex program of telemedicine diffusion into the regional healthcare systems. [82]

6.5 Information Access, Infrastructure, and Tele-Practice

The Internet currently provides continuous access to health information for millions around the world. It has the potential for providing universal access. Increasingly, consumer access to health information ceases to be an issue. Patients are taking ownership of their own health records and searching for, acquiring, and using available information to participate actively in their own medical management. Family and other support persons are joining in [18,88]. By connecting each to all [89], all to each, and all to all, the emergence of the Internet was a transforming event beyond that of the telephone that connected one to one, or broadcast/cable that connected one to many.

Information access is an important result of Internet deployment and access, but true national and even global telemedicine also involves patient—clinician interactions and clinician—clinician consultations. These are the direct practice of telemedicine. Today there are many examples of local, regional, and international medical tele-practices whose ongoing experience contributes valuable lessons concerning the operational "do's and don'ts" of telemedicine, including topics such as scheduling, credentialing, record keeping, privacy, and regulatory compliance. The universal experience is that smooth operation requires procedural standardization, staff training and regular retraining, and administrative buy-in to a shared vision and goals. However, although these essentially human and local operational topics are beyond the scope of this paper, they are underpinned by infrastructure issues that are very pertinent to national telemedicine programs and their international implications.

Successful telemedicine practices, whether live or store-and-forward, will require the bidirectional transmission of large multimedia files. When the exchange can be asynchronous, bandwidth limitations need not be critical if sufficient time is available for transmission. When the exchange must be synchronous, and when time is a critical factor, telemedicine's capability is completely dependent on the least powerful and developed infrastructure of the participants.

Lan's recent review [90] of these issues from the perspective of global business applications is applicable to telemedicine. He points out that although current generally available data transmission speeds are adequate for operations such as e-mail, real-time delivery of large-sized files is unreliable and further, that network bandwidth is dependent on the information and communication technology adoption

of the participating communities, whether they are towns, cities, regions, or nations. Coordinated network bandwidth availability is a critical part of any telemedicine information systems' development strategy. Congruent policies and practices must also be in place for privacy, security, authentication, authorization, and recovery. The technologies to enable these policies and practices, such as firewalls, antivirus and encryption software, and biometrics must also be congruent and compatible.

6.5.1 U.S. Broadband Issues

We have previously explained that by conducting a variety of medical consultations and services via the Internet, for example, remote communities with limited access to specialists can receive improved care. In terms of demands upon networks and bandwidth requirements, however, these telemedical activities are only a fraction of what is possible. Telemedical home monitoring can dramatically aid homebound patients as well as ambulatory patients with chronic conditions. These conditions, which require daily monitoring and self-management skills, can be better managed by the tele-supported patients continuing to conduct the business of their daily lives, and the number of emergencies and doctor visits can be reduced.

Facing growing cases of chronic illnesses amid continuing nursing shortages, the healthcare industry is increasingly turning to telemedicine and home-health monitoring to care for patients. More than half of the 8000 home-care agencies in the United States that provide services to Medicare patients now use some form of remote monitoring, according to the National Association for Home Care and Hospice. The market for home-medical monitoring devices alone is expected to grow from \$461 million in 2005 to over \$2.5 billion in 2010 [91].

Recent research findings conclude that remote monitoring and telemedicine can offer tremendous cost savings for a nation's economy. In December 2005, Robert Litan of the Brookings Institution issued a report documenting the economic benefits to home-healthcare applications and remote monitoring that shows a potential savings to the U.S. healthcare system of \$927 billion over the next 25 years [92].

Many aspects of telemedicine are dependant on access to high-speed broadband networks, bidirectional transmission speeds, and quality of service that guarantees stable transmission of video and other healthcare data. Without robust and ubiquitous broadband networks, telemedicine applications lose many of their important functionalities. Thus, for telemedicine patients and providers, universal access to broadband is critical. To maximize the benefits and the availability of telemedicine, a national policy is needed to create incentives for the ubiquitous deployment of high-speed broadband networks. However, the prospects for advancing broadband deployment in the United States could be put into question owing to undefined network neutrality proposals which could inadvertently impose roadblocks to telemedicine's development unless policymakers ensure that healthcare services do not face regulations with an unknown impact.

A powerful examples of how broadband allows medical professionals to perform a range of diagnostic and treatment services are emerging Internet-based stroke treatment programs. These programs allow stroke specialists located in urban locations to remotely recommend treatment in real-time for stroke patients in rural and other remote areas. This access to specialized care is critical for communities without large hospitals or stroke experts in close proximity. These systems, as with many telemedicine services, rely on broadband connections to deliver smooth and clear video images of patients to doctors who could be hundreds of miles away. Without them, rural-stroke patients would typically be rushed to the nearest hospital with a stroke specialist on staff, which could be dozens or hundreds of miles away. Such a travel distance might exceed the critical time-to-treatment window and thus limit treatment options, often with severe outcomes.

Beyond acute care programs, tele-health monitoring services are available for homebound and ambulatory chronic disease patients suffering from conditions such as diabetes, asthma, hypertension, and chronic heart and lung diseases. There are now numerous examples which demonstrate that using home-health technologies for monitoring, maintenance, and control of chronic conditions can reduce acute care visits and hospitalizations. These tele-health services also minimize the need for time-consuming and costly travel to a medical office, especially for those patients whose physical challenges make travel a burdensome exercise. Using telemedical monitoring devices, physicians and other care providers can have face-to-face meetings with patients, take vital signs, and consult with other healthcare professionals as appropriate wherever patients and providers are located. Research by the Center for Health and Technology at the University of California, Davis, found that in a three-year pilot study of four rural areas, 145 hours of patient travel and 7500 miles of nurse travel were avoided through the use of home tele-health [93]. These travel times and mileage pale when put into the context of the vast distances to be overcome in the R.F.

It is critical for policymakers to create an environment that facilitates the growth of telemedicine applications. That future could be compromised if legislators and regulators fail either to accelerate broadband deployment or disrupt the emerging tele-health market with ambiguous network mandates. Policymakers should make broadband deployment a national priority and approach undefined regulations like net neutrality with an open mind so that the millions who could benefit from telemedical services do not wait for broadband to reach them.

New telemedical technologies require dedicated bandwidth in reliable and secure networks that can transmit private and sensitive medical information. To achieve these goals, networks require upgrades and certain intelligence that enables data to be identified and routed appropriately. Any legislative mandate that requires all data transmitted over broadband networks to be treated the same would preclude network operators from offering services such as those required by telemedical providers. Today, many tele-health applications are delivered over virtual private networks (VPNs) because these customized network connections provide the

required reliability and quality of service. The common Internet protocol, Transmission Control Protocol/Internet Protocol (TCP/IP), treats all bits of data identically and on a first-come or best-effort basis. This best-effort approach is not sufficient for time-sensitive live video or real-time two-way communications used in telemedical applications. Without the ability of network providers to manage Internet traffic, data for these critical telemedical applications could become just indistinguishable ones and zeros. It would be impossible to distinguish between the Internet phone calls, e-mails, or video games and the time-sensitive video transmission required for healthcare applications. Network neutrality regulations could curtail or eliminate the opportunity for tele-health providers to collaborate with network operators to design network configurations optimized for telemedicine.

In addition to network configuration requirements, all telemedicine applications have a primary need for the privacy and security of medical information. Regardless of the benefits that remote monitoring and telemedicine offer, none would be accepted on a large scale if patients and physicians feared that their private-health information was susceptible to hackers or other malicious behavior.

If regulations mandate that the broadband communications network is simply a conduit for data and providers are unable to offer specialized services, patients and medical professionals would be on their own to ensure the security of sensitive medical records. These records cannot be treated like common e-mail or Voice-over-Internet Protocol (VoIP) voice calls.

Innovation in telemedicine depends both on the devices and people at the ends of the network and the intelligence within the network. Innovation at all points will complement the advances made by telemedical pioneers. The innovation can be simple software that can identify telemedicine data more quickly, specialized service packages that allow a patient to select various features based on the type of telemedical services they use, or large-scale network improvements that reduce the costs for providing broadband.

6.5.2 R.F. Telecommunication

In 2000, "The concept of telemedicine technologies development" was worked out and endorsed by the R.F. Ministry of Healthcare. A concept document was approved at parliamentary hearings and recommended to the Russian government as a basis for defining a federal program. Following these recommendations, the Ministry of Communication and Informatics decided to support the telemedicine section of the program "Electronic Russia" [82].

There are no established national policies and standards for a telemedicine system in the R.F. Telemedicine raises a broad range of legislative, ethical, technical, and regulatory issues not dissimilar from those described for the United States. Through management at the federal level, Russian telemedicine may become more unified if the Russian Ministry of Healthcare receives proper funding for further development and integration of the various tele-health projects and networks. These

problem may become solvable if funding is provided in the ambitious federal program "Electronic Russia" [39]. However, current "...difficulties included the absence of legal regulations, commonly accepted financial mechanisms for federal funding; absence of adequate training of telemedicine professionals both medical and technical personals; absence of common standards for medical data transfer; and reliable communications with the most remote hospitals" [75].

There are "...a number of the Russian medical institutions using different telemedicine technologies. There are also several telehealth networks created around the scientific medical centers and large hospitals. They use store-and-forward technology and real-time video conferencing over ISDN and IP-channels" [39].

The development of telemedicine services is strongly dependent on the general telecommunication infrastructure in the R.F. which currently is of inconsistent quality and accessibility throughout the R.F. As in other countries, little telecommunication investment was made in sparsely populated regions because they were seen as poor economic investments and thus given low priority. However, even in urban areas where bandwidth might be available, healthcare facilities might be unable to afford purchasing it.

"In rural areas, there are an estimated 54,000 small communities with no telephone access whatsoever. In the country as a whole, there are some 22 phone lines per 100 people, compared with the United States with 60 lines per 100 people, and the waiting list for basic services currently has 3.5 million names..." [94], documenting both the need and the potential for continued development of telecommunication in the R.F. The state of telecommunications in the R.F. can be summarized as "... well developed, but low speed telephone lines suitable for digital connections up to 33.6 kbit/s with new digital telecommunications (fiber optic network) available mainly in the large cities" [95].

According to R.F. Federal Statistics, the volume of telecom services in 2004 increased 27 percent compared to 2003 [96], but most was for business uses. Internet access for healthcare must now be considered a requirement and most healthcare provider organizations require Internet connectivity for contact with regional or federal governments for statistics and policy information exchange. However, financial problems in medical organizations make it difficult to apply new information and telecommunication technologies in practice [97].

Ten years ago the quality and spreading of telecommunication backbones didn't allow to create the wide telehealth networks. The big investments have been made by the Russian Government into development of these backbones since that time. For many large medical institutions a question of access to the quality telecommunication channels is now only a question of last mile. [39]

During the last several years many Russian hospitals and medical institutions became connected to the Internet or even have possibilities

of Integrated Service Digital Network (ISDN)-based videoconference facilities. Low speed network services like e-mail and others based on modem connections could be assumed to be of great importance in application for telemedicine. [95]

6.6 Future Research

Telemedicine programs are usually initiated from academic, tertiary medical-center hubs, but the ultimate questions about program sustainability are associated in remote sites. If it is possible to reverse the direction of the program-development process and allow rural communities to determine what they need hubs to provide, community-designed and community-built programs will become community-owned programs and the community will take increased responsibility for management and sustainability. When examined from this perspective, new and creative questions and opportunities arise:

- Do the rural communities really need the tertiary hub, or can they meet many needs by collaborating with other regional communities to identify scattered local specialists that they can access by sharing through telemedical technologies and rural community networks?
- Networks of community networks can be created [27,60].
- For appropriate decision making, rural communities require education concerning available options and how to consider and select the best options. This need is as important as the need to access medical services that are not available locally.
- Although it is in the interest of public health agencies to promote telemedicine, it is the communities themselves that must pursue the systems.
- Data required to prove programmatic effectiveness is clear, but few rural communities have the personnel and expertise to select and design the required data collection methodologies; fewer still are organized to collect that data (medical-error reduction, provider productivity, reduced resident-departure from the community for care, travel-cost reduction, within-community healthcare spending, and enhanced education and training at all community levels).

6.6.1 U.S. Research Focus

Our ongoing studies of telemedicine program sustainability issues, conducted at the Center for Telehealth, Medical College of Georgia, are in close collaboration with community healthcare and nonhealthcare leaders and stakeholders, and aim to develop business models for integrating telemedicine technologies with existing

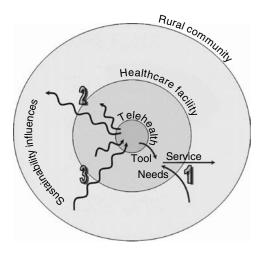


Figure 6.3 Potential opportunities and sustainability influences arising from the introduction of telemedicine technologies into community/healthcare interactions: (1) enhanced service delivery to address community needs, (2) enhanced community and healthcare facility well-being, resources, and stability, and (3) enhanced community and healthcare facility approaches to supporting and receiving value from the infrastructure required for telemedicine.

community capabilities to address real community healthcare needs. We investigate public healthcare facility, provider, business leader, local government official, and public opinion (interviews) on the potential influence of telemedicine on the sustainability of both the community and its healthcare facility, as well as their influences on the sustainability of a telemedicine program. We define existing community, local healthcare provider, and facility attitudes and approaches toward developing, maintaining, and integrating telemedicine services into existing systems in an attempt to complement rather than disrupt (Figure 6.3).

6.6.2 R.F. Research Focus

We are collaborating with both medical and technical Russian colleagues who are currently working in the telemedicine field to develop web-based mechanisms that will encourage and facilitate the study of telemedicine's impact on public health and socioeconomic factors in the R.F. The goal is to create a Web site on which R.F. researchers and administrators can post data relevant to these issues, engage in electronic discussion, and develop collaborations with researchers that have mutual and overlapping interests both inside and outside the R.F. Although our initial target population of researchers and administrators will be within the R.F., the Web site will be bilingual and thus available to English-speaking participants in the

United States and other countries. Ultimately, the scope of this initially R.F.-focused project will expand. Collaborations and work will not be confined to the impact of telemedicine in the R.F. and the United States alone, but will have the potential to encompass multinational and even global efforts to understand these issues.

6.7 Discussion and Conclusions

6.7.1 The Business of Healthcare and the Impact of Tele-Healthcare

Aging of the earth's population is an increasingly compelling objective reason why the number of persons who will require active monitoring by medical personnel will increase dramatically in coming years. This circumstance increases the demand for remote monitoring of patients at home, at work, and in the course of all activities of daily living, as well as the potential need to intervene in emergency situations at sites remote from healthcare facilities. Modern healthcare must be mobile from the point-of-view of both patient and provider

Modern healthcare systems place emphasis on the importance, competence, and gate-keeping capabilities of primary-care doctors, nurses, physician assistants, medical assistance clinics, ambulatory/home management, and preventive medicine personnel. They must receive continuing education and consultation support. Whenever possible, this education and support must be provided at times and in locations that are relevant to them. Their practice routines must be simplified, not complicated. Their time utilization must be made more efficient, not disrupted.

Economic expansion onto new territories, employment of modern patterns of work management (shift work), and emergence of new markets of medical services triggered by, in particular, the growing mobility of the world's population will speed up deployment and acceptance of mobile telemedicine services by consumers and providers alike. There is also a need to respond efficiently and effectively to unpredictable natural disasters and man-made industrial accidents.

These and other factors objectively underlie a growing demand for telemedicine services and the range of situations in which they will be applicable in the R.F., the United States, and the world.

Legislation, regulation, education, and other factors that will objectively facilitate the evolution of a mobile and networked healthcare sector should be pursued in terms of national policy, economy, social life, and technology implementation. Technology and telecommunication lessons already learned by business should be incorporated into healthcare.

Ultimate acceptance of telemedicine is almost preconditioned by the distribution of labor forces, including medical professionals, and the increasing mobility of populations which are present in varying degrees in all countries. These needs are magnified by economic disproportions and continued urbanization, trends it is believed will become even stronger in the future. Telemedicine services such as teleconsultation and tele-monitoring as well as distributed education will increasingly be demanded by the general public.

At the same time, the rapid development of new telemedicine technologies and the creation of a worldwide universal information space will be creating a solid foundation for successful assimilation of informatics and telemedicine in healthcare. Distribution of information to patients, reliance on prophylaxis, enhanced acceptance of the need for and support of self-treatment, and the promotion and acceptance of the need for health lifestyles will all be enhanced by the availability of telemedicine services.

Informed leadership recognizes the worldwide relevance of the issues under consideration, and their potential for meaningful, cross-border contributions to world health:

The telemedicine may become a very important direction of the development of the national health care services. There is also a joint initiative of the President of the Russian Federation and the President of Italy unveiled at one of G8 summits. They had suggested to promote the telemedicine technologies to the problem regions of Africa and Central Asia where many people suffer from AIDS/HIV, tuberculosis, malaria. The medical institutions and the telecommunication providers of the Russian Federation are experienced enough to participate in this initiative. [39]

Finally, even though increasingly good evidence for telemedicine-facilitated healthcare cost saving is accumulating in literature, the socioeconomic impact indicators have not thus far been examined consistently. There are few specific studies on socioeconomic impact of telemedicine, but studies of this kind will be important instruments for policymakers in developing approaches for the integration of telemedicine into modern healthcare systems.

6.7.2 The Internet and the World Wide Web

When the public Internet first appeared on the scene, it was regarded by many as a sophisticated special interest toy of computer aficionados. However, its transformational power in business, education, and communication rapidly became evident as was demonstrated by the number of organizations and individuals that came online, creating Web sites with increasingly rich content. As these sites grew in content, demand for access grew. As these sites grew in the complexity of their content, demand for transmission speed grew. Initial patience with the time required to download files disappeared as users became more dependent upon the content of those files and as they grew to understand the power of that content in the workplace, in the

school, and at home. An important measure of the degree to which individuals, communities, businesses, and governments came to be seen as sophisticated participants in the world around them was the degree to which they were "wired," and the degree to which they used that wired state to conduct their business. This perception persists and is even more prevalent today.

6.7.3 The Business of Telemedicine

During this same period, the power of hard-wired video was being used to create a resurgence of telemedical activity. The concentration of medical specialists in urban areas and consequent reduced access to specialty healthcare services in rural areas were long-recognized. Telecommunication appeared to be an ideal way to at least assist in the solution of this imbalance. Small and ambitiously large projects arose across the nation and the world. So long as they remained focused on their objectives and received external support, they were successful. However, they were universally piloted using government or grant subsidy. Although clinically successful, they were not incorporated into the business model of healthcare and so could not be sustained when subsidies were exhausted. The cost of telecommunication lines, system maintenance, and equipment upgrade overwhelmed particularly the small rural facilities that were already in financial stress. Reimbursement regulations began to catch up insofar as clinician payment was concerned, but not in terms of facility support. Prison telemedicine stood out as an exception, in large part because of the tremendous savings realized by avoiding the high cost of prisoner transport.

The power of the Internet, WWW, and wireless communication changed that scenario. Previous telemedical systems demonstrated the feasibility of healthcare at a distance as well as its acceptability by both patients and clinicians. The new telecommunication technologies reduced its cost, and through their use in the commercial world, began to show the way for incorporating telemedicine into the business of healthcare. We learned that telemedicine technologies are not replacement tools for previous systems, but rather a way to on the one hand enhance the efficiency of those previous systems, and on the other hand to accomplish tasks that were previously inconceivable without advanced telecommunication technologies.

6.7.4 It Is a Whole World Out There

The possibility of reaching across geopolitical, socioeconomic, and other barriers to deliver healthcare services offers a tool for making healthcare services more universally available without the cost of replicating and maintaining them in a myriad of locations. Telemedicine offers a tool to continue the essentially local and personal nature of individual healthcare delivery while expanding the scope and depth of what was available locally and minimizing the cost of that expansion. It also offers a tool for standardizing healthcare service approaches and delivery systems where that standardization could be proven to improve outcomes, reduce long-term morbidity,

reduce cost, and reduce medical errors. Once it is implemented across a wired or wireless space, distance ceases to be an issue. The potential for global impact is obvious.

But this very potential for global impact exposes numerous barriers and problems. Ours is not a homogeneous world. Every language, socioeconomic, cultural, and technological differences will have to be taken into account. So too will the fact that in terms of education and personal wealth/poverty, only a very small portion of the world population today has realistic access to such services. That telemedicine could have an impact globally is clear, but unless access discrepancies are addressed, that impact risks widening the gap between residents of developed and underdeveloped countries and even the gap between residents of affluent and poor regions within a country. Telemedicine requires a rethinking of national business parameters of local, regional, and national healthcare. It requires a rethinking of similar issues, but on a more massive scale, if it is to redesign the business parameters of global healthcare.

Global realities therefore require that international, and eventually global telemedicine be approached incrementally. What can we accomplish now and how can we leverage local healthcare systems and practices in the process? What local, national, and international barriers must be overcome before telemedicine's potential contribution to worldwide public health can be realized? Are there local issues and advantages that are best left local? Even if telemedicine would allow us to move toward homogenized healthcare worldwide, is that really a desirable outcome? On the other hand, to the extent that information sharing can focus the expenditures of available health resources to standardize public-health measures such as sanitation, immunization, maternal and infant health, industrial safety, etc. it should be undertaken immediately, and where necessary, developed nations must facilitate the realization of these goals in undeveloped nations.

To the extent that telemedicine technologies can transport specialty services to regions and populations where they are currently unavailable, and to the extent that socioeconomic barriers to that transport do not exist, service delivery will grow of its own accord based on locally relevant business models. Realizing the remaining potential for tele-health requires overcoming the geopolitical, educational, and socioeconomic barriers that grow from national differences. Health needs can help to motivate overcoming these barriers, but health needs will not be met until these barriers are overcome.

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ECONOMIC DEVELOPMENT



Chapter 7

Convergence in Western Healthcare Systems: Plus Ca Change

John Anthony Devereux

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7.1 Introduction

This chapter explores historical developments in the healthcare systems of the United States, Australia, and England, made in response to the spiralling costs of providing healthcare, and the increased needs for accountability and flexibility. The countries chosen represent the perceived full gamut of Western healthcare systems. From a predominantly private-driven and -funded system (the United States) to a predominantly state-driven and -funded (England) system, with Australia as a hybrid model.

It will be argued that there is a lessening of differences of approach between countries. The National Health System (NHS) in England has increasingly embraced competition through NHS trusts, and, most recently, Primary Care Trusts. Australia has reduced restrictions which formerly limited private health insurance competition. The United States is exploring ways to increase the medical coverage offered to its citizens. The thesis of this chapter is that oversimplified analysis clouds a clear trend in Western health systems to similar solutions being adopted to similar problems. There is a clear convergence toward the mean.

7.2 The Nature of the Problem

There is a tendency to view Western health systems as representing all points along a spectrum. Thus, the NHS in England is viewed as a socialized system of medicine, where everything is provided free, and free-market forces play no part. At the other end of the spectrum is the U.S. health system, heavily private-dominated, expensive, market-driven care, with state contributing little or nothing by way of healthcare. In the middle is the hybrid Australian healthcare system, where Medicare provides a safety net, but market forces regulate other aspects.

The truth is, of course no whether as extreme. In reality, all Western health systems are converging—largely as a result of spiralling healthcare costs and a resultant need for flexibility and accountability.

What then, are the sources of the vast perceived differences? There are two. One is political rhetoric. The rugged individualism, which characterizes growth and capitalism, fits nicely with a healthcare system which is perceived to work in the same way. Hayekian liberalism explains the strength of liberal capitalist growth and development, so a free-market health system in which competitive forces are allowed to roam free fits the American paradigm. The English psyche is different. Postwar England prided itself on establishing an inclusive, welfarist model. A model where all people (irrespective of wealth or income) qualify for a pension at 65, and where an all-embracing health system takes care of a person "from the womb to the tomb."

The second, and equally as prevalent problem, is that there has been alack of cross disciplinary work in the field of health systems law. Each healthcare system, on its own, is complex and constantly changing, so coming to grips with one's own healthcare system is difficult enough, without having to then compare one's own system with that of another. Oversimplifications are easy to make in the absence of detailed analysis. This chapter explores the changes in health systems to elucidate the common features of them and argues that, far from being extremes, the systems share many similarities. This chapter adopts as its means of analysis, an overview of the legal constraints which regulate each system.

7.3 The United Kingdom Experience—Carry On Doctor

The widely held perception of the United Kingdom health system is that popularized by the Carry On Movies—most notably Carry On Doctor and Carry On Matron: bustling large hospitals, patients lined up in long, and open wards; matrons in strict starched uniforms; doctors who speak in upper-class accents and see medicine as an extension of upper-class pranks perpetuated at public schools or Oxbridge. Medicine is a charity, not a business. A vocation practiced exclusively by the upper class for the benefit of the unfortunate lower classes.

Defining it thus does little to enunciate its true character. Problems with so doing can be traced to the constant state of change and flux which is the NHS. Kennedy and Grubb note that "the structure of the NHS is set out in a bewilderingly complicated array of primary and secondary legislation, together with other quasi-legislative measures such as statutory directions and health circulars" [1].

Newdick describes the NHS as a muddle.

those wishing to understand the various rights and obligations arising within the NHS must have access to dozens of subsequent Acts of Parliament, a large pair of scissors, and a great deal of time to delete and replace parts of the 1977 Act with the subsequent changes. Indeed, by the time the enterprise was complete, further deletions and substitutions would be required by the passage of further reforms. For practical purposes therefore . . . the rights and duties which arise in connection with the NHS today are simply inaccessible. [2]

Some commentators have suggested the muddle is a deliberate smokescreen "to divert attention from the real challenges facing the NHS" [3].

Rhetoric about public accountability and consumer involvement is not matched by any real commitment to provide the missing evidence about cost-effectiveness on which any well-informed involvement would depend. But because something has to be seen to being done, what better responses could there be than institutional reform. It is dramatic, gets widely reported, and it distracts everyone from thinking about the fundamental problems. And because it takes time to shake down again, it takes some time for people to realize that they still have to confront the problem of priority setting, for which they still do not have clarity of objectives, nor data on costs and outcomes, nor appropriate performance measures. But by then the politicians have changed and the new ones are dreaming up some new organizational reform to help keep the system in a permanent muddle [4].

The only way to appreciate the NHS is to understand it in its historical perspective. What follows is brief narrative covering the history of the NHS. What should become clear is that, although the rhetoric of the NHS has always been about a massive, centrally directed health system, the reality was far from this. In reality, the NHS has long suffered from a weakness in central management. More modern variants of the NHS have not only encouraged diversity to continue, but also have broadened the base to include private providers so as to drive competition focussed healthcare.

7.4 The English Health System before 1948

Newdick [5] notes that before 1948, healthcare was provided to many people on a charitable basis and government had little influence. There were variable and inconsistent standards. Doctors, who were self-employed, often worked in affluent areas which meant that the best facilities were among those who were most affluent and who could afford to pay medical bills. Nye Bevan (the architect of the NHS) was reputed to have said "the best hospital facilities were available where they were least needed."

Public health was provided for under poor laws. The Local Government Act 1929 transferred control of such institutions from hospitals to local authorities. The National Insurance Act 1911 provided free general practitioner (GP) services to some workers. Other than this, the provision of health services was a matter of negotiation between doctor and patient.

7.5 The National Health Service in 1948

The original intent of the introduction of the NHS in 1948 was to introduce central direction to the provision of health services: "the sound of every bedpan was to reverberate around Whitehall" was how Nye Bevan put it [6].

It was less successful at this aim than popular myth suggests. Part of this was due to the nature of the negotiations which accompanied the birth of the health service: "prolonged negotiations accompanied the birth of the service, and these negotiations at times seemed likely to prevent the birth taking place at all" [7]. Doctors were

largely successful in their negotiations, leading to retention of some rights of public practice, greater pays for consultants, and the retention of the independent contractor system for GPs. Doctors retained a role in administration at all levels of the service. Newdick [8] also suggests that the government's commitment to clinical freedom thwarted any real possibility of central control. Moreover, "other than the ideological commitment to providing care on the basis of need, the NHS had no central agenda, or system of prioritising its resources" [9].

The main losers with the introduction of the NHS were local authorities. They lost control of their hospitals which were, together with voluntary hospitals, placed under the care and control of the NHS.

The National Health Service Act 1946 introduced a comprehensive system of healthcare provision which was free to the consumer. Although the medical profession pushed for only 90 percent of the population to be covered, the government was insistent that all the population be included in the NHS coverage. A tripartite organization was developed which distinguished between primary healthcare services (notably GPs), hospital services (hospital boards), and community health services (provided by local authorities).

7.6 The First Reforms—1973

The next major change to the NHS was the 1973 reforms. These are well summarized by Ham:

Within the new structure, Regional Health Authorities (RHAs) took over from regional hospital boards.... The members of the RHAs were appointed by the Secretary of State for Social Services, and the main function was the planning of health services. Beneath RHAs there were ninety Area Health Authorities in England, and their members were appointed partly by RHAs, partly by local authorities and partly by members of the non-medical and nursing staff. The AHA chairman was appointed by the Secretary of Sate. Some AHAs contained a university medical school and teaching hospital facilities, and were designated as teaching areas. AHAs had planning and management duties, but one of their most important functions was to develop services jointly with their matching local authorities. Both RHAs and AHAs were supported by multi-disciplinary teams of officers. Alongside each AHA was a Family Practitioner Committee which administered the contracts of GPs, dentists, pharmacists and opticians. FPC members were appointed by the AHA, local professionals and local authorities. Finance for health authorities and FPCs was provided by the Department of Health and Social Security. Most areas were themselves split into health districts, each of which was administered by a district management team (DMT),

which in practice became the lowest tier of the service. At district level were located Community Health Councils (CHCs), introduced as part of the re-organized structure to represent the views of the public. There were around 200 CHCs in England. [10]

The 1979 Reforms 7.7

Despite the above changes, the 1970s was a decade of unrest for the NHS. Resources within the NHS were never such as to allow all wishes to be fulfilled. Managers had little authority as to allocate resources as between practice groups, junior doctors began striking and, eventually, in 1979, there was a Royal Commission into the NHS, resulting in further structural change.

Under the pre-1979 NHS, the role of mangers was compared to that of diplomats [11]. Their function was largely passive consensus building, resolving conflicts between various clinicians.

The Royal Commission expressed concern at this role "there is a risk that consensus management may sap individual responsibility by allowing it to be shared: it is important that managers should not be prevented from managing the services for which they are responsible" [12].

The result was a restructure of the NHS to abolish one layer of the NHS, the Area Health Authority (AHA) and with them, the District Management teams. These were replaced by District Health Authorities (DHAs). These were responsible for running hospital and community health services. Health authorities and local authorities were no longer coterminous. In 1981, Family Practitioner Committees (FPCs) were given the status of employing authorities and were subsequently responsible for making arrangements for the provision of primary healthcare. Regional Health Authorities (RHA) oversaw both DHAs and FPCs.

The major change to the NHS came in the 1980s. In 1987, several health authorities, complaining of a cash-flow shortage, closed wards, cancelled nonemergency operations, and failed to replace staff vacancies. The problem was related to what Ham described as "the efficiency trap." As hospitals were funded on a fixed basis, there was no incentive for hospitals to increase productivity. Hospitals who treated more patients suffered, because the same pot of money had to be spread further around. The 1979 reforms, too, proved to be largely ineffective in reinforcing the need for sound management. The 1983 NHS Management Inquiry (The Griffiths Report) was highly critical of the lack of "a clearly defined management function throughout the NHS."

7.8 The 1990s

A ministerial review, initiated by Prime Minister Thatcher in 1988 focussed on alternative methods of funding the NHS, including increasing the role of private insurance or a European model of social insurance. Instead of these options, the review became enamored of the writings of Alain Einthoven who had advocated the establishment of an internal market within the NHS.

The result was a white paper entitled "Working for Patients." In it, the government reaffirmed its commitment to the basic tenets of the NHS, that is, that care and treatment should be available to anyone on the basis of clinical need, regardless of ability to pay.

However, within that overarching framework, conditions for competition were established between hospitals and other providers. There was to be a separation of purchaser and provider roles. DHAs, who had formerly purchased and provided care, were to become purchasers of care and to contract with competing public and private providers.

Self-governing NHS trusts were established to run hospitals and were given the power to vary salary packages and to borrow capital within funding limits. Groups of GPs were allowed to band together to be known as GP fundholders. They were assigned their own budgets to purchase some diagnostic and elective procedures from public hospitals and other providers.

Under the new system, money would follow patients—patients would get to choose when and by whom treatment would be delivered.

Although the rhetoric of the new National Health Service and Community Care Act 1990 was strong, reality was somewhat different: "...the new system was not internal, nor was it a market in more than a restricted sense... It was not so much a matter of the patient dictating where the money went, but the patient following whatever channel the professionals dictated" [13]. The NHS executive, by 1994, expressed the concern that unrestricted internal market, absent a regulatory framework, was dangerous. The chief concern was that of anticompetitive features such as monopolies, barriers to entry, poor information, inappropriate pricing, and collusion [14].

The lack of information available as to performance data was a major disincentive for players in the market to trade. NHS Comparative Performance Guides were described as cruse. As one commentator put it "... the design of hospital information systems is such that no real distinction can be made between parties who leave hospital alive and those who die there" [15]. The paucity of information deprived purchasers of the ability to make informed decisions. Newdick points out also that there was the absence of an equation which enables particular categories of healthcare, or patient, to be given priority [16].

7.9 New Labor and the Latest Reforms

The latest wave of reforms has been introduced by the current labor government in England. The Blair government promised an overhaul based upon responsibility, partnership, and public confidence.

The internal market has been retained, but renamed. Purchasers of care became commissioners of care. Contracts are now referred to as service level agreements.

GP fundholders have been abolished and primary care groups (and trusts) have been established. These are large groups of GPs and community nurses who manage the budget for primary and community care and purchasing services from NHS trusts and other providers.

The idea of wholly government funding of healthcare has been abandoned. The government has adopted what it calls a private finance initiative. This permits private interests to own, build, and run hospitals for NHS benefit. Moreover, the NHS may access private facilities to treat NHS patients on a competitive basis.

7.10 The United States' Experience

It would be an unwise foreigner who would speculate unduly, in a U.S. published book, on the finer points of the U.S. healthcare system. What follows, therefore, is an overview of some major features, as perceived not by a local expert, but by an outsider, keen to make comparisons. The summary draws heavily upon Furrow's book.

The United States, long the bastion of private enterprise and competition, is traditionally seen as a nation which eschews government involvement in business. The health system is often portrayed as expensive, defensive medicine in which a large number of people are left uninsured and struggle to obtain decent medical coverage. No more so was this the image than during the Clinton era, where the struggle was to define a consensus-driven model on how a modern healthcare system should function. That attempt, based as it was on managed competition reform, failed [17].

It may come as somewhat of a surprise to note that, taking into account the cost of direct government healthcare programs, the cost of government-employee health plans, tax benefits which support private healthcare systems, the total tax-financed healthcare spending in the United States was 59.8 percent of total healthcare spending [18].

This trend is not new, but has accelerated over time. In 1960, the government funded only 25 percent of health expenditure. By 1993 the rate was 43.9 percent. By 1997 it was 46.7 percent [19].

Furrow et al. summarize the nature of government involvement in healthcare as follows:

The federal government provides health care to veterans in over 300 veterans' hospitals and nursing facilities and in community clinics; to the military and their dependents in over 100 military hospitals and through the TRICARE program; to 1.5 million Native Americans in almost 100 hospitals and health centres run by the Indian Health

Service; to disabled coal miners through the Black Lung program; and to a variety of special groups through block grants to the states for maternal and child health, alcohol and drug abuse treatment, mental health, preventative health and primary care. States provide health care both through traditional programs like mental health and tuberculosis hospitals, state university hospitals and workers compensation, but also increasingly through a variety of newer programs intended to shore up the tattered safety net, including insurance pools for the high-risk uninsured, drug benefit programs for the elderly and programs to provide health insurance for the poor uninsured. County and local governments operate local hospitals. Federal, state and local governments provide comparatively generous health insurance programs for their own employees and less generous programs for their prisoners (the only Americans constitutionally entitled to health care) [20].

7.11 Medicare and Medicaid

In the public health sphere, the two most important programs are, of course, Medicare and Medicaid [21].

The former is a scheme covering the elderly and disabled with eligibility generally linked to those in receipt of social security. There are two parts to Medicare: Part A and Part B. The former covers hospital care, nursing home, home health, and hospice services. The latter covers medical practitioners and noninstitutional services (physiotherapy, ambulance), but only for those who pay a premium.

There are complex provisions related to whether Medicare will cover major new technologies, with decision-making power vested in the Centre for Medicare and Medicaid Services (CMS). This body may, on request, issue national coverage determination. Appeals from the CMS go to departmental review which may, in turn, be the subject of judicial review.

Medicaid covers the poor. It differs from Medicare in that it is state administered, and eligibility and coverage differs from state to state. Critics note that it is not all the poor who are covered, but rather the deserving poor [22].

Historically, as Furrow et al. [23] note, the deserving poor were

- Aged, blind, and permanently and totally incapacitated.
- Dependent children and their caretaker relatives (the categorically needy).
- Those who would be eligible for Medicaid if institutionalized, but who instead receive services in the community (the optionally categorically needy).
- Those with disabilities who income exceeds the thresholds but who incur regular medical expenses which, when offset against their income, brings their income below the threshold (the medically needy).

The tying of Medicaid to traditional ideas of deserving poor has gradually diminished. The current groups eligible for Medicaid are

- Pregnant women (subject to means test)
- Children (subject to family means test)
- Low-income elderly and disabled Medicare recipients
- Disabled children and adults

7.12 History of U.S. Health Schemes

The tradition of U.S. healthcare is, primarily, a private experience. Although there is evidence of some health insurance in the early part of the 20th century (mainly as an adjunct to disability policies), before the 1930s, it was very rare.

The first types of insurance schemes were "blue cross" schemes, set up by hospitals during the depression. These schemes were community rated, that is, the premiums they charged were not based on an individual's comparative risk—the same premium was charged to all. Payments under the scheme were not made to individuals, but directly to hospitals who provided the service. Doctors groups followed suit, setting up their own plan called Blue Shield.

Commercial insurers followed suit, though their plans were not community rated—premiums varied to reflect the various risks insurers faced in insuring various people.

Changes to the tax laws in the 1950s made it attractive for businesses to offer employees health insurance, a trend which was magnified by the passage of the Employee Retirement Income Security Act 1974.

The most recent trend in health insurance has been the move to managed care an amorphous term which roughly equates to health insurers controlling access to medical care by controlling funding and provision of care.

Even in the field of private health insurance, moves are afoot in various states to ensure more universal coverage.

7.13 Moves toward Universal Coverage?

Hawaii comes the closest of any state to providing universal healthcare coverage as the result of a 1974 law that requires employers to provide health insurance for full-time workers (those who work 20 hours or more per week) and, as of 1990, a state insurance plan for low-income, part-time workers and Medicaid recipients (the State Health Insurance Program or SHIP). In August 1994, Hawaii combined SHIP, Aid to Family With Dependent Children and General Assistance programs into one managed care program. As Scott notes, the program has reduced wastage and includes capitation measures, a strong emphasis on communication, central

coordination of services, and an assessment of service delivery. Only 9.6 percent of Hawaiian adults were uninsured in 2002 [24].

In 2003, the Maine legislature provided that medical insurance coverage would be available to all residents by 2009. Illinois now has a scheme to provide coverage for those under the age of 18. The California Governor was to convene a summit on 24 July 2006 aimed at generating ideas on how to lower healthcare costs and reduce the number of uninsured [25].

The most dramatic changes have come about in Massachusetts. On 5 April 2006, Massachusetts legislature enacted a law which aims to cover 95 percent of the state's 500,000 uninsured within three years [26].

The uninsured are divided into three categories. The first group number 100,000 poor people who qualify for Medicaid, but have not signed up. These people will be covered by the state and federal government.

The second group, approximately, 200,000 people are low-income families and individuals who do not qualify for Medicaid and are too poor to buy health insurance. Those earning up to 100 percent of the federal poverty level will be covered by the state. Those who earn between 100 and 300 percent of the poverty level will only pay part of their premiums, according to a sliding scale.

The remaining 200,000 uninsured higher-income people will be dealt with using what Business Week described as a "carrot and stick" approach. The insurance business will be reformed in Massachusetts making it cheaper to buy insurance. Preeminent among these reforms is a connector which will allow individuals to buy insurance as if he or she was a large company.

As of 2008, high-income individuals in Massachusetts who do not have health insurance will be penalized an amount equivalent to half the cost of health insurance premiums.

All employers who have more than ten employees must contribute to employee healthcare costs. Employers who do not provide insurance will be forced to pay an annual fee of \$295 per full-time employee.

7.14 Australian Healthcare System—No Worries, Mate

To understand the nature of the Australian healthcare system, some mention needs first to be made of the legal constraints on healthcare systems in Australia.

The Australian constitution weighs heavily on the operation of healthcare in Australia. For example, a national health system as found in England is constitutionally impermissible in Australia. Attempts to nationalize industries in Australia have fallen foul of the Australian constitution [27].

Since the Uniform Tax Cases [28] in the 1940s, the federal government has had the exclusive power to levy income tax in Australia. As a result, it has, by far, the greatest amount of revenue in Australia.

That revenue base is not supported by a constitutional head of power which permits the Commonwealth to regulate healthcare. As a consequence, most health services in Australia are provided at a state level, though funded at a federal level.

There are some health matters over which the Commonwealth does have legislative competence, but they are small in number. Examples of these powers are s. 51 (ix) (the Quarantine power), s. 51 (xiv) (the insurance power), and s. 51 (xxiii) (invalid and old age pensions).

Successive attempts by the federal government to introduce a pharmaceutical benefits scheme were declared unconstitutional by the High Court of Australia [29].

In 1946, a constitutional amendment enlarged the social security power of the Commonwealth so as to include the following: the provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), and benefits to students and family allowances.

The above head of power was, eventually, interpreted widely which has allowed the Commonwealth some leeway, resulting in the passage of two important pieces of legislation—the National Health Act 1953 and the Health Insurance Act 1973.

The broad scope of these pieces of legislation are summarized in the Australian Health and Medical Law Reporter.

The National Health Act, in addition to allowing for the provision of a wide range of health services, provides conditions for receipt of benefits for healthcare in nursing homes, regulates the establishment and business of organizations providing medical and hospital benefits [private health insurance] and provides for and regulates the payment of benefits for pharmaceuticals prescribed by medical practitioners. [There are sections which] set up committees to enquire into the payment of benefits and, consequently, into professional conduct of medical practitioners.

The Health Insurance Act provides for the payment of medical and hospital benefits. Those benefits are payments for, or repayments of, costs of medical or hospital services, most of which have been provided for, or at the direction of, a medical practitioner. [The Medicare Scheme]. [There are section which are] designed to monitor these uses of public money by establishing committees. Their function is to enquire, where necessary, into payment of benefits and, consequently, into the professional conduct of medical practitioners. [30]

The Medicare scheme owes its existence to a combination of s. 51 (xxiiiA) and s. 96 of the constitution. The latter allows the Commonwealth to make grants to the states on such terms as it sees fit. Under the States (Tax Sharing and Health Grants) Act 1981, and now the Health Care (Appropriation) Act 1998, the Minister for

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Health and Aged Care of the Commonwealth may grant financial assistance to a state, territory, hospital, or any person for the purpose of providing or paying for health services. No grant may be made to a state or territory unless the Minister is satisfied that that body is adhering to the Health Care Agreement Principles:

Principle 1—Eligible persons are to be given the choice to receive, free of charge as public patients, health and emergency services of a kind or kinds that are currently, or were historically, provided by hospitals.

Principle 2—Access to such services by public patients free of charge is to be on the basis of clinical need and within a clinically appropriate period.

Principle 3—Arrangements are to be in place to ensure equitable access to such services, for all eligible persons, regardless of their geographical location.

In addition to the above broad principles, recent Medicare agreements between the states and the Commonwealth have required states to, for example, establish minimum performance standards and establish consumer complaint mechanisms. The various Medicare agreements, then, allow the Commonwealth to fund the states' public hospitals.

Medicare is funded by a levy on taxable income. The current levy is 1.5 percent of taxable income, higher if the taxpayer earns over \$100,000 and does not maintain private health insurance.

At a micro level, Medicare also reimburses sick Australians for some of the costs of seeking medical treatment. A person covered by Medicare (any Australian) is entitled thereby to a rebate of 85 percent of the scheduled fee of GP services, and 75 percent of specialists-scheduled fee. This is not the same as 85 percent and 75 percent, respectively of the fee actually charged by the medical practitioner. Constitutional prohibitions prevent the Commonwealth from limiting what a medical practitioner charges a patient. Many practitioners charge in excess of the scheduled fee. In this case, the shortfall is met by the patient.

The one exception to this rule is the bulk billing scheme. Under this scheme, the patient assigns to the medical practitioner, the patient's right to seek a rebate from the Commonwealth. The medical practitioner in turn, agrees to accept the amount of this rebate as 100 percent of his or her fee. The patient is thus left with no "out of pocket" expenses.

Nothing in the Medicare scheme prevents a private hospital for charging for services such as accommodation in a private room, etc., though the medical services offered by consultants to such hospitals are covered by Medicare. In addition, Medicare does not cover ancillary health services such as physiotherapy, dentistry, ambulance transport, or the like. Australians can choose, if they wish, to take out private health insurance to cover the costs of such items.

Until recently, health insurance provided under such schemes had to be community rated. That is, the premium charged to each member of the health insurance scheme had to be the same—irrespective of how well or sick that person was. It is also not possible, under Australian law, to deny someone who already has coverage,

renewal of health insurance, simply because they have been sick. It is possible to refuse claims for conditions preexisting at the time insurance cover is taken out. Australian health insurers were also prevented from offering gap insurance, to cover the difference between the Medicare rebate, and the amount actually charged by doctors.

Legislative amendments passed in 1995 permit an exception to community rating. The reasons for the changes have been discussed elsewhere. Briefly, the level of Australians' participation in health insurance had dropped steadily. Although 59 percent of Australians had private health insurance in 1984, by December 1993 this figure had dropped to 38.4 percent. Within one year, this figure had dropped another 2 percent [31].

There was also a greater dropout rate among younger people. This had, in turn lead to a vicious cycle. As the proportion of aged and sickly people rise, communityrated premiums rise. Young healthy people do not see the value for money, so dropout—forcing community-rated premiums to again rise.

The key concept introduced by the legislative amendments is lifetime cover. Australians must, if they wish to join a health insurance scheme by the time they reach a prescribed age—or pay more from then on. Australians without private hospital cover on the 1st July following their 31st birthday must pay a 2 percent loading on top of the base-rate single member premium for each year they remain without hospital cover. The maximum loading payable is 70 percent. The loading does not apply to nonhospital cover.

The loading also applies (or increases) if a person ceases to have hospital cover for greater than three years. There are some exceptions. Periods where a person is overseas for greater than a year are not counted, nor are periods of suspension permitted by a health insurance company. There are special rules applying to migrants, refugees, veterans, and people born before 1 July 1934.

The federal government also provides a rebate to people who maintain private health insurance. People aged 64 or under receive a rebate of 30 percent off their premiums. Those aged 65-69 receive a rebate of 35 percent off their premium. Those aged 70 or more receive 40 percent off their premium.

People in Australia whose income is above a specified threshold, and who do not take out private health insurance are forced to pay a higher Medicare levy.

The final important changes to private health insurance permit insurers to cover the gap between what the Medicare rebate is, and what a practitioner charges. The changes also permit health insurance schemes to set up beyond the borders of one state, and to enter into "no gap" arrangements with particular hospitals. The theory is that a smaller number of larger-health insurance organizations should be able to enjoy economies of scale in terms of administrative expenses. The no gap arrangements with providers of healthcare was designed to generate competition between health insurers and to reduce restrictions on products offered, thus allowing health organizations to operate according to market demand for different products.

7.15 The Tendency toward the Mean in Western Health Systems

It has been argued in this chapter that there are many similarities in Western health systems. The idea of the English NHS being a centralized, highly controlled system has been seen to be a myth—even from its inception. Whatever the intent, managerialism has been notoriously weak in the NHS. Clinical freedom allows for differences in response and action. As time has progressed, the central features of the system have become more diverse as competitive market forces are allowed to take hold.

The current state of play in the NHS, where public and private suppliers of healthcare vie for health money is likely to lead to some of the issues which have beset the U.S. healthcare system. In *Petrovich v. Share Health Plan of Illinois* [32], the Appellate Court of Illinois confronted the situation whether an insurance company could be vicariously liable for the negligence of one of the doctors for whom it reimbursed medical expenses. Although it was clear that the doctor was not employed by the health management organization, the Court held that, under Illinois law, the health management organization could be liable if one of the doctors with whom it contracted, acted negligently.

In a very recent article in Medical Law International, Margaret Brazier and Joanne Beswick [33] speak of the possibility of a similar outcome in England. The basis of liability in England is not vicarious liability. Primary care trusts, the authors argue, may owe a nondelegable duty of care to patients—even those it sends to a private facility or even to a private facility abroad, to undergo treatment. The net result would be the same as in *Petrovich v. Share Health Plan of Illinois*—negligence of a health-service provider could be sheeted home to the person paying for the treatment.

It has already been noted that Australian health insurers (with limited exceptions) work on a community-rated system of premiums—much like Blue Shield and Blue Cross. Interestingly though, Massachusetts' new law which penalizes people who can afford healthcare insurance, but choose not to take it up; is reflective of the same approach in Australia, where high-income people are slugged a higher rate of Medicare levy if they decline to take out health insurance. Similarly, is the idea that Massachusetts has enshrined in law that the state will help fund people's health insurance. The same is true in Australia.

It is trite to say, but important nonetheless to note that both Australia and England have now adopted the Diagnosis-Related Groups system pioneered by the United States, in establishing the amount of funding to be paid/reimbursed for each episode of treatment.

In the end, there is a certain inevitability of approach in Western health systems, irrespective of the funding arrangements, or underlying rationale. Plus ca change, plus c'est la même chose.

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Chapter 8

The Brain Drain of Health Capital: Iraq as a Case Study

Hala Al Saraf and Richard Garfield

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8.1 Introduction

In the last three decades, Iraq has experienced three distinct historical and political periods. Each of these has had a unique impact on the human resources available in the health system. In the first period (from the late 1960s through the 1970s), people left the country mainly to study or because of opposition to the government. Many of those who left to study returned later to take a lead in the development of hospitals and in specific medical specialties in the following decades.

In the second period (1980–2003), wars and international economic sanctions led to an intellectual embargo [1] and impoverishment of the country as a whole [2]. Many physicians were unable to maintain successful private practices and emigrated. The government responded by training in-country many more medical students in the hope that the inadequate doctor to population ratio would be improved. This quick-fix, along with other accommodations (like incentives given for professionals who did return, higher salaries, and securities for home and commodities) [3] partially stemmed the "brain drain" but weakened the quality of medical education because only a limited number of skills returned to Iraq during this phase.

In the third period (2003 to present day), economic disruption [4] and physical insecurity have driven and are constantly driving physicians out of the country just when many hoped that a new era would begin, in what is popularly known in the West as the post-Saddam era. Iraq thus now faces greater shortages in medical experts and specialty teaching positions than at any time in the last 35 years and no recovery strategies to mitigate these stagnating conditions have been designed or implemented.

This chapter extracts lessons from these three periods in Iraq. We first identify the conditions and environment that led to the establishment of modern medical practice in Iraq. We then determine the conditions for success or failure in the three modern day periods, and lessons are drawn for Iraq and other countries with protracted instability to improve human resources to better achieve a sound health system.

The focus on rights in health is usually patient-focused, with special emphasis on the denial of access to care. Here we stress the need to establish stable conditions for health practitioners to exercise their right to work and the responsibility of the Ministry of Health and the government in general to assure conditions that will permit these professionals to practice. Finally, the role of the international

community in addressing health inequalities and the need for professional societies such as like the American Medical Association to address violence against physicians and other health workers is discussed. Innovative solutions and applicable remedies, including the use of modern technology tools, are presented.

8.2 Section 1

8.2.1 Health from Past to Present

In this chapter, the importance of medical science in the lives of Iraqis throughout history is discussed. Historical and cultural norms must be part of the planning in reestablishing a system of services and education. An overview of the history of the Iraqi medical system is detailed here below.

8.2.2 Legacy of the Past

Iraqis can be proud of their medical heritage. Hospitals are still named after ancient renowned physicians including al-Razi (Rhazes 850–923), Ibn Sina (Avicenna 980–1037), al-Zahrawi (Abulcasis 1013), and Ibn an-Nafis (1288) that influenced the development of the profession of medicine throughout the world [5]. These figures served the medical profession in Iraq during the Abbasid era during the 9th century when Baghdad was the capital of the Islamic world. Their institutes like Bayet al-Hikma (the House of Wisdom) and Mustansryia are still alive and functioning as academies where many sciences, including medicine, are deliberated. However, like many other countries, Iraq lived ages of darkness during the Mongolian invasion in AD 656. A renaissance finally occurred in the 19th century.

8.2.2.1 The 19th Century Heritage

European powers identified Iraq as important both commercially and politically in the 19th century, and began undertakings including medical care programs at that time. British, German, and French missions in Iraq established health services to cater for their employees.

While the British built health facilities in Baghdad and Mosul in 1882, the Indian Consular Agent of Muslims was concerned with the health of Shi'ites in Kerbala (south of Baghdad/Central Iraq). Other religious groups like the Franco Jewish Alliance Israelite Universelle and other Jewish communities established dispensaries and outpatient clinics in Baghdad and Mosul as early as 1864.

After World War I, the British took control of Iraq and built a national health system. The British left in the 1920s but their influence has continued [6]. Hospitals, dispensaries, X-ray services, as well as a special institute for ophthalmic

and pathological chemical laboratories, and even a Pasteur Institute for the preparation of an antirabies vaccine, most established near the turn of the century, are still functioning. Iraqi doctors who graduated from Istanbul University worked under the supervision of a British General Inspector in the health department during the early 1920s. Where it was not possible to recruit Iraqi doctors, Arab medical experts (Syrian and Lebanese) were deployed to replace the British doctors who were forced to evacuate during the 1920s.

Iraqi medical education started in 1927 by Sir Harry Sinderson [7] who remained in Iraq and was given the title of Pasha to become the personal doctor of the king of Iraq and established the first medical college. He became the dean of the college and he adopted the Edinburgh College curriculum.

Royal patronage was given to the medical school by King Faisal during his visit to Baghdad Medical College on 4 April 1930. The Iraqi prime minister, along with his cabinet, supported medical education as well, by adapting national programs and objectives to meet the medical school requirements. The whole system was geared to establish a generation of highly educated medical doctors. Secondary education was adapted to emphasize the use of English and enhance the importance of chemistry and physics.

Religious groups did not oppose dissection of human bodies for anatomical studies. They surpassed other groups in demonstrating religious flexibility when it came to the general public good. In the early 20th century, people were willing to bend rules and regulations to modernize the health system.

The Royal College of England recognized Baghdad Medical College in 1932. This was a great achievement and for the following five years, Iraqi medical graduates were sent to England to complete their studies. They then became the nucleus of Iraqi medical tutors for subsequent generations of physicians in training.

From 1930 until the late 1970s, doctors frequently visited the United Kingdom, the United States, and other countries for specialization. This ended when war in the 1980s drained resources and sanctions in the 1990s further isolated the country (see Section 8.2.2.2).

If Iraq is to reestablish a capable health system and a viable medical education, it is essential for the political leadership to actively support health and education. This should be coupled with social acceptance of foreign expertise and new education trends. Religious leaders should show flexibility and comprehension regarding today's updated approaches to developing medical knowledge.

8.2.2.2 The 20th Century

Iraq consolidated its medical education by the 1930s, and from then into the 1970s, it maintained this solid foundation. The medical school lasts for six years and is based on the European system, in which medical students enter college after secondary school and usually have to be in the upper 6 percent of their class [8],

with the first three years devoted to basic sciences and the subsequent years focused on clinical aspects of medical care. Intensive clinical training occurred at hospitals in internal medicine, surgery, pediatrics, gynecology and obstetrics, and community medicine. Graduates spent two years as residents in the main branches of medicine and surgery before serving in the national military service for an additional two years. After their national service, doctors would spend a compulsory period of at least one year in rural areas. Only after these 11 years could doctors apply for specialization training of up to four more years in secondary and tertiary hospitals in major Iraqi cities.

During the Iran–Iraq War, for the first time medical students were not permitted to take postgraduate medical studies abroad. Instead, in 1986, the government established two postgraduate medical programs: the Iraqi Commission of Medical Specialties which provided postgraduate training in most clinical specialties and some subspecialties, and the Arab Board Degree under the direction of the Arab Board of Medical Specializations. Training was expanded to 17 medical colleges in the 18 provinces of Iraq, but curricula were not modernized and few innovations were permitted. In 1989, there was an attempt to adopt a WHO (World Health Organization)-supported model in community-based education, but since then the full adaptation of the model has not taken place because of staff shortages. The systems which had developed over the previous decades became rigidly state-controlled and defensive during Iraq's time of isolation and war.

Medical education started suffering significant deficiencies in knowledge and skills. Lack of training and neglect of studies in family medicine could be seen among graduates working in primary healthcare settings.

8.2.3 Health Services

Health services are to a large extent the public mirror of medical education in any country. Their quality is directly related to the capacity and orientation of medical education. Other factors that influence a well-functioning health service are adequate financial support, a strong infrastructure, capable technical leadership, and political will. Health services in Iraq varied greatly between the "times of peace" of the 1960s–1980s and the "times of war and economic crisis" from the late 1980s to the present. From 1980 forward, Iraq had eight years of war with Iran, an invasion of Kuwait, The Gulf War of 1991, 13 years of economic sanctions, and invasion and regime change in 2003.

8.2.3.1 Times of Peace and Times of War

The WHO described the healthcare system in Iraq before 1990 as one of the best in the Middle East region. During the early 1970s, Iraq nationalized the petroleum industry and built the apparatus of a socialist state. These increased revenues to the health system and 13 large hospitals were built throughout Iraq. International contracts were used to build infrastructure and, in nursing, the health workforce. Iraq rapidly built a network of primary, secondary, and tertiary healthcare facilities. Access to public health services was 97 and 79 percent within the urban and rural populations, respectively [9]. At this time, most of the doctors and specialists in Iraq were there to serve and teach. Thanks to their efforts, the health system managed to survive eight years of war and being isolated from the world. The accumulated skills and expertise in the system, based on decades of development, protected most of the health system from deteriorating during this period.

These same investments in medical education and infrastructure define the weaknesses of the system. It was heavily hospital oriented with 282 hospitals in all 18 provinces, providing about 25,000 hospital beds [10]. It was built rapidly by international firms to European standards and was highly vulnerable to disruptions of supplies, and the need for frequent repairs and technological development.

The country had a network of 14 research centers, 146 medical warehouses, 10 drug production factories, and 1570 primary healthcare units. Health indicators can be summarized in Table 8.1 which reflects the consolidated health status of Iraqis during periods of peace and war.

8.2.3.2 Permanent Instability

A state of war and semipermanent economic crisis started in the 1980s and has not ended as of this writing. Within the last decade, per capita spending on health fell dramatically. Analysis carried by the Ministry of Health suggests that during the 1990s the funds available for health were reduced by 90 percent [11]. Financial and technical reservoirs were exhausted under an increasingly rigid central (government-controlled) system.

The time after 2003 is, however, distinct. Expectations were that the health system would quickly recover, physicians would take over the health system from politicians, and Iraq would speedily recoup from its series of wars and economic sanctions, in this new post-Saddam period. Medical educators and the returned senior specialists were in place and would be able to transmit expertise one more time before retiring. In fact, the lack of security that characterized the immediate post-invasion days has not resolved, and in fact has deteriorated over the subsequent years—the potential for recovery has not occurred. Indeed, even minimally adequate health service information no longer exists, as much of the reporting system has either been lost or politicized to reflect achievements of the health leadership that is continuing to witness a very high turnover (four Ministries of Health and Higher Education since 2003). Progress has been measured by counting the number of rehabilitated health facilities or newly constructed services. However, under the current conditions of extreme insecurity, one needs to ask the question of who is accessing those services, how they access them, and at what cost? Indeed, even those

Table 8.1 Health Indicators Compiled by Dr. Garfield, R.

Indicator	Mid-1980s	1990–1991	9661	Poorest Level after 1991 (Year)	Year When Previously at This Poorest Level	Year When Previously at This Most Recent Reliable Poorest Level Information (Year)
Infant mortality rate	52	42	26	102 (1999)	1970	102 (1999)
Under five mortality rate	64	42	126	126 (1999)	1970	Below 100* (2000)
Chronic malnutrition (stunting)—C/S (percent)	18*	18	32	32 (1996)		19 (2002)
Chronic malnutrition (stunting)—N (percent)	12*	29	26	37 (1994)		11 (2002)
Maternal mortality per 100,000 births	I	121	I	294 (1989–1998)	I	A N
Diarrhoea episodes per child per year	-	3.8	-	14.4 (1996)	-	ΑΝ
Calories available per capita	3926	I	_	1600 (1090 on ration + 500 estimated purchase, 1995)	1961	2300 + 1000 (2003)
Percentage of births below 2.5 kg (percent)	5–9	4.5	I	12	I	

ō Notes: (-) = Indicates no reliable data available. *Indicates projection. All other data are from routine sources representative surveys. C/S—Central and Southern Iraq, N—Northern Kurdistan region.

measuring the supposed progress in rehabilitation are often unable to visit the centers to confirm if contracted work has been performed. Insecurity weakens access both for patients and doctors. While some doctors have been complaining that patients do not attend hospitals or clinics, patients say the same about some services where physicians abandon their duties and are not available to attend patients in hospital [12]. Mental health services are among those most affected, because of (1) increasing mental disorders and a clinical impression suggesting a problem of grand dimensions, especially posttraumatic stress disorders and (2) absence of psychiatrists and specialists, even before 2003. The radiology department in Baghdad Medical College as well as other departments have not accepted postgraduate students because of lack of supervisors since 2004.

8.3 Section 2

8.3.1 Brain Drain

8.3.1.1 First Generation

The first wave of brain drain started when the Ba'ath party came into power in 1968. Dr. Mahmud Thamer, an emeritus professor at Johns Hopkins University, describes that period as "a time that ended freedom of speech, time of imprisonment and murder, and spread of corruption into the medical system" [13].

Some of the best physicians left in 1969. The teaching faculty of the Baghdad Medical School emigrated en masse to the United States, the United Kingdom, and other western countries. It is estimated that over the course of Ba'athist rule (1968–2003), an estimated 4.5 million Iraqis, more than 20 percent of the total population, fled the country. Economic reasons were a primary factor. The Ba'athist regime introduced public–private partnerships as well as the nationalization of foreign investments. They expelled foreign companies from Iraq, closed private hospitals, confiscated pharmacies, and nationalized the education system. Many professionals found in those changes a serious threat to their future practice, and physicians who could left the country.

During the late 1970s and early 1980s, the government designed a plan to attract Iraqis to come back home. A rich motivation plan was set out to offer financial incentives and commodity facilitation was designed to regain expertise. Baghdad city was designed to allocate lands for professionals who returned special financial motivations, loans, vehicles, and a chance to join academic universities at a high level was granted to them. No numbers were revealed in terms of returned skills but the feeling was that a good number came back, colleges began to flourish, and the societal lives of those experts became a model for junior medics who followed. However, despite the financial and logistical promotions, there were contrarian political pressures and mistrust. For a university professor to be promoted, to upgrade his or her skills, and to participate in conferences, he or she needed to be

part of the political system or show loyalty to the government. At the same time (early 1980s), the Iraq—Iran War started and many of those with expertise had to go to the front lines and serve in a very difficult environment that they were not ready for. Eight years of war during which traveling outside the country was not allowed, many Iraqis felt imprisoned by their own system; a situation that only ended after the invasion of the coalition forces in 1991 and removal of the travel ban by the United Nations (UN) Human Rights missions. That was a period when many recently returned experts fled back to their expatriate residences with nary a plan to return home to Iraq.

8.3.1.2 Post-Gulf War

Even after 1991, new physicians were being trained and the physician to population ratio grew better even as the crisis was evolving. There was a radical decline in income from private practice, but the Iraqi state made funding regulations to ease the difficulties for doctors. Still, eight years of war with Iran were financially and psychologically exhausting. Doctors who were then doing their obligatory military service were extended to serve for as long as the duration of the war (sometimes up to—eight to ten years) [14]. Following Iraq's invasion of Kuwait and the imposition of comprehensive sanctions on Iraq, a larger wave of brain drain took place. Restrictions on travel were removed. Exposure to international organizations through humanitarian programs and reconnecting to the outer world encouraged many doctors and academics to leave the country and take jobs in other Arab or developing countries. The primary factors for brain drain are economic and social within the political context. The result was a loss of both the quantity and the quality of health workers of all types.

There were 17,152 physicians in 2003 nationwide. The national average distribution of physicians in 2003 was estimated to be 5.5 per 10,000; with 12 beds per 10,000 but only 4.8 physicians per 10,000—Iraq is relatively short of physicians per bed. Especially, in light of the low level of support staff per physician, the beds were seriously underutilized [15]. Although there were more physicians in terms of

per 100,000 Population, 200	per 100,000 Population, 2002							
	ME Average	Iraq	Syria	Iran	Jordan			
Physicians	121	53	140	105	205			
Dentists		11	72	19	55			
Pharmacists		8	52	13	52			
Nurses and nursing assistants		46	194	246	275			

Table 8.2 Human Resources in the Health Sector per 100,000 Population, 2002

human resources compared to dentists, pharmacists, and nurses, they were still much below the regional level in the Middle East. With such low levels of a health workforce, the country encountered the events of 2003 and forward.

8.3.1.3 Elimination and Forced Migration

The situation right now is complicated and risky, but I have no doubt that Iraq will come out of this. It has all that it needs to recover: the finances, the capable people, and a tradition of highly effective training. It is not building on nothing, and the foundations of the country that the Ba'athists tried to extirpate will most certainly revive. (Mahmud Thamer, Iraqi physician and Johns Hopkins professor; [16])

This was a moment of optimism by a leading Iraqi physician who left the country back in the late 1960s. The majority of Iraqi physicians seemed to feel this way after the 2003 invasion. In fact, recovery to previous levels was not considered an adequate goal and it was considered time to move even more forward decisively and rapidly. They knew they would have international support, with leading international medical schools helping them, and the power to act in a free democratic atmosphere.

Unfortunately, this has not come to pass. Iraq is in the midst of a human capital disaster with forced brain drain and targeted elimination of physicians and academics. Iraqi doctors report that they face challenges beyond poor resources. The perceived elite members of the Iraqi society have now become the target for daily insurgent activities. Many have been killed, others have fled the country, and those who decided to stay have closed their private clinics, fearing for their lives [17].

WHO's report in 2006 refers to a health workforce: "The intellectuals of any country are some of the most expensive resources because of their training in terms of material cost and time, and most importantly, because of lost opportunity." Physicians are indispensable and Iraq will not be able to coax back those who leave in the short term. At the same time, there was no time for handover from the previous key medical leaders to the new generation. Today, too much time has passed and there is no longer a chance to hand off from retiring professionals to the students of today. Iraq will have to engage in a sustained period of academic rebuilding within today's structural insecurity.

In the past, Iraqi doctors left because they were incidental victims of the regime. Today, they leave in large numbers because they themselves are the targets of violence and exploitation. The act of practicing medicine in Iraq has become a hazard to doctors and academics. They are being kidnapped and held for ransom, as they are considered to have money and not likely to be armed. They are tortured and sometimes killed, which further disrupts civil society. They are exposed to higher risk than many other sectors as they must move around in public to do their work. It is important to study the impact of such practices on the doctors themselves,

the patients who need their care, and the students who look at these doctors as mentors from whom they need to learn how to lead tomorrow.

8.4 Section 3

8.4.1 Human Rights

During war and civil conflicts, human rights become vulnerable because the government lacks its normal ability to mediate. In the case of Iraq, profound consequences are taking place against two segments of Iraqi population: physicians and patients.

The UN Human Rights Commission (UNHRC) describes Iraq as "the largest and most recent displacement of any UNHRC operation in the world, yet even as more Iraqis are displaced and their needs increase, the funds to help them are decreasing." UNHRC Director continues that, "This growing humanitarian crisis appears to have slipped off the radar screen of most donors." More than three million people have left the country since 2003, with an average flow rate of 2000–3000 people leaving the country every day [18].

Iraq is witnessing a crisis, different from most other international conflicts. Physicians are being targeted by killing, kidnapping, and forced migration over the past three years. The spokesperson of the International Committee of the Red Cross (ICRC) indicated that more than half of the 34,000 registered doctors have recently left Iraq and hundreds have been killed. Medical staffs are soft targets for kidnappers. As for those doctors who serve through the public system, they continue to request extensions of unpaid leaves. A spokesman of the Ministry of Health reflected his despair for the number of doctors and pharmacists who flee the country for security reasons. He believes that the infrastructure is not being supported and that the physicians are not participating in rebuilding the country, but the question here is what measures have been taken to maintain their lives or ensure the security of the doctors and their families?

Nurses have received their share of killing and pain. In IRIN (Integrated Regional Information Networks) report titled "Neglected nurses fight their own war" published by Aid & Development on 20 November 2006, that more than 160 nurses have been murdered since the U.S.-led invasion of Iraq in 2003 and more than 400 wounded, according to a senior official at the Ministry of Health's Strategy Department. In addition, he said, thousands have fled the country or were forced to leave their work after receiving threats from insurgents and militia fighters [19]. Economic reasons are another factor that push health professionals out even though they may not be the main factor. Logically speaking, with a salary of \$150.00 per month, it is hard to make a living. The workload and anger of the continuous flow of patients put the nurses and health workers in Iraq in danger. With more than 150 patients to look after on a typical day, a nurse has the

additional burden of accepting verbal and sometimes physical abuse from angry patients, or their friends and relatives, demanding immediate treatment. Despite many media reports and statements and the simple absence of many famous names in present day Iraqi medical education and healthcare facilities, no official action has been taken to stop this new wave of violence.

Physicians, medical and other health professionals are indispensable in times of crisis. Their ethics and sense of responsibility to act under all circumstances make them targets for abuse. In Iraq, they have become easy prey. This systematic trend of killing, kidnapping, and forced migration is draining the country of its best academic resources in many specialties, not only health. Killings have been specifically aimed at presidents of universities, deans of medical colleges, assistant deans, scientists, and professors. Many have been killed while practicing their profession in their clinics or in front of family members. Some doctors were lucky enough to receive threatening letters forcing them to leave the country. When those letters were not adhered to, in many cases they were killed within days. This has been reported from families of a distinguished heart surgeon and a professor of biological sciences in Basra City [20].

A case of a doctor who decided to stay in Iraq for his profession and patients was reported one day before he received threats to leave:

I was qualified in the Baghdad School of Medicine 1969, I got MRCP/UK 1979, FRCP/London 1992, and I am a Senior Consultant Physician in Renal Medicine.

Before the war, I used to have a private practice and was involved in different fields of renal medicine, including renal transplantation. Since the war, things started getting worse and worse, and the number of patients attending the private clinic is much less than before. My eldest son qualified for the School of Medicine in Baghdad. I am quite worried about him - either kidnapping or killing. My youngest son is in the second year of the School of Dentistry. I am now thinking of sending him away to continue his studies for the same reasons.

My daughter is in her final year in the School of Dentistry and she's a main target as she has to continue this year to get qualified. I am trying to look for a job in one of the Gulf States. I find it difficult mainly because of my age. (Dr. H. Al Saffar, 2006-with permission)

8.4.2 Should I Stay or Should I Go?

While the simple answer for most healthcare workers in developing countries is "go," where factors such as higher pay and better working conditions are tempting doctors to leave their native health systems, physicians in Iraq currently do not

have much choice because their answer, whether they like it or not, is "I have to go." This can be quantified in three ways. First, it is not a choice but rather a forced decision. The government, apart from insignificant media releases by the Ministry of Higher Education and the Ministry of Health, does not attempt to protect the lives of scientists and academics, to investigate the reasons behind assaults or to come up with alternative options such as safe haven zones, relocation to safer provinces, or even mobilization of social forces to protect hospitals and doctors. Second is where to go and how to reestablish oneself? Has the international market been flexible and is it willing to absorb Iraqi skills and expertise? The answer is not much. With the decline in the level of medical education, the gap in communication skills and isolation, Iraqi doctors are not as desired as they once were. Even for those Iraqi medical doctors who received postgraduate training outside Iraq, they may be too old to enter a culturally new workforce. To emigrate professionally is not a large factor because the international health market has a heavy age bias and in the case of conflict countries, a nationality bias as well. Third, a question that every doctor in such a situation needs to face: What will happen to my patients? Who will take care of them? [21]

8.4.3 Rights of the Patient

The right to life is shared both by doctors and patients. Yet, for example, the Iraqi government and U.S. forces have never secured transport for patients who need to attend medical treatment. They have even failed to provide access to transport critical supplies that are required in provinces where conflicts are going on. Some international humanitarian organizations have stepped in to try to do this on ad hoc basis. Many patients want nothing more than a visit to Jordan, where they can see their doctor from Iraq.

Human rights have been sacrificed to tribal interests. Shi'ite doctors fear attending patients in Sunni-dominated areas and vice versa. Doctors have been asked to accompany death squads to identify easy targets for killings from rival groups within the hospital. The Ministry of Health, now a partisan institution, has done nothing to address this problem.

Iraq ratified both the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) on 12 February 1969 and hence became legally bound by their provisions. The ICCPR incorporates protection for the right of life, the security of persons, and the freedom to seek and impart information, all of which are vital in the healthcare sector. The ICESCR provides the most definitive concept of the right to health through its article 12, which "recognizes the right of everyone to the enjoyment of the highest attainable standard of physical and mental health." [22] Governments are mandated to create conditions which would assure medical services and medical attention for all in the event of sickness. On the other hand, international medical principles provide that physicians and other health

professionals have the obligation to care for those in need. Although Iraq is going through this rather unique statewide crisis, the fact remains that the government has not taken any action to put this issue high on the agenda; no parliamentary sessions or media mobilizations have taken place to inform society of the danger of such events, and they have not liaisoned with international or other Arab institutions, for example, to temporarily absorb Iraqi academia to ensure their safe return once security prevails. These human rights violations need investigation and documentation because they are leading to crisis, touching as they do upon the very vulnerable issue of the health of the entire population of the nation [23].

8.4.4 Conclusion

Currently, financial loss is not the only damaging outcome in Iraq. The country is losing its scientists at a time when the fragile health system is in dire need of rehabilitation, not further chaotic de-structuring. The loss of the medical workforce will limit the whole system for years, possibly generations to come.

Some short term, prompt solutions may assist the current system:

- If systemwide recovery is not feasible immediately, the Ministry of Health should concentrate on providing agreed upon minimal essential services, through emergency departments, especially in areas of major fighting. Iraq has always reflected a desire for decentralization of the healthcare system. There is no better time for such a step to be taken as now. By decentralization of drug supply centers and maintenance workshops for medical supplies, a chance for better healthcare delivery will be noted in the main regions in Iraq. Reducing the pressure from Baghdad, the capital, as the one and only center for medical excellence, a tighter and more efficient control of drug distribution and focus of activity may lead to enhanced security as there would be more careful control of incoming and outgoing products at the same time, reducing visits of doctors to nonsecured zones, and possible accompanying casualty and death.
- Health services in Iraq must be supported through innovative means and technologies: how Iraq used history in establishing the 20th century system during the 1920s must be considered lessons learned to gear all other ministry resources to enhance medical services for the whole population. The factors behind the success of establishing the Ministry of Health during the 1920s should be reassessed and studied to help enhancing the effort of current ministry in reorganizing its departments. The Ministry of Communication can work on a more reliable availability of Internet access to medical schools and teaching hospitals. The Ministry of Education can work on establishing programs with international universities and medical institutions, and the whole government can show more dedication to international obligations in

terms of ensuring health services to all population with special focus on vulnerable segments, that is, women and children. Programs such as telemedicine, e-communication, and distance learning programs can contribute toward achieving such goals in the short term, for doctors, medical students, and the population at large. They can improve educational opportunities when there are few senior physicians on site. The experience of telemedicine has been tested by professors in the Baghdad Medical College who arranged for international speakers (from Italy) to give lectures to students via the Internet. With this experiment, the network is up and the system can be established. With dedication and more sponsorship, a one-time experience could become a system for continuous education.

- Upgrading the skills of existing health personnel through continuing education support may address some of these training quagmires in Iraq. There have been various opportunities for training to medical and health professionals, thanks to different governmental and not-for-profit bodies. However, lack of coordination between the Ministry of Higher Education and the Ministry of Health did not allow any lasting benefit from these infrequent opportunities. The Department of Human Resources is in need of further enhancement of its authority. The department staff itself needs orientation on the trends of health capital development and human resource planning and distribution. Foreign professionals could develop innovative graduate education opportunities and training programs to transfer technology to conflict areas through means of distance learning education and information technology.
- At the same time, Iraqi professionals who have emigrated and are living abroad need to be involved in creating opportunities to favor both the retention and the repatriation of national talent. The advantage these expatriate Iraqis have is their exposure to updated knowledge as well as their experience gained through having established professionally within a foreign context.
- Human rights investigations and documentation are required to produce evidence of abuse that is more credible and less vulnerable to challenge than traditional case reporting in other areas of daily life. Assassination of medical professionals and their forced migration should not be considered as part of the overall lack of security and killings in Iraq. By registering full details of deaths, Iraq can plan for the compensation of lost skills and work on correcting manpower distribution accordingly. The new Iraqi Ministry of Human Rights should be geared toward tracing every incident or violation regardless of who is behind it. The most important issue here is careful documentation rather than shame and blame. Documentation helps the population make better choices when the time comes for electing their representatives. The ability of health workers to participate in the defense of human rights is necessary to more honorably achieve their goal of healing.
- There is a need to measure the consequences by quantifying lives lost or lengthened sickness times owing to absence of healthcare services. Fact-finding

- studies in this respect are needed. Assurances must be made to guarantee fairness and the application of adequate study designs.
- To better strengthen the security of those professionals who are there, whether it be medical enclaves (neighborhoods of health professionals) or other methods of protection including bodyguards or secured zones (green zones).

One important concept is to acknowledge that the strong body of physicians developed in the 1970s and 1980s did not directly continue into the 1990s because of economic and political sanctions, and that the country only managed to survive, with brain drain, with a weakened system of medical education throughout the 1990s and into the 21st century. And after the 2003 invasion, no hand-off from older, experienced physicians to a new generation was able to take place owing to security never having been reestablished, and this absence of experienced physicians and health system may force Iraq to start over and rebuild medical education and expertise from the ground up.

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Chapter 9

Famine Elimination: A Tangible Step toward Sustainable Development

Athina Vassilakis

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9.1 Introduction

Famine is defined by G.W. Cox as the "regional failure of food production or distribution systems, leading to sharply increased mortality due to starvation and associated diseases" [1]. Though famine definitions commonly refer to food shortages and starvation [2], starvation is what distinguishes famine from chronic hunger and malnutrition.

Famines continue to threaten human lives despite worldwide economic advances and development. In 2002, ten to fifteen million Southern Africans faced famine or potential severe food shortages [3,4]. Even with relief efforts, famines can have devastating effects especially when they occur in regions already suffering from traditional hunger periods [5] or chronic hunger [6]. In Ethiopia, the 1984–1985 famine estimated toll reached up to 1.5 million deaths [7]. Particularly alarming for food security is the World Food Program (WFP) report that extreme weather conditions tripled the number of food crises in the 1990s compared to the last 40 years [8].

In the context of sustainable development, the economic impact of famines is just as compelling a cause for intervention as the humanitarian reasons. Human capital losses from famines are not limited to the death toll. Poor health from acute malnutrition can limit the ability to acquire and apply knowledge and can cause chronic illness. This decreases the country's productivity and ability to develop economically. The basic health of a population is therefore the foundation of any effort toward sustainable development [9].

This chapter first presents some of the causes and effects of famines. An overview of theoretical frameworks and empirical experience in addressing famines follows. The final section explores how to incorporate famine interventions into an overall plan to protect human capital and promote sustainable development.

9.2 Causes of Famine

Famines are complex events that result from a combination of ecological and human factors, including economic, political, and health factors. For example, a poor crop yield after a drought can worsen lack of assets or sociopolitical tumult [10]. Consequently, it can decrease either food availability or a vulnerable population's ability to buy food.

9.2.1 Environmental Factors

Ecological factors often trigger famines by decreasing agricultural production or changing precarious economic balances. It is noteworthy that many of the ecological factors presented here result either from poorly thought out development plans that caused soil overuse and degradation [11], or increased detrimental weather events attributed to global warming.

Drought adversely affects agricultural production and is associated with most famines. Its effects are especially pronounced in countries where irrigation systems are limited and farmers rely on rain for crop growth. Drought was responsible for the 1966–1967 famine in Bihar, India, the 1972 Wollo Province, Ethiopia famine, as well as famines in Sudan, Bangladesh [2], and Indonesia [8]. More recently in 2002, two years of bad harvests because of drought led to hunger in Southern Africa [4].

At the other end of the climate spectrum, floods and hurricanes can also destroy farmers' crops and cause famines. This was the case in Belize in 2001 after a particularly destructive hurricane [8], and in India, China, and Bangladesh (1974) [2] because of floods. Floods are one example of detrimental ecological consequences from poor development plans. For years, North Korea encouraged its farmers to clear marginal land of trees and shrubs to increase rice production. By 1995–1996, the country's soil had lost its natural protection and devastating floods resulted [12].

Parasites are the final ecological factor that can destroy crop production and trigger food shortages and famines. Blight fungus contributed to the Irish potato famine (1845-1846), while rinderpest caused several famines in Africa in the 1890s [2].

Economic Factors

Economic factors are often central in the development of famines. Most famines occur in the midst of sufficient food supplies [13]. The problem is that the hungry do not have the means to buy food. Artificial increases in prices—based on erroneous projections or hoarding for economic profit—can quickly reduce the availability of food to the poor [2]. For example, Niger's famine in 2005 came after a cereal production that was 11 percent below its five-year average. Prices rose 75–80 percent above their five-year average although the production was 22 percent greater than the harvest of 2000–2001, a year without food-security problems [14].

Market integration may also create famines by forcing countries to change agricultural and food policies inappropriately. One study found that India experienced more serious famines over 120 years in the 1800s than it had experienced in the last two millennia. The forced integration of the Indian food market into the world economy at that time combined with the loss of traditional household and community food-security mechanisms account for this change [2,4].

The economic and technological development of a country is also a crucial factor in the development of famines. Farming technology and infrastructure are necessary to protect the food chain. Inappropriate or low technology farming methods result in low crop yields [7]. In addition, poor quality roads, unreliable transportation, and inadequate marketing channels can all decrease revenues or locally hyperinflate prices [15–17].

Government policies often affect the economic chain of events of food security as well [18]. For example, the government can control imports to increase demand for locally produced food and raise prices [14]. This effectively protects farmers, but makes it more difficult for the poor to buy food. Further, government policies sometimes perpetuate poverty and food insecurity without any tangible gain for the state. In Ethiopia, the government gathers about 1 percent of its total revenues through cash taxes for using government-owned land, due shortly after harvest. These cash taxes force peasants to take their crops to the market all at the same time and sell at decreased prices. Their low revenues then make it difficult for them to accumulate assets, placing a disproportionate burden on this vulnerable population [19]. Finally, government dismissal of food shortages can help develop or worsen famines. In 2005, Niger's prime minister, Hama Amadou, acknowledged food insufficiency and asked for international help only after significant pressure from opposition parties and nongovernmental organizations (NGOs) [16].

9.2.3 Political Factors

Political unrest and corrupt governments can create man-made famines either by limiting production and access to food or by persecuting select members of the population. In 2002 in Zimbabwe, political supporters of the ZANU-PF (Zimbabwe African National Union-Patriotic Front) invaded commercial farms. They prevented farmers from planting and harvesting, and destroyed some of the infrastructure [20]. Furthermore, the government closed down farms and confiscated large food supplies from suspected supporters of the opposition [11,20]. This was achieved by abusing government monopoly on grain sales and claiming that the confiscated supplies were for sale [15]. In 2000, Malawi's government sold grain from its national store to profit the ruling party in the midst of a famine [11].

Conflicts and wars also often create famines both locally and regionally, when refugees flood nearby countries and stretch their resources and markets. Wars in Angola, Sierra Leone, Sudan [8], Timor, Laos, Vietnam, Afghanistan, Chad, Uganda [2], and Ethiopia's civil war [7] all resulted in famines. Of note, although armed conflict usually causes hunger and famines, it can also result from hunger [21], potentially triggering a vicious cycle. Wars can completely destroy food production and distribution, dislocate populations, force relocation of refugees, and inhibit social services such as healthcare. The war of Ethiopia with Eritrea in 1998–2000 stopped agriculture progress after several years of steady increase in production because flour mills, bridges, power lines, and irrigation systems were destroyed [19]. In addition, loss of security and access to food, depletion of assets through raiding of livestock and

stores, and loss of revenues from nonfunctioning markets can also lead to economic hardship and famine [22,23]. The effects of war on food security continue years after it ends. Congo's civil war ended four years ago, but about 1250 people still die daily mostly from hunger and disease [24].

9.2.4 Health Factors

HIV is among the latest contributing factors to famines. Permeating all aspects of life (personal, social, political, ethical, and economic), HIV hastens famines and exacerbates their outcomes in countries with high disease prevalence. HIV usually affects young to middle-aged adults and thus strikes at the most productive members of a household. This decreases food production, the ability to obtain food, and knowledge about foraging for survival during food scarcity. According to the World Health Organization (WHO), HIV deaths in a farm household can cause up to 60 percent loss of crop output [25]. Further, debilitated HIV patients are unable to work or help with intense manual labor, making it more difficult for families to obtain sufficient food [26,27]. Finally, loss of community support because of stigma from the disease also makes families more vulnerable in times of hardship [28].

Effects of Famine on Human Capital 9.3 and Sustainable Development

As the WFP has aptly stated, "hunger is a tragedy that kills not only individuals, but also the creativity, productivity and hope of those who continue to survive" [8]. Famines may be defined by starvation and death, but they have both immediate and long-term effects on survivors that debilitate a country's human capital and production. The WFP has estimated that iron deficiency alone cuts GDP (gross domestic product) by 2 percent in some countries [29].

Immediate Effects 9.3.1

Among the most common immediate effects of famine are hunger, weakness, lack of drive, decreased ability to feel happiness, hypoalbuminemia, dependent edema, decreased muscle mass, alopecia, hypotension, poor wound healing, and depression [30]. Significant immediate health consequences of famines include protein energy malnutrition, kwashiorkor, specific nutritional deficiencies, and mental as well as immunological effects.

Protein energy malnutrition is a general deficiency in both protein and calories needed by an individual. Children are usually the first to show signs of malnutrition because their bodies have higher nutritional and energy needs for growth [31]. During famines, protein energy malnutrition is one of the leading causes of death in children under five years [32]. Acute malnutrition is usually reflected in weight loss for height (wasting). It later slows or stops growth (stunting). Severe malnutrition can lead to marasmus or kwashiorkor [22,33]. Kwashiorkor usually develops in children one to three years old and is characterized by growth failure, muscle wasting, edema, liver enlargement with fatty infiltrates, diarrhoea, anemia, hair and skin changes, apathy, and irritability. Marasmus, usually seen in infants, presents similarly but apathy is not as prominent [32]. Protein energy malnutrition is also associated with long-term deficits in physical growth and behavioral development [34].

In addition to general energy and protein intake deficiencies, people can develop specific nutrient deficiencies. The most common include iron, iodine, vitamin A, zinc, folate, and calcium deficiencies [8].

Iron deficiency can cause anemia, impaired psychomotor or mental development in infants, and cognitive impairment in adolescents by up to five to ten IQ points [29]. Some studies suggest that deficits do not completely disappear with subsequent nutrition [35].

Severe iodine deficiency can lead to hypothyroidism. If this occurs during a critical period of development (e.g., in utero), it can lead to permanent mental retardation (cretinism), hearing impairment, and spastic diplegia (a type of cerebral palsy). The effects are exacerbated by deficiencies in vitamin A and selenium [29,32,36].

Vitamin A deficiency can cause dry eyes, night blindness, and complete blindness at advanced stages. It also causes growth retardation and increased susceptibility to infection [32].

Zinc deficiency increases the risk of dwarfism, diarrhoea, and pneumonia [29]. Folate deficiencies can cause neural tube defects [36]. Calcium deficiency can cause tetany and seizures. In conjunction with vitamin D deficiency, it also results in osteomalacia or rickets [32].

Famine and undernutrition can further have a number of mental effects on people. They can make both adults and children become confused or less able to work. Sudden or long-term fasting has been associated with a number of psychological changes including delusions, dissociation, confusion, suicidality, irritability, aggressivity, and increased impulsivity [37]. These mental effects can make it more difficult for individuals to protect themselves and find safe food sources [10]. Finally, undernutrition during development can lead to cognitive disabilities (decreased attention, poor coordination) and impaired ability to learn [8,10].

Suppression of the immune system is another crucial effect of undernutrition. This increases susceptibility to disease and exacerbates disease processes [8,33]. In Africa, malnutrition, diarrheal diseases (usually one-third of total deaths of children under five years), acute respiratory infection, malaria, and measles (usually one-fourth

of total deaths of children under five years) cause 60-95 percent of deaths during famines [38,39]. Some have suggested that food availability may not be as crucial as demographic factors, familial norms, and climatic constraints in determining infant and child mortality in areas with high infectious disease rates [40]. Discordant evidence challenges this view: case-fatality rates for measles can be as high as 10-33 percent in the setting of famines and emergency situations, significantly higher than normal [41].

Aside from direct immune suppression, disease or disease exacerbation can also result secondarily. For example, weakening of respiratory muscles from undernutrition can lead to decreased coughing and worsen respiratory infection [33]. Even worse, several disease processes induce malnutrition, thus creating a vicious cycle [33]. Finally, HIV-infected individuals require better nutrition to stay healthy and avoid progression to AIDS. Consequently, HIV/AIDS results in more deaths than would otherwise occur during a given famine [27].

Increased mortality is characteristic of famines. Mortality seems to be less severe among infants than among children who depend on solid foods [7]. In Ethiopia, more than 50 percent of all deaths in the 1984-1985 crisis were among children aged one to nine years [7]. Also, inadequate maternal nutrition during pregnancy can lead to intrauterine growth retardation, low birth weight, and increased perinatal mortality [10].

Long-Term Effects 9.3.2

Famine can cause a number of long-term sequelae including developmental abnormalities and chronic illnesses. The effects of famine on development depend on the timing, type, duration, and severity of malnutrition. The period from the second trimester up to two years of age is a critical phase: the impact of malnutrition is greatest and least reversible at this time [34]. Children under two years with failure to thrive (from undernutrition) usually remain small (25–60 percent with weight or height below the 20th percentile). They also have behavioral problems and learning difficulties more frequently (poor attention, impaired social skills, and impaired school performance), and cognitive function below normal (50 percent of the time). Severe, irreversible developmental deficits are not uncommon [8,34,42], and behavioral deficits from prenatal and childhood malnutrition are notably more permanent than the physical effects [34]. Animal studies suggest potential physiologic bases for these observations: they show that prenatal protein-calorie malnutrition can lead to poor development of the hippocampus (a brain structure involved with memory) as well as poor neurotransmitter function (dopamine and serotonin) [36].

Exposure to famine has been associated with the development of many adultonset chronic illnesses including mental illnesses, endocrine dysfunctions like diabetes, and possibly poverty-related obesity and heart disease [8,30,34,36].

Effects of famine on the brain can be very powerful. One study showed that semi-starvation in normal individuals resulted in abnormal eating behaviors and ruminations which persisted up to 50 years later [30]. Other studies suggest that in utero exposure to malnutrition, especially in the second and third trimester, may be linked with schizophrenia, antisocial behavior, and affective disorders (both uni- and bipolar) requiring hospitalization [34,36]. For affective disorders, one study found an attributable risk of about 30 percent in exposed cases [36].

Famines also affect the reproductive system. It is well known that the female reproductive system is affected by nutrition via hypothalamo-pituitary-gonadal axis perturbations. Some studies suggest that famines may cause long-term effects on the female reproductive system. In particular, one study showed that women exposed to famine during childhood had decreased chances of first and second childbirth compared to women not exposed, with a dose–response for this association. The researchers hypothesize that improper maturation of the axis may lead to irregular menses and thus less frequent ovulation and decreased fertility [43].

9.3.3 Link to Sustainable Development

Famines push families to deplete their assets, disrupt community and social networks, and weaken the productive power of the populations they afflict. In the process, they destroy the human capital of the countries affected, rendering development even more difficult to achieve.

In the face of food shortages, families use progressively more extreme and harmful coping strategies for survival. Initially, they choose "insurance responses" such as adjustment in crop and livestock, use of famine food, loans from kin, and small-stock sales [18]. Later, they sell their productive assets such as land, livestock, and utensils [2]. When destitution develops, out-migration, theft, prostitution, and even commerce of children become prevalent [2,18]. This final stage depletes the human capital through increased chances of acquiring disease (HIV), sacrifice of the future productive force (children), and chronic food insecurity from asset depletion.

Famines also break up families and communities because of mandatory migrations and increased deaths. This disrupts transmission of knowledge, a crucial form of human capital [2]. For example, weakened HIV-positive adults are more vulnerable to famine and more likely to die before they have time to transmit survival tactics such as knowledge of famine foods (roots, nuts, and berries that are nutritious and safe to eat) [2,27]. Social network disruption also eliminates previous social support systems for coping and productivity.

Finally, famines deplete human capital by decreasing the population's productive power. The poor development and physical weakness of famine survivors lead to poor decision making, decreased ability to work and produce, limited ability to learn, low efficiency at work, and inability to make well-thought out decisions or plan for a better future. When children are hungry, they also have difficulty

concentrating in school. Even worse, families struggling to gather food may limit children's schooling so they can help provide for the family [26].

Without an appropriate education, children will fail to build assets or join a skilled workforce. A study in Zimbabwe showed that children exposed to drought completed about five months less schooling than those not exposed, resulting in a loss of 7–12 percent of lifetime earnings [29]. Lack of education also limits personal autonomy, sex equality, and poverty reduction, all necessary for sustainable development and useful for population protection against diseases like HIV [26]. A limited education can also mean loss of a buffer for coping with situations that are unavoidable, such as wars. One study showed that both parents' education levels have independent, significant impacts on child mortality, and that a father's education level above primary education leads to a difference in survival during wartime [23].

Frameworks to Address Famines 9.4

Up to this point we have examined the various causes of famine as well as their consequences on human capital. Here we summarize the perspectives on how to address famines of two prominent figures in the field, Amartya Sen and Alex de Waal.

Amartya Sen 9.4.1

Sen's approach to famines is an economic analysis of food entitlement taken as a fundamental freedom of an individual. In other words, the ability to obtain adequate nutrition and food (through growing or buying it) is a right that depends on economic factors.

Entitlement, the ability to acquire goods, depends on endowment (land, labor), means of production (technology, knowledge), and exchange conditions (relative prices, labor markets). Food entitlement therefore depends on the entire economic food chain, so all of the chain's levels are relevant to famines. Entitlement failures (which create famines) result from a combination of economic climate, exchange dependence, and lack of safety nets and social security programs for the unemployed [13]. Discrepancies in purchasing power between groups, public panic, manipulative speculation [13], or any factor affecting economic balances can easily result in entitlement failures. In sum, inadequacies in food distribution and access are the main cause of famines rather than insufficient food availability [10].

According to Sen, economic development is the turnkey for famine elimination because it increases the resources and assets available to people to provide for themselves. This reduces the need for active entitlement protections but requires planning and adaptation to local needs. Investments in economic and human capital to enhance technical change, skill formation, productivity, growth of outputs, and incomes help increase economic development. At the same time, production should account for the overall conditions of a country and should overcome climatic or other challenges through diversification and expansion in available fields [13].

If income gaps persist despite economic growth, the government should intervene to ensure food entitlement. Social programs that timely recreate lost incomes and allow people to better compete for the available food supply can help counterbalance inequalities of entitlement. Furthermore, they use market trends to reestablish food item price stability [13]. Such safety net systems have been used in India, Botswana, and Zimbabwe, and have the advantage that they do not disrupt economic, social, and family lives [13]. In addition, they are more socially acceptable because participants are active productive agents rather than passive recipients of aid.

Although safety net systems may seem to require a significant investment, Sen shows the opposite. Sufficient investments are easily found for most famines because they usually only affect about 5–10 percent of the population. Governments that act early and appropriately can re-create "a minimum level of incomes and entitlements" by investing no more than 4–5 percent of national food consumption or 3 percent of GNP (gross national product) [13]. Mathematics and economics, however, simplify the problem.

The missing link between the simple economics and practice is each government's effectiveness and commitment to intervene against famines. Sen claims that democracy, freedom of speech, and government transparency and accountability promote the antifamine political contracts—which bind governments to protect their country's population—necessary to eliminate famines [13]. He supports that absence of democracy leads to inequality of political rights and powers, which affect economic rights and food entitlement. As an example, he notes that Botswana and Zimbabwe responded quickly to decreased food productions in 1979-1981 and 1983-1984, preventing the development of famines. Sudan and Ethiopia faced famines at that time despite having smaller decreases in production than Botswana or Zimbabwe. Democracy and free press also decrease the social and political distance between the government and the people [13]. As a result, the population influences public policy and information flow. Democratic governments therefore have more incentive to commit to famine prevention because they are closely supervised and their power is not guaranteed [13]. This avoids cases like Kenya where, in 2005, 50,000 prisoners skipped lunch to donate it to starving Kenyans before the famine received national and international attention [21].

9.4.2 Alex de Waal

Alex de Waal has used Sen's thoughts as a springboard to further analyze the political aspect of food insecurity and famines. He supports the creation of political contracts and wants them to play a central role in antifamine efforts [44].

Political contracts are government policies that are based on the interdependent reliance of government and the population. They ensure the government's commitment to intervene against famines [44]. Political contracts are pivotal because governments act based on political incentives. These incentives include country stability and security of power, both of which are affected by the visibility of a crisis, its political salience, the people it affects, and the technologies that can address the problem [45]. In addition, political contracts determine how inclusive antifamine programs will be when they are initiated [44]. For example, in Zimbabwe in 2002, Physicians for Human Rights reported that officials demanded ZANU-PF party cards from anyone who enrolled in "food for work" programs [20]. Even in India, where a political contract is present, there exist notable differences between states depending on the perceived political mileage gained by the government from programs like the Public Distribution System [46].

In Africa, political contracts with government commitment, recognition of famines as political scandals, and government accountability to the people are either fragile or nonexistent. This is because they require trust and effective government interventions, which Africans have never experienced. Historically, political contracts in Africa have differentiated urban from rural areas, have approached famine relief as an administrative obligation rather than as a right, and often have been weak (not upheld) [44]. In Kenya, while the people in central highlands and cities have been protected from famines, the seminomadic pastoralists have been abandoned for decades. Even in Ethiopia and Somalia, with antifamine programs since the mid-1970s, true political contracts do not exist because the focus has been on economic development and social welfare. Finally, Botswana's drought relief program, with local institutions in its activities and the Indian political contract as a model, still does not recognize famine relief as a right [44].

There are many obstacles to creating new antifamine political contracts in Africa. Authoritarian regimes, war economies, minimalist state goals, and government abuse of power pull officials' attention away from the well-being of the population. Neoliberalism focuses on economics without accounting for political and social factors, and social Darwinism decreases the moral and political shock of famines [44]. Finally, international influence through structural adjustment programs and the humanitarian international (groups and organizations that provide professional international humanitarian help) weaken countries' economies and the population's political influence [44].

Within this context, de Waal warns international humanitarian organizations to ensure that their famine relief efforts do not decrease the ability of the local people to negotiate political contracts because it would simply perpetuate poverty, marginalization, and famines. Per de Waal, the international humanitarian professionalizes and institutionalizes famine responses. It separates technical solutions from political context and implicitly perpetuates the existence of famines by intervening only after they develop (i.e., no prevention) and only on a short-term basis (with no effort for long-term development) [44]. In fact, most of the public work programs

in Africa are donor-sponsored through international organizations, and therefore short-lived [46]. Emergency interventions are usually effective, but they often do not remedy the fundamental causes of famines such as the structural deficits in rural Ethiopia in 2003 [45]. Also, specialized international interventions disempower locals because they exclude them from decision making, do not encourage political activism (organizations claim to be neutral), diffuse political responsibility for famine response, and limit local demands to free food rather than structural changes [44,47]. Out of necessity, famished populations participate in these programs nonetheless. The humanitarian international therefore politically weakens its target population.

9.5 Practical Solutions

Famines must be addressed from many different fronts to obtain reliable, long-term results. Per Sen, programs should aim toward general economic development, counterbalance of economic disparities, support of food entitlement as a right, and support of democracy. Economic and social solutions should therefore include planning for appropriate country development, building human capital, and addressing famine at all levels of the economic chain. De Waal focuses on the political arena and underscores the importance of political contracts, without which economic and social solutions are never implemented. To help develop political contracts, organizations need to address country instability, marginalization of population subsets, government corruption, lack of economic development, economic and political disparities, and international interventions that inadvertently perpetuate conditions that favor the development of famines. This section addresses the above fundamental areas of intervention and presents examples of its application, and questions to consider for future interventions.

9.5.1 Monitoring and Response Triggers

Monitoring of conditions in a given country provides warning signals for organized intervention to prevent or relieve famine. To best tailor a response, the government should monitor reliable data from a variety of fields. Ecological monitoring can take into account the frequency and severity of regular hazards and specific meteorological forecasts [10]. Market monitoring for hoarding, local price elevations, and livestock sales can allow to quickly locate vulnerable areas. Combined with household asset information, it can also help better target the most needy. This information can, however, be difficult to translate into specific needs and may at times be irrelevant because rich and poor can be equally affected by famines in terms of mortality [7,18]. Finally, anthropometric measures reflect that all assets have been lost and that malnutrition and famine are setting in. Height, weight, and

mid-upper-arm circumference are all used to document the extent of famines [22], although consensus on the most appropriate indicators, standardization of survey measurements, and cutoffs for defining undernutrition are still debated [4,39,48]. This combined information helps assess the current trends in the food chain.

The Famine Early Warning Systems Network (FEWS NET) from the U.S. Agency for International Development (USAID) is a good example of a sophisticated program that monitors conditions that affect food security and tries to elucidate the needs of each area to prevent famines. It includes environmental data, livelihood availability, estimated state of the food supply, and works with local entities on contingency planning to respond to early warnings [5]. Both national and international sources of information are included, which likely improves objectivity of the data. It is unclear how much importance is given to accounts of conditions from local leaders and regional workers, though FEWS NET does try to enhance local input and monitoring to empower Africans to meet their own needs [5]. Enhanced cooperation with local institutions that advocate for the people affected by famines may help forge political contracts and should be considered for this program. In addition, programs like FEWS NET should work out how to keep their monitoring mechanisms functional under emergency conditions such as postconflict situations or after natural disasters. Market monitoring in particular might prove very difficult to implement.

Any monitoring system should be closely linked to a response system to be triggered at a certain threshold. Setting appropriate trigger levels to activate preventive programs against famines is complex. False warnings can cost money. They can also cause panic, instability, and hoarding of food, all of which can lead to famines on their own [2]. Governments therefore tend to set high thresholds. However, if early responses increase the vulnerable populations' ability to compete for food despite market fluctuations, markets usually restabilize naturally [13]. As a result, smaller monetary investments are required from the government than would be if famines actually developed. Moreover, if early intervention programs have clear economic development goals, any intervention turns into an investment. Each trigger is an opportunity to invest in the sustainable development of vulnerable communities by safeguarding or increasing their assets.

National Famine Prevention Programs 9.5.2 and Sustainable Development

National famine intervention programs should connect with the overall development strategy of a country. This will ensure that they not only alleviate suffering of the victims but also serve as investments in the country's production and development [46] in three main areas: human capital, economic and market development, and food production and security [3]. At the same time, governments should reassess already established policies for appropriate results, protect the natural

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resources of their country, limit corruption and disparities, and forge political contracts with the population to address famines reliably.

The human capital ladder places health first in importance, followed by education and livelihoods [46]. Food and health services should therefore be at the forefront of responses. To make food more available, governments can release cereal banks to stabilize prices, subsidize food sales, enact food for work programs, fortify foods with micronutrients, and activate nutrition programs [3,5,26,49]. School nutrition programs have the additional benefit of being an investment against the return of hunger [8] because they help fight poverty and increase school attendance and performance [29], particularly for girls. People should receive food handouts where they live. This avoids inadequate reach of aid, disruption of household stability, overcrowded unsanitary settings that can spread disease, and protects victims from exploitation and discrimination [3]. Resettlement may be necessary at times (mud slides) [49], though in countries like Ethiopia it carries many negative associations owing to historical events [50]. Investment in health infrastructure and services both during the relief and recovery phases can include maternal and child healthcare, nutrition, sanitation, clean water, HIV/AIDS aid, and emergency clinics [3].

For economic and market development, interventions should focus on protecting and enhancing vulnerable populations' assets, the country's infrastructure, and the country's markets. Targeted credit programs (microcredit and microfinance projects) effectively prevent famines and promote sustainable development. They involve offering small loans with favorable terms to the most destitute and vulnerable to give them a chance to build assets through investment. These programs can also include training in sound investment or improved technologies to enhance the likelihood of success. India and Bangladesh have successfully implemented credit programs (goat loan and repayment program) as have NGOs in a number of small-scale interventions that have been successful with women in particular [46].

Social protection programs such as short-term wage employment, food for work, or public assistance programs are particularly promising because they affect all the main areas of development. First, they protect human capital because they provide income and food purchasing power to the otherwise destitute. In addition, they discourage food countermovement (movement of food away from areas where it is needed and toward areas where it is in demand because people can afford it) and utilize the market's innate function to achieve economic stability [13]. Finally, they can improve infrastructure through construction of floodgates, dikes, land enclosure, roads, irrigations systems, and other works needed locally, which can help improve future productivity and food security [8,49]. India and Bangladesh have already successfully implemented social protection programs. In India, the National Rural Employment Programme offers employment in rural areas and creates community assets that benefit the participants. The Employment Assurance Scheme expands infrastructure and social overhead capital in backward areas. Cooperative for Assistance and Relief Everywhere (CARE)-Bangladesh has similar successful projects that promote sustainable development [46].

To further address food production and security in the long run, social programs should also incorporate training that will help increase productivity and prevent future crop failures. This can include training farmers in the diversification of strains, recognition of pests, use of protective measures against pests, pesticides, and alternative options (cow's urine, neem leaves, and sisal). Combining this with a program to propagate this knowledge can help build human capital in the form of knowledge [51]. Successful interventions are particularly important because they can help restore hope for the future and stimulate victims to search for solutions [27].

Governments should at all times protect the natural resources of their country including their human capital, ecological assets, and adapted technologies. Governments should incorporate both economic prospects and nutritional interventions (target vulnerable children and pregnant women to protect them and their offspring, fortify foods with iodine, iron, and vitamins to prevent deficiencies) into development policies [2]. They should also carefully plan and study land use in advance to prevent overuse, abandonment, and ecological degradation [7]. For example, although farmers may shift toward new strains of crops to improve yield, they should also preserve the original natural strains that are likely better adapted to the environment and can serve as important backup in case the new strains fail. In addition, they should protect famine foods because they form a natural buffer during difficult periods [2].

To ensure that such programs are enacted appropriately, political contracts between the government and the vulnerable population need to be in place. Where such contracts do not exist, it is important for advocacy to be decentralized. Empowered locals should focus on political activism, negotiate contracts, and demand rapid and effective responses in regions with frequent food-security emergencies [18]. Indeed, per de Waal, primary mobilization with mass movements [47] forms the basis of any truly effective effort to produce sound political contracts that will not be breached by governments [44]. This is because governments respond to numbers and threat to security. Primary mobilization can emphasize education and information propagation, politicization of famine on a cultural basis, and demand for national technologies to address the problem [47]. Locals should choose experts on famine as leaders and form alliances based on the right to freedom from famine to gain political leverage [44].

To address corruption and disparities, government activities should be transparent and promote equitable distribution of resources [2]. Officials should publicly monitor governments for their program efficacy, fund efficiency, and ability to objectively show international supporters and donors that they are worth the investment [3,4]. This can help minimize government abuses, eliminate ineffective or unfair programs, and offer clear data for further development. At the same time, it will ensure governments uphold newly created political contracts and enact famine policies that appropriately target the most vulnerable.

Finally, governments should seek the help of international organizations to respond to the needs of their population. The international community can help

with guidance, expertise, and financial support. Governments receiving aid, however, should assess all recommended programs for their efficacy and potential success within the constraints (social, political, economic, and infrastructure) of their country. They should avoid inappropriate guidance from international organizations [4] such as the International Monetary Fund's (IMF) economic policy to rural Ethiopia that did not account for the repeated droughts that occur in the region [45], and find solutions based on their country's strengths and resources.

9.5.3 International Role in Famine Protection and Prevention

Developed countries owe much of their current economic power to the developing world. The legacy of the World Bank and structural readjustment, and forceful modification of the agricultural sectors (through debt repayment pressures) have systematically impoverished developing countries to profit Western economies. Even today, international agricultural policies push developing countries to keep the most desirable land for export production rather than food production [4]. Developed countries should now invest to reduce poverty and promote international development as well as stable, booming world markets.

The Western world should first decrease the indirect pressures that inhibit the economic development of countries. Aggressive debt repayment, world market manipulation, and aggressive arms sales [44] destabilize developing countries and international markets. In addition, subsidies, high tariffs, import quotas, and other barriers to import that allegedly ensure health and safety standards effectively prohibit developing countries from selling their products in rich countries. The European Union (EU) put 140 percent tariffs on many sugar imports from Africa. Meanwhile, it supported its own sugar-beet farmers with \$1.6 billion a year and dumped production surpluses in overseas markets [52]. Instead of supporting unfair market competition, some suggest elimination of farming in the developing world altogether. They argue that cutting subsidies and supporting Western farmers while they look for other employment would actually save money and help decrease market prices [53]. These steps are essential if the developing world is going to have a chance for sustainable development [54].

The developed countries should also continue to support antipoverty measures and programs. They should strengthen local and national strategies for poverty reduction and food security [55] through donation of expert advice or funds. They should continue to offer international financial or technical support through bilateral and multilateral aid, international programs or funds (the WFP, the Food and Agriculture Organization, United Nations Development Programme, United Nations International Children's Emergency Fund (UNICEF), WHO, the Millennium Villages Project (MVP), the Global Fund for AIDS, TB, and Malaria), and other governmental organizations and NGOs that focus on poverty eradication.

The MVP model is particularly laudable because it not only aims to create self-sustainable villages, but also further first to prove that only minimal funds (about \$100 per person yearly) are required for such development and second to test the potential for large-scale implementation of such interventions [56]. If this attempt succeeds, it would make a strong argument for further investments in development. In addition, the MVP pursues its work in a fashion that empowers the local population to support itself.

The international community should ensure that humanitarian interventions do not only serve the Western world's interests. Some argue that the United States uses genetically modified corn in famine relief efforts to get rid of corn that cannot be sold to the EU [4]. Western companies use famines as opportunities for profit. Transnational food corporations that market food and control food systems benefit most from famine interventions. Altria, Kraft, and Mille profited over \$8 billion in 2001, while the Switzerland-based Nestle S.A. profited \$4 billion in about six months through famine relief efforts. These profits equaled about half of the total GDP of six South African countries combined (about \$20 billion) [4], yet the local population was left just as destitute and vulnerable to future famines as it was before. Indisputably, large companies need profit incentives to intervene at times of crisis. Acceptable profit margins and economic policies to rechannel some of the profits to the developing countries are unclear at this time. Perhaps a profit threshold for humanitarian interventions after which the majority of profits must be donated back to the countries where the interventions took place can limit the current excesses.

The international community and humanitarian organizations need to reassess their role and responsibility in famine prevention. They should be more transparent and accountable for their actions, and should strive to eliminate famines permanently, not just address them in the short run. De Waal supports that they should not allow governments to avoid responsibility for famine relief. They should make famine a political cause rather than a charity question, at the international scale. As such they should form the secondary activism in famine prevention to promote famine as a human right through international and national legislation as well as articulate the needs of the local people effectively on a political level [47]. Whether the international community can intervene politically in humanitarian areas is an ethical and philosophical question that is still debated, even with the assumption that local voices will be guiding these interventions [57,58].

If humanitarian famine responses include political discourse to promote democracy and the recognition of freedom from hunger as a right, they should ensure that they do not take the lead to the detriment of local empowerment [59]. Instead, they should provide material and political support to accountable, local entities that have progressive social agendas rather than take the lead themselves [44]. Nijera Kori is a social mobilization of landless men and women in rural Bangladesh that strives for collective action and the rights of the poor. It puts pressure on political parties to respect human rights and democratic principles, ensures that the voices of the poor are heard, and speaks on their behalf at the national and international levels [46].

International humanitarian efforts should also enhance collaboration between NGOs, peacekeepers, the military, and the media [60] to protect victims' rights and political voice.

Finally, limitation of environmental pollution and financial compensation for climatic damages to crops can help limit famines. Developing countries are the hardest hit by climatic changes from global warming, with an increased incidence of food insecurity in the last few years [8]. Developed countries, however, are often the largest polluters. Some have suggested that the WFP or other international organizations should offer peasants catastrophe insurance for bad weather to alleviate the current effects of global warming. It would allow farmers to obtain money before they have depleted all their assets and therefore before famine sets in [61].

Conclusion 9.6

Famine is a complex event, which can profoundly affect human capital. Addressing famines can bring high yields in sustainable development by protecting human capital and decreasing poverty. Intervention accountability and political contracts guarantee long-term sustainable efforts against famines. Some areas need further exploration and development. First, it will be imperative to find ways to keep monitoring and information propagation intact in emergency situations. Second, the international community should reevaluate its interventions and address the issues of economic incentives, appropriate profits (if any) under the umbrella of humanitarian work, and the potential political scope of humanitarian aid. It seems that the UN has already politicized its discourse on famines [57], and the Geneva Convention laws have begun to prohibit creating famines as war tactics [45]. Once more general consensus on these issues is obtained, the challenge will be to translate the discourse into action and concrete results.

Developed countries should commit to offer economic support to prevent famines. Effective prevention must foremost address poverty among other factors that contribute to famines. Funds are available: the United States falls short about \$60 billion of the 0.7 percent GNP target for official development assistance to developing countries [62], while the WFP's total annual budget for 2006 was barely \$2.8 billion [63]. Nonetheless, the funds, material support, debt relief, and fair markets needed for development and famine relief are lacking. Already in the beginning of 2007, the WFP is about \$105 million short in funding to address food crises because of floods in Southern Africa [64].

Additional future ideas for improved response to famines may lie in modification of crop production practices, official international methods to oversee and evaluate humanitarian efforts, or legislation to cover crimes pertaining to famine. De Waal proposes the expansion of the international criminal tribunal's mandate so that it can investigate famine crimes and the appointment of a relief commissioner to evaluate all international efforts against famine [44]. Mobile vertical farming [65],

a radical change in crop production, could potentially protect crop through advanced technology and provide both food and income.

Although implementing the Millennium Development Goals may seem a daunting task, eradication of famines is one relatively achievable short-term goal with high yields in protection of human capital and sustainable economic development.

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Chapter 10

Health SWAps: For a Sustainable Development of Healthcare Systems in Low-Income Countries

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About the GRAP-SWAP Research Project 10.1

The GRAP-SWAP research, conducted in close partnership with the Belgian development cooperation agencies, focuses on the application of the sectorwide approach (SWAp) to the health sector, more specifically in Africa. The GRAP-SWAP's central research question can be declined as follows: Does the adoption of a SWAp and of its implementation modalities make a difference compared to "traditional" cooperation approaches, when it comes to

- (a) Overcoming the limitations of project approaches and increasing the efficiency and sustainability of external aid interventions, from a financial and economic perspective and also from an institutional perspective?
- (b) Facilitating health sector reforms, improving their relevance (quality of policies), their effectiveness (quality of implementation) and their impact, taking into account and easing the constraints that often prevent the generation of significant effects for target populations—thereby contributing to poverty reduction strategies, notably in terms of access of the poor to health services?

The research methodology draws on document and literature review, some theoretical developments (bearing notably on the classification of the so-called transaction costs associated with the management of development aid, and the use of incentive theory to improve the outcomes of the aid relationships), as well as research work conducted during short missions to African countries (Benin, Mali, Senegal, Rwanda, Tanzania, and Uganda) on the basis of semi-structured interviews and questionnaires. More extensive research into the application of SWAp-related healthcare reforms at the decentralized level started in Tanzania in the second half of 2006, with the help of local research institutions.

10.2 Introduction

In a context in which donors try to improve the performance of development cooperation and the contribution of their activities to sustainable development and poverty reduction, comprehensive approaches to the development of a sector known as sectorwide approaches (or SWAps) became popular a bit less than a decade ago. SWAps are supposed to avoid the weaknesses of traditional cooperation modalities (in particular the project-based approach) by promoting, alongside a comprehensive vision of the management of a sector, better ownership of development policies by government and other national stakeholders, a reinforced partnership between donors and beneficiary countries, joint responsibility taking, and better governance.

Since the late 1990s, SWAps have been adopted as a cooperation modality of reference in many developing countries—especially in the health sector (to which

the origin of SWAps can be traced) and in sub-Saharan Africa.* Today, a number of countries that do not yet have a proper health SWAp (e.g., Niger, Rwanda, etc.) are considering this option. At the same time, there is a growing trend among some development agencies to bypass specific sector support and move to general budget support aimed at backing comprehensive poverty reduction strategies. Huge amounts of money dedicated to fighting specific diseases (e.g., AIDS [Acquired Immune Deficiency Syndrome]) and channeled through vertical programs also tend to bypass, and sometimes de-structure health SWAps. It is thus legitimate, looking at the experience gained so far, to examine whether the SWAp remains a relevant cooperation modality and, in particular, whether it actually promotes a more sustainable development of healthcare systems in developing countries.

In the pages that follow, we first briefly look into the origins of SWAps, and the general theoretical foundations that support the claim that they may lead to the increased effectiveness and sustainability of aid interventions. We then develop more specifically how the SWAp can support the general strengthening of integrated healthcare systems, which is considered essential to lastingly improving health outcomes in low-income countries and thus contributing to the sustainable development of their societies. We also present some preliminary results of the GRAP-SWAP research in African countries (notably in terms of what health SWAps have achieved or failed to achieve so far), and conclude by stressing the need for SWAps to focus more on the core issues that constrain the capacity of health systems to deliver equitable, effective interventions, while intensifying efforts to evaluate the effects of healthcare reforms in terms of quality of care and improved health outcomes.

10.3 Origins of Sectorwide Approaches

The term "sectorwide approach" or "SWAp" was first coined by the Inter-Agency Group on SWAps and Development Cooperation (IAG), an informal thinking forum gathering experts from several donor agencies around the World Health Organization (WHO). The concept, which builds on earlier efforts (promoted by the World Bank) to develop comprehensive Sector Investment Programs (SIPs), was presented in a WHO paper by Andrew Cassels (1997) [1]. According to a seminar handbook produced under IAG auspices for the purpose of training donor agency staff in the new concept,

the SWAp defines a method of working between government and development partners, a mechanism for coordinating support to public expenditure programs, and for improving the efficiency and effectiveness with which resources are used in the sector. The defining characteristics are that:

^{*} Some Asian countries have also attempted to embrace a sectorwide approach (SWAp) to developing their health sector (e.g., Cambodia, Vietnam, Bangladesh), but the most accomplished examples are to be found in anglophone sub-Saharan Africa.

- All significant funding for the sector supports a single policy and expenditure program
- Government provides leadership for the program
- Common implementation and management approaches are applied across the sector by all partners
- Over time the program progresses toward relying on government procedures to disburse and account for all funds
- The SWAp is an approach rather than a blueprint, flexible and adaptable to a changing environment [...] The working definition thus focuses on the intended direction of change
- The process of a SWAp brings together development partners in dialogue on sector policy issues. The "implicit bargain" is that external development partners agree to give up their explicit role in running projects (or small fragments of the sector), in return for a voice in the overall direction of sector policy and its management. [2]

Other definitions of SWAps have been proposed [3–7], but most draw on the same functional characteristics. For the sake of clarity, it is useful to make a distinction between the SWAp, which is "a process aimed at development of coherent sector policies and strategies," "a way of working together between government and development partners"; and the sector program, which is the "updated sector policy and action plan" resulting from the adoption of a SWAp [8]. Moreover, it should be understood that a SWAp is a working method, and should not be confounded with its financing modalities, which may include budget support, basket funds, and projects. It is also important to understand what makes SWAps innovative, and why they are viewed as representing a new aid modality breaking with past practice. In the rest of this section, we thus put things in context and start by briefly recalling how ideas about development and the role and instruments of foreign aid have evolved.

The most traditional aid modality, widely adopted as from the early 1950s, is the so-called project-based approach [9–14], which rested on the idea that the main constraint preventing development was lack of funds for investment. A project-based approach is in place when stand-alone projects constitute the preferred cooperation strategy. Under this approach, projects addressing donor-identified priorities (possibly but not necessarily in support of national investment plans) are implemented "outside government's channels of financing, management and evaluation" [15], by project management teams that are primarily accountable to the donor. Funds are targeted to specific activities, the objectives and outputs of which have been predetermined. Management usually rests on project cycle management (which governs the sequence of decision making from initial programming up to ex-post evaluation) and the logical framework approach (which provides a set of planning, management, and evaluation tools relying on strict Cartesian logic).

The choice of a project-based approach to development cooperation was justified on a number of grounds [16–18]. However, a series of evaluations of aid effectiveness pointed to serious problems associated with the project-based approach. These include the following:

- A lack of ownership of projects by national authorities, to the extent that project priorities are often determined by donors.
- The undermining of national institutions and management systems, to the extent that projects are managed by parallel structures (which tend to attract the most qualified staff away from the public sector and are not conducive to national institutional strengthening).
- The high transaction costs associated with the management of aid, in particular on the side of the recipient country (which must deal with a myriad of individual project management units, all of which apply their donor's specific procedures, use their specific management systems, conduct their own reviews and evaluations, and "want to see the Minister").
- A general lack of coherence, as multiple, fragmented projects prevent government from having a comprehensive view of the sector (hence inconsistencies, duplication of efforts, a breakdown in the budgetary process, and the resulting distortions in the allocation of funds).*
- And the undermining of accountability mechanisms, to the extent that project managers are primarily accountable to the donor, rather than the population and its representatives [11,18–20].

All these problems, which reduce the effectiveness and efficiency of aid interventions, also clearly undermine their sustainability and hamper the sustainable development of low-income countries' national institutions, including their healthcare systems. As we shall see, these problems recently prompted a change of aid paradigm.

Although the project-based approach rested on a diagnosis of capital shortage, the macroeconomic approach [9,12,14,21], which emerged in the first half of the 1980s in response to the economic and debt crises that affected many developing countries at the time, postulated that the main obstacle to development was macroeconomic instability as well as the pursuit of inadequate economic policies. Under this approach, led by the International Monetary Fund (IMF) and the World Bank, macroeconomic budget support was provided to countries that adopted a Structural Adjustment Program (SAP) and submitted to these institutions' policy conditionality. The approach involved implementing a series of neoliberal reforms focused on cutting public deficits, developing exports, reducing state intervention in the economy, liberalizing trade and the financial sector, and so on.

^{*} Among capital and recurrent budgets, across geographical areas and across priorities within a sector.

This aid strategy, which rested on the implementation of uniformly imposed "recipes" later known as the "Washington consensus" [22], prevailed in the 1980s and most of the 1990s—or rather, coexisted with the project-based approach (which remained a significant aid vehicle throughout that period). In spite of some merits (notably in terms of promoting a change in political culture and better economic governance), it was strongly criticized for its relative ineffectiveness at achieving stated objectives (poor capacity to stimulate economic growth, reduction in domestic demand, increase in aid dependency) and, even more, for its disastrous effects on the social sectors of the recipient countries (as health and education budgets were slashed in a bid to reduce public expenditure).* Furthermore, where some positive results were achieved, they often seemed to depend on the continued provision of high levels of concessional lending, thus trapping countries in an unsustainable aid-debt service system [23].

Evidence of failure of these traditional approaches to deliver the expected results in terms of development, together with significant changes in the international context (end of the cold war, reduction in aid funds as more and more developed countries struggled to contain their own budget deficits) [24], led as from the mid-1990s to (i) a refocusing of development efforts on poverty reduction, now the stated ultimate goal of most aid interventions; and (ii) the emergence of a new paradigm in the management of development aid [9,12–14], characterized by

- A number of concepts now adopted by most in the development community, namely, ownership and participation, partnership and joint responsibility, accountability and results orientation, good governance, capacity building.
- Embodied in some new instruments, such as the Poverty Reduction Strategy Paper (PRSP),[†] the IMF's Poverty Reduction and Growth Facility (PRGF), and the World Bank's Poverty Reduction Support Credit (PRSC)[‡]—as well as the program-based approaches (PBAs), of which the SWAp.

The emergence of this new paradigm primarily rests on empirical foundations, the product of multiple studies on aid effectiveness conducted by bilateral and multilateral donors in the second half of the 1990s (including a major contribution from the World Bank) [24]. Theoretical foundations, however, also support the view that the application of the new concepts should result in improved effectiveness and sustainability [25].

Among the instruments that embody the new aid paradigm, program-based approaches (PBAs) are defined as "a way of engaging in development cooperation

^{*} This led the World Bank, at some point, to introduce the concept of "social dimension of adjustment" to mitigate the negative social effects of Structural Adjustment Programs (SAPs).

[†] First put forward in the context of the Highly Indebted Poor Country (HIPC) initiative, but now widely adopted also among non-HIPCs.

[‡] Successors, respectively, to the Enhanced Structural Adjustment Facility and the Structural Adjustment Credit.

based on the principle of coordinated support for a locally owned program of development, such as a national poverty reduction strategy, a sector program, a thematic program or a program of a specific organization." They are characterized by "(i) leadership by the host country or organization; (ii) a single comprehensive program and budget framework; (iii) a formalized process for donor coordination and harmonization of donor procedures for reporting, budgeting, financial management and procurement; (iv) efforts to increase the use of local systems for program design and implementation, financial management, monitoring and evaluation" [26]. These are all features found in the definition of SWAps presented in the beginning of this section, and they are all expected to enhance both the effectiveness and the sustainability of aid interventions.

In the rest of this chapter, we examine more in-depth how SWAps may, in particular, contribute to the sustainable development of health systems (and beyond, through improved health outcomes, of human capital) in low-income countries—first in theory and based on the literature, and then based on the preliminary results of our own research in Africa.

10.4 Health Sector Weaknesses and Reforms in Low-Income Countries

So far, health systems (see definition in Box 10.1) in low-income countries have generally failed to provide universal access to even a very basic package of quality health services. Effective interventions actually exist to address many priority health problems, but this knowledge somehow fails to translate into improved outcomes, as proven interventions are either difficult to implement in specific contexts or are made available in an inequitable way [27,28].

Box 10.1 Definition of a Health System

A health system includes "all actors, organizations, institutions and resources whose primary purpose is to improve health" [29]. This definition encompasses the public, private, traditional, and informal sectors, as well as health promotion and prevention activities (including those carried out in "sectors" not directly related to health, such as education, environmental protection, etc.) [30].

According to the WHO [31], health systems should have three fundamental objectives: (i) improving the health of the population they serve, (ii) responding to people's expectations, and (iii) providing financial protection against the costs of ill-health. More weight is generally given to the first objective, especially in low-income countries—even though the other two would in fact deserve more attention.

The lack of resources is definitely one of the causes of this problem [32–34], and "scaling up financial resources for health should be a priority" [35]. However, it is by far not the only cause: structural problems leading to ineffective and inefficient use of available resources are also to blame [30,36], and "how money is spent is at least as important as how much money is spent" [37].

As long as a number of systemic deficiencies have not been addressed, simply injecting more money is unlikely to deliver lasting results in terms of quantity and quality of services. Among the constraints and challenges faced by health sector managers in low-income countries are the following [27,29,37–39]:

- At the community and household level: demand-side barriers (resulting in lack of demand for health services)
- At the level of health services delivery: shortages of qualified staff, drugs and essential supplies (resulting in part from poor management), poor physical infrastructure and equipment, weak technical guidance and supervision, poor case management, referral, and other communication failures
- At the level of health sector policy and strategic management: insufficient high-level political commitment, weak and overly centralized planning and management systems, weak incentives to use inputs efficiently and to respond to user needs and preferences, weak links between programs, inadequate regulation of pharmaceutical and private sectors, weak health information systems, and donor practices that undermine country policies
- At the level of cross-sectoral public policies: civil service rules and remuneration, excessive centralization, poor communication and transport infrastructure, and macroeconomic policies
- Environmental and contextual characteristics: physical environment (climate, geographic predisposition to disease), governance, and overall policy framework (corruption, weak rule of law, weak structures for public accountability, political instability and insecurity, etc.).

To remedy all these problems, the governments of developing countries have for many years (in particular since the 1990s) undertaken a series of financial, organizational, and political reforms. These reforms usually pursue long-term objectives of efficiency, quality, equity, promotion of patients' rights, and sustainability—with the ultimate objective of improving health outcomes in the population [32,36,40].

However, it is widely recognized that these reforms have so far to a large extent failed to meet their objectives. In view of existing international commitments, in particular the health commitments undertaken in the context of the Millennium Development Goals (MDGs), it is now considered a matter of urgency that health systems become the focus of more successful national and international efforts, so as to improve their capacity to deliver effective interventions. Indeed, "health systems that are too fragile and fragmented to deliver the volume and quality of services to those in need" [41] are perceived as the main bottleneck to achieving the MDGs [27,38,42–45].

To deal with this situation, there is a growing consensus that further, better organized research into health systems is required—so as to promote evidence-based, rather than purely ideological, policy making.* The main challenges are to consolidate (through systematic reviews) and complement (through additional research) existing knowledge into which strategies are effective or not, and why, in specific environments—so that knowledge can be turned into practice; to determine, on the basis of evidence, which delivery mechanisms are best suited in a given context; to focus on how to overcome the constraints that prevent the effective and equitable application of proven health interventions in low-income settings; and to understand better which proven mechanisms are likely to bring about the desired changes.

To this effect, national health research systems must be strengthened; health system research priorities must be identified both at the national and at the international level; health research must be more focused on policy-relevant questions determined by developing countries (rather than donor agendas); international comparative research must be promoted, even if it presents methodological difficulties; appropriate research methodologies must be developed, in a multidisciplinary spirit; the social and contextual determinants of health must be encompassed (which constitutes a challenge to the biomedical model of health research); and more resources must be dedicated to research [27,38,42–46].

To conclude this section, it is worth pointing out that of all the challenges facing health systems in low-income countries, the most formidable is doubtless the management of human resources (HR). HR are "the heart of the health system in any country" [47], "the most important aspect of the health system" [48]. Health systems can simply not function without adequate HR, which have been shown to drive health system performance [49]. Yet, because it is a difficult issue involving multiple factors and forces, the topic of HR management has been a widely neglected component of health system development in low-income countries [50,51].

The problem is both quantitative and qualitative. The massive shortage of health workers experienced in many low-income countries has been attributed, among other factors, to low salaries, poor working conditions, insufficient training capacity, chronic under-investment in HR and in the health sector, a brain drain from developing to developed countries, the HIV (Human Immunodeficiency Virus)/AIDS epidemic, and the existence of "ghost workers." The phenomenon has been aggravated, in recent years, by a plethora of global initiatives, which bring new funding to the health sector but add to the work burden and fail to increase the

^{*} Same references. The WHO set up a "Task Force on Health Systems Research" in 2003. The Task force has identified 12 priority topics for research aimed at furthering the implementation of the Millennium Development Goals (MDGs).

supply of health workers accordingly. To make things worse, for similar reasons, the skills needed to implement basic packages of services are often inadequate among existing medical staff, so that the quality of services remains poor even where staff shortages may not be too acute (e.g., in some urban areas) [49,51–53].

The mobilization and strengthening of human resources is thus recognized as essential to building sustainable health systems. Evidence supports the view that effective workforce strategies enhance the performance of these systems [49,51]. A systemic approach is needed, and various actions must be undertaken simultaneously to address the diverse nature of the HR problem and its multiple causes. The adopted measures must not only increase the numbers of health workers, but also improve their territorial distribution and raise their motivation and productivity. National strategic plans with a long-term view, strong political commitment, and strong national leadership are required, and must be supported by international resources and actions (such as measures to reverse the irreversible migration of skilled medical staff to developed countries).

SWAps, with their focus on coordination, comprehensiveness, and capacity building in support of local ownership, should provide a constructive background for the adoption of measures to strengthen HR management and other aspects of health systems. They should also offer a suitable framework for research into this thorny issue.

10.5 Role of SWAps in Support of Health System Reforms—and the Specific Issue of Global "Vertical" Initiatives

A study of health sector reforms published in 1995 concluded that their potential impact in terms of efficiency and effectiveness was undermined by the limited duration of many reforms, the isolated character of many reform strategies, and the limited nature of existing reform evaluations [32]. This and other studies also highlight the critical role donors play in the reform process: through their participation in the policy process, they influence the reform agenda (sometimes considerably); they can contribute financial resources in support of reforms; however, without effective coordination arrangements, they may end up weakening rather than improving fragile health systems, and undermine attempts at reforming them [38,54].

These findings, together with other elements presented in "Origins of sectorwide approaches," led to the emergence of SWAps, and explain why their basic principles were initially developed in the health sector. In his "Guide to sector-wide approaches to health development," Andrew Cassels identifies a dual purpose for SWAps: "First, to ensure that policies, budgets, and institutional arrangements are likely to lead to improvements in sectoral performance – and thereby,

improvements in service quality and health outcomes. Second, to create the conditions which allow a different form of interaction between government and donors" [55].

The principles underlying SWAps were further elaborated and tested as from the late 1990s. For many development agencies as well as governments, the SWAp became the preferred model of development assistance in health, with a view to achieving sustained improvements in health service quality and accessibility, and thereby in people's health and well-being [36]. Many hopes were thus founded in this new aid modality, and (as we see in "Some lessons learned about health SWAps") some improvements are noticeable. However, although SWAps are often successful in drawing attention to crucial policy issues, their record in terms of supporting complex health system reforms is not immediately apparent (see for instance [4]).

One specific difficulty existing and nascent health SWAps are grappling with is the multiplication, in recent years, of global vertical initiatives*—many of which originate from the international commitment to the MDGs.

Generally speaking, vertical programs and approaches[†] are often incompatible with the objectives of the SWAp, as their record in terms of national ownership, development of local capacities, harmonization of procedures, coordination with other interventions, transaction costs, and so on fails to meet the standards of the new aid modalities. By promoting the adoption of common priorities and joint responsibility for policy outcomes, the development of government capacity and sectorwide management systems, and the establishment of common management arrangements, SWAps tend to support integration and the horizontalization of health services.[‡] Existing vertical initiatives tend to be encompassed at least to some extent in less specific delivery structures—even though there is often reluctance to give them up, for fear of losing in terms of quality and efficiency [59].

The recent rise of new global, vertical initiatives such as the Global Fund thus challenges the SWAp model [60]. The main risks associated with them are as follows:

■ Budgetary distortions: The financial resources potentially available from global initiatives may result in resources being "disproportionately allocated to specific diseases or interventions," with insufficient regard for sector priorities; these massive amounts may also constitute a disincentive for government to

^{*} Such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria (the Global Fund), Stop TB, Roll Back Malaria, the Global Alliance for Vaccine and Immunization (GAVI), and the U.S. President's Emergency Plan for Aids and Relief (PEPFAR).

[†] Vertical approaches imply "a selective targeting of specific interventions not fully integrated in health systems" [56], and "use planning, staffing, management, and financing systems that are separate from other services" [57].

[‡] By contrast, horizontal approaches "tend to incorporate several health interventions as part of a comprehensive primary care approach, usually delivered through government health facilities" [58].

increase the share of its own resources dedicated to the health sector; the temporary nature of resources made available by these initiatives compounds the problem.

- Loss of government leadership and ownership, and undermining of coordination mechanisms: Many of the new programs show little enthusiasm for joining existing coordination mechanisms; simultaneously, the "huge amounts of money potentially at stake" make it "difficult for government to refuse to implement activities that do not necessarily coincide with its defined policies and priorities."
- (Re-)establishment of parallel implementation structures: An obvious temptation if the "promoters of vertical programmes fear that integration with existing structures may be lengthy and slow down disbursement"; this, in turn, "involves a clear risk of undermining years of efforts dedicated to the building of integrated primary healthcare and other services."
- Establishment of parallel planning, monitoring, and evaluation structures: To adapt to program-specific procedures and planning processes and for reasons of accountability to global program donors, which is another way of undermining a SWAp [61].

At the same time, if properly managed and integrated with existing SWAp coordination mechanisms, global initiatives offer potential benefits and opportunities: they may provide an injection of funds in support of preexisting national priorities, and could also constitute an incentive to (finally) tackle the HR crisis [61].

In the section that follows, we review, on the basis of a few recent case studies, the extent to which health SWAps contribute to supporting health system reforms in practice. We show that the record is mixed, and issue a number of recommendations that may improve their impact.

10.6 Some Lessons Learned about Health SWAps

The research carried out in the context of the GRAP-SWAP project, primarily based on semi-structured interviews and the use of questionnaires on the occasion of short missions to investigate nascent or established health SWAps in Benin, Mali, Rwanda, Senegal, and Tanzania (briefly presented in Box 10.2), has produced a number of preliminary findings, which are presented below.*

First of all, SWAps are dynamic processes. The existence of a consensus on health policy, as well as a real willingness among development partners to support recipient country's institutions and to coordinate their actions, is a prerequisite for

^{*} Note that these findings are shared by other researchers—see for instance the recent paper (2006) by J. Martinez [62], which draws some similar conclusions about the health SWAp in Mozambique.

Box 10.2 Brief Overview of Health SWAp Experience in Selected Countries

- In Benin, the health SWAp is only nascent and seems little appropriated by the national authorities. Some important donors (among which the World Bank and the European Union) have somewhat disengaged from the health sector, both at the financial and at the technical levels, to provide general budget support. The Ministry of Health (MoH) is therefore little supported and is weak in the political arena. It would thus be necessary to put forth all efforts in common to save the sector.
- In Mali, the health SWAp started in 1998 with the setting up of the PRODESS (Programme de Développement Sanitaire et Social). The process is institutionalized and major donors support it. A systematic mechanism of consultation of civil society and a bottom-up planning process are in place. Significant progresses have been recorded in various areas. However, progress is mostly perceived at the programmatic level, which puts all emphasis on quantitative targets, but still little is done to deal with the quality of healthcare or the thorny question of human resource management.
- In Rwanda, the health SWAp is also only nascent, but it is led by the government which has clearly committed in favor of SWAps and budget support. However, numerous reforms are led at the same time and the country receives huge amounts of money dedicated to vertical (HIV/AIDS) programs.
- In Tanzania, the health SWAp started in 1998. It features all the elements recognized as characteristic of a SWAp, with a generally high level of achievement. The SWAp is deemed to have made a significant contribution to the overall success of health sector reforms undertaken since its inception, in particular the decentralization of primary healthcare. Quite substantial improvements have been observed in terms of government ownership of policies/strategies and efficiency in the use of financial resources. On the other hand, little progress has been made as far as transaction costs, quality of healthcare, and human resource management are concerned.

Source: GRAP-SWAP research project [61,63-68].

any SWAp to come into existence. The breadth and depth of a SWAp can be assessed based on achievements with regard to the typical components deemed essential for the existence of a SWAp and sector program, as notably identified by the European Commission (see Table 10.1). However, there is no such thing as an ideal model of a SWAp.

Components of a Sector Program				
	Benin	Mali	Rwanda	Tanzania
Clear sector policy and strategy	++	+++	++	+++
Sectoral medium-term expenditure framework	+	+	+	++
Performance monitoring system	+	++	+	+
Government-led formalized process of donor coordination	+	+++	++	+++
Agreed process for moving toward harmonized systems for reporting, budgeting, financial management, and procurement	(+)	++	+++	++
Systematic mechanism of consultation with clients, beneficiaries, and with	+	++	_	++

Table 10.1 "Breadth and Depth" of the Health SWAp: Six Typical Components of a Sector Program

Source: Authors' appreciation, GRAP-SWAP research project. (Components of a sector program: From Commission of the European Communities (CEC), Guidelines for European Commission Support to Sector Programmes, Brussels, Belgium, 2003, 7–10.)

Nor does any static equilibrium exist. Even in health SWAps considered successful (such as the Tanzanian one), new challenges constantly emerge, which may disrupt existing processes or even threaten to undo the achievements of past efforts—typically, for instance, the resurgence of global vertical initiatives is perceived as such a challenge by established health SWAps. So most SWAps go through ups and downs, emerge and evolve in less than ideal conditions* (see Table 10.2), and require continuous adjustments.

Generally speaking, the motivation and long-term commitment of partners determines to a large extent their ability to overcome obstacles and re-launch the SWAp dynamic whenever it appears to stall. The involvement (within all significant stakeholder groups) of a number of open, cooperative, committed individuals seems to be of primary importance in this regard—especially as institutions, left to themselves, may still be too weak to adequately withstand internal and external

^{*} The European Commission identifies four "essential" conditions, as well as four "important facilitating" conditions, for the success of a sector program [68]. Table 10.2 presents an appreciation by the authors of the extent to which these conditions are met by health SWAps in the studied countries.

Table 10.2 Conditions for Successful Sector Programs

	· ·	1	l	1
	Benin	Mali	Rwanda	Tanzania
Four Essential Conditions				
Strong and effective leadership at MoH level		+	++	+++
Commitment to the process elsewhere in government (particularly in the Ministry of Finance and at senior political level)	+	++	+++	++
Broad consensus between the government and the donors on key policy and management issues for the sector	+	++	ı	++
Reasonable degree of macroeconomic and political stability	++	++	+	+++
Four Important Facilitating Conditions				
Manageable institutional relationships	+	+	_	+
Existence of an experienced "lead (group of) donor(s)"	_	++	+	+++
Incentives compatible with the objectives of a SWAp		_	+	+
Possibility of achieving "quick wins" to raise commitment and support	+	++	+	+++

Source: Authors' appreciation, GRAP-SWAP research project. (Conditions for successful sector program: From Paul, C., Tanzania's Health SWAp: Achievements, Challenges and Lessons Learnt, Mission Report (Final), GRAP-SWAP research project, December, Liège, Belgium, 2005, Annex 5, 113–115.)

pressures. However, very often recipient country civil servants are subject to a high turnover, especially at decision-making level. Donor representatives also rotate every three to four years. It is therefore of crucial importance to capitalize experience so as to keep an institutional memory and avoid repeating mistakes. Unfortunately, such a capitalization is rarely encountered in practice.

Second, at the beginning of a SWAp and then periodically throughout its existence, it is of the utmost importance to conduct a serious stakeholder and institutional analysis. Indeed, as in any human enterprise, private interests as well as organizational constraints are very likely to interfere with the public interest. The use of adequate incentives is indeed crucial if sector reforms are to succeed, and they can only be identified through a thorough understanding of what drives various stakeholder groups, and what prevents the achievement of specific outcomes.

For instance, stakeholder analysis may highlight the interests and institutional constraints of the different donors and national actors willing to participate in the SWAp, to draw a consensus or provide further incentives to problematic actors. As for health sector workers, one should assess what motivates them and encourages them to perform adequately, and this knowledge may be used in the design of innovative solutions for tackling the HR crisis. Stakeholder analysis may also reveal what constraints, other than merely financial ones, prevent the poor from accessing medical services—again, essential knowledge for the design of a pro-poor health sector strategy.

Third, protagonists in a health SWAp should always remember that the SWAp is not an end in itself, just a means of promoting the ultimate goal of positively influencing health outcomes through better quality of care. Typically, the first years after the adoption of a SWAp are dedicated to institutional strengthening, the reinforcement of harmonization and coordination processes, the improvement of management systems and procedures, and so on. Nothing wrong with that—progresses made in terms of coordination and harmonization, the building of trust capital among partners, and the constitution of a common front for health may be a source of perceived quick changes and benefits. In fact, real advances are often observed in these areas, and they should contribute to institutional sustainability.

However, as much effort seems to go, in particular, into the improvement of formal sector programming capacities and the choice and follow-up of quantitative performance monitoring indicators, there is a danger that too much energy goes into a theoretical programming exercise increasingly disconnected from a serious diagnosis of the sector's problems and the implementation of concrete measures to solve these problems on the ground. The health sectors in Mali and Benin, for instance, seem to be affected by this programmatic disease, to the detriment of a focus on the quality of care.

In fact, the sooner quality improvement is made a core objective of the SWAp, the better. Health SWAp promoters "should never get so mired in administrative, institutional and procedural details" that they neglect the core business of providing quality services. It should be possible "to 'embed' quality-of-care objectives at an early stage in the design of sector reforms as well as management systems—for instance, by creating innovative incentives for health practitioners, or by including quality indicators in the sector's performance monitoring system" [71]. Too often, it seems that the transition to a sectoral approach focused on quality of care and patients' needs does not materialize as quickly as could be expected. Yet, failure to tackle the fundamental deficiencies of health systems in low-income countries (starting with the HR crisis) may result in SWAps ultimately being judged just as disappointing as other once fashionable aid modalities.

Fourth, the choice of aid financing modalities is not neutral: it may even be crucial for the success of reforms. Donors wishing to support a sector program may choose between different financing modalities, of which the most prominent ones are projects (often managed on the basis of their own procedures, although partial adoption of the partner country's procedures is rising),* the pooling of funds (in the form of basket funds, trust funds, etc.) with other donors, and sector budget support. Because one of the characteristics of SWAps is an increasing reliance on government procedures to disburse and account for all funds, and in view of the commitment to alignment made in the Paris Declaration,† the use of sector budget support should increase to the detriment of other financing modalities. However, conditions for the provision of budget support are not always met.[‡]

Furthermore, even donors that are strongly committed to budget support still see a useful role for projects. They can notably help donors keep in touch with reality in the field (and thus improve the quality of their sector dialogue with government), be used to test innovative approaches and new policy concepts at the local level (pilot projects), and also fill gaps in national sector programs, in particular if very centralized programs clearly fail to reach the poor [73]. There is nothing wrong, in our view, with the simultaneous use of various financing instruments to support a sector's development, as long as it results from an indepth analysis of local needs and conditions, takes account of the preferences of the partner government, and conforms with the requirements of the international harmonization and alignment agenda.

Another relatively recent development is that some donors (led notably by the British Department for International Development or DFID) now advocate giving up sector budget support altogether in favor of the use of general budget support. — on the grounds that it imposes less distortion on the budgetary process, and is generally better at empowering partner governments, fostering national planning capacities, and stimulating the development of public finance management and accountability systems. We believe, however, that sector-specific support still has an important role to play, and should definitely precede the switch to general budget

^{*} The rejection of the project-based approach does not entail the rejection of the project instrument as such. Provided they focus on activities included in the sector program and the corresponding medium-term expenditure program, projects remain a useful tool for contributing to sector programs.

[†] The "Paris Declaration on Aid Effectiveness" was adopted in March 2005 in the context of a conference organized by the Organisation for Economic Co-operation and Development's (OECD) Development Assistance Committee. It defines alignment as a situation in which "donors base their overall support on partner countries" national development strategies, institutions and procedures" [72]. More generally, it commits both donors and recipient countries to improving their record in terms of ownership, harmonization, alignment, results orientation, and mutual accountability.

[‡] They usually include improvements in public finance management and a reasonable degree of macroeconomic stability, together with a common agreement on the sector (or overall government) expenditure program.

[§] General budget support backs an overall development or poverty reduction strategy rather than a sector.

support, or coexist with it as long as sector management needs strengthening. Indeed, although technically sector budget support hardly differs from general budget support,* in practice it usually involves a deeper dialogue, closer cooperation between government and donors, and more targeted efforts at capacity building and institutional strengthening within the sector.

The case of Benin provides a good illustration of the danger of a premature cut in sector-specific support. Preliminary moves were made toward the adoption of a SWAp in the early 2000s. In recent years, however, several important partners of the health sector (among which the World Bank, and the European Commission to a large extent) have withdrawn their direct technical and financial support and opted instead for general budget support (to back the poverty reduction strategy). This move has contributed to plunging the health sector into a serious crisis as its resource envelope was reduced, initiatives in favor of institutional strengthening were dropped, and donor participation in strategic thinking on the sector's future declined markedly. A return to sector-specific support, and the adoption of a true SWAp, now seem more needed than ever if the sector is to resolve its problems.

Finally, it should be noted that it is not easy to ascribe evolutions in the management and achievements of a country's health sector specifically to the adoption of a SWAp. Typically, other processes are at work (such as civil service reform, implementation of a poverty reduction strategy, decentralization, etc.) which have a direct or indirect impact on the sector's operations. In most cases, there is thus no way of isolating, and even less quantifying, a SWAp's specific impact. In the observed countries, we thus had to rely, for this part of the analysis, on the subjective perception of interviewed people as to what role the SWAp might have played in the sector's evolution. Table 10.3 synthesizes the main results achieved so far by the studied health SWAps, as perceived by SWAp protagonists.

10.7 Conclusions

Both theory and the findings of our research support the view that health SWAps produce some positive effects. Improvements may be perceived quite early in the process of adopting a SWAp, especially in terms of coordination between donors and information sharing, which promotes the building of a capital of trust between stakeholders and thus lays the foundations for the adoption of more substantive reforms. When the SWAp process is institutionalized, better programming and the emergence of a (relative) consensus about sectoral strategy and policy are usually

^{*} Fungibility mechanisms ensure that although sector budget support is in theory allocated to the financing of a specific sector, in practice, its existence frees up some budget resources that may be re-allocated elsewhere. Even project support, to the extent that it finances expenditures that would otherwise have been funded out of government resources, can be fungible.

Table 10.3 Perceived Benefits of the Health SWAp

	Benin	Mali	Rwanda	Tanzania
Increased government ownership	0	+	+	+++
Better coordination of donors and shared views on sector issues	+	++	_	+(+)
Strengthening of MoH's programming capacities	++	+++	+	++
Strengthening of MoH's financial management capacities	+	+(+)	+	++
Increased efficiency in financial resource management	0	++	+	+++
Increased resources dedicated to health		+	+	++
In-depth reforms of the health system	+	+	+	+++
Improved human resource management	0	0	+	0
Improved quality of healthcare	0	0	+	+
Coherence between health and other policies	++	++	++	++
Reduced transaction costs	(+)	(+)	(+)	+
Improved aid predictability	_	0	0	++
Willingness to further harmonize procedures	+	++	++	++

Source: Authors' synthesis of interviewees' appreciation, GRAP-SWAP research project.

observed. The SWAp is also likely to promote better enforcement of the national health strategy.* In the longer term, real and more far-reaching reforms of the health sector may be achieved if all efforts are focused on them.

However, if some obstacles may be lifted relatively easily with a SWAp, others are much more difficult to tackle—even when it comes to apparently "simple" institutional ones such as lack of procedure harmonization on the part of donors. Several of the observed health SWAps are still beset with weaknesses such as a lack of

^{*} In Benin for instance, the nascent SWAp has allowed a small group of donors to defend the Ministry of Health (MoH) vis-à-vis another external partner, which planned to implement a project disconnected from the national strategy.

local leadership, the persistence of multiple procedures and thus high-transaction costs, sectoral strategies that keep being no more than a compilation of projects or vertical programs, sectoral medium-term expenditure frameworks which do not really set priorities and do not rest on in-depth analysis, and, above all, poor HR management and a lack of focus on healthcare quality.

These weaknesses bear on the capacity of health SWAps to significantly contribute to the development of more sustainable healthcare systems. Yet, none of them needs be insuperable. Based on our findings, a number of recommendations can be formulated to improve the sustainability of health SWAps as such and their contribution to the general sustainability of health structures in low-income countries:

- Once a SWAp exists, all actions undertaken in the sector should be conceived within the framework of the sector program, including pilot projects; projects put forward in the context of vertical initiatives should be adequately integrated within existing strategies and systems, taking account of implementation capacities and constraints.
- More efforts should go into procedure harmonization among donors (in terms of programming, management of funds, monitoring, and evaluation), and on the government side, into the development of more reliable national procedures and management systems (without which no alignment of donors on them can seriously be envisaged).
- Both national authorities and donors should be aware of the accrued need for capacities generated by the running of a SWAp, and invest accordingly in capacity development; MoH, in particular, needs to develop their planning and monitoring competences, as well as the planning, management and technical skills of HR in the field; as for donors, they need to reinforce their local representations and field offices with sectoral as well as economic experts (who need to participate in both technical and budget-related dialogues), and generally upgrade the skills of their staff to match the complex requirements of a more comprehensive approach to development.
- In the design of health policies and strategies, more attention should generally be paid to the needs, expectations, and perceptions of the population; this should go hand in hand with the development of accountability systems vis-à-vis recipient constituencies, which can be expected to provide incentives for better performance both at the technical and at the political level—and in particular, for an increased focus on quality of care.
- More should generally be done to analyze which reforms fail or succeed, and why—and to capitalize on experience; it is indeed striking to see how poorly the results of pilot projects, for instance, are disseminated and integrated into national strategies, even where a SWAp is in place; in this regard, the coordination, monitoring, and evaluation mechanisms established in the context of a SWAp could be put to better use; more resources should also

be dedicated to evidence-based research and impact studies, with a specific focus on critical issues such as HR management, the quality of care, and the sustainable integration of vertical programs into national health structures.

Whereas SWAps can obviously not provide solutions to all the problems that beset the health structures of low-income countries, we believe they remain a most relevant cooperation modality and can, if adequately managed, make a substantial contribution to the development of more sustainable health systems. During the first years of development of a SWAp, much emphasis is usually placed on improving sector coordination and management processes. This is valuable as such—although this should clearly not be the end of the road. The next (logical) step, which however seems harder to take, is to move to an approach more focused on the quality of services and the needs of patients. The willingness of health sector managers and their development partners to take this step will determine whether health SWAps, in the coming decade, end up disappointing as much as other cooperation strategies, or are deemed to have finally provided a breakthrough in the achievement of better, more sustainable health systems in the developing world.

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Chapter 11

Global Health Capital and Sustainable Socioeconomic Development

Patricia A. Cholewka

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11.1 Introduction

Issues concerning social, economic, and environmental development are closely related to the status of population health. Pervasive ill health hampers a country's economic and social development and political stability by triggering a vicious cycle of use, and nearly non-replenishment, of human and financial resources. In addition, education geared to economic development is compromised by health conditions and risk behaviors that undermine the physical and emotional well-being that makes learning possible.

This chapter will address an unmet need in the marketplace by posing management strategies from various international sources for encouraging health-capital outcomes. With the recent outbreaks of once-contained communicable diseases, as well as, newly discovered contagious diseases such as Severe Acute Respiratory Syndrome (SARS-CoV), bird flu (H5N1 strain of Avian influenza), and prion diseases such as variant Creutzfeldt-Jakob syndrome (vCJD), there is increased international attention to disease detection, surveillance, prevention, containment, and management by healthcare systems. There is also a growing realization of the important role that health capital has in increasing the value of a nation's well-being, that is, the quality of a nation's continued socioeconomic development through disease prevention through the building of individual health capital.

International Concern 11.2

The international community is paying more attention to mounting evidence that shows a strong relationship that exists between human capital and sustainable socioeconomic development. In economic terms, human capital theory treats everyone's state of health as a stock or an asset, that is, as health capital. Therefore, the flow of services that health capital renders consists of "healthy time" or "sicknessfree time" and can be considered inputs into work, consumption, and leisure activities [1–3]. The present value in money terms of the stock of years of life in certain expected states of health has been coined health capital [1,3]. This concept of health capital is related to an approach, used by U.S. government agencies that regulate public health and safety, to evaluate and compare the cost of implementing alternative public policies that would reduce a particular risk or harm and improve health [4].

Links between health and economic development have been well documented. People who are healthy in general are physically and mentally stronger, and more fit to work. Healthy people, for the most part, are better able to learn and use their education to earn a living. Improvements in health strengthen a country's economy and lighten the overall burden of poverty. Outside investors are attracted to sites where healthy and educated workers are ready for jobs. In short, get healthy people and wealth will follow [5].

The link between health and European Union (EU) enlargement was first addressed in a European Commission paper in 1999 [6]. This paper addressed the "lack of clear, modern public health policies equal to the challenges facing the health system and the relatively low priority given to this sector by the acquis (the combined body of Community law)" [7, p. 20]. Hager and Jennet [7] also conclude that there is considerable evidence that, parallel to the development of infrastructure and industrial investment, economic growth requires societies to invest in their people. In the developed countries, the value of the human capital stock is now some three to four times the value of the stock of physical capital. Additionally, it is also recognized that human capital investments have greater value at the margin than physical investments. In other words, investment in human capital is a driving force of growth and development (p. 20).

And, according to The World Bank, "no country has achieved sustainable development without investing substantially and efficiently in the education and health of its people" [8, p. 18].

11.3 Globalization and Health Capital

The term "Globalization" has become the most talked-about theme of the 1990s in the Western social sciences [9]. Although the idea of globalization has only recently captured public attention, globalization has been occurring for centuries with interactions among societies and historic struggles between nations for economic and cultural primacy. Globalization has many possible forms. Each is likely to lead to different social, environmental, political, and economic outcomes. International funders such as non-governmental organizations (NGOs) and other organizations of civil society have a vital interest in these outcomes. Therefore, it is important to deepen understanding of these issues and engage in efforts to fashion and help shape a globalization that conforms to the ethics and values that each institution was created to uphold [10].

Globalization also encompasses a host of interwoven processes including closer international ties by means of new communications technologies across the Internet that produces a rapid turnover of ideas, images, patterns, and objects of consumption; increased transnational movement of capital, goods, and people; a growing awareness of risks and dangers that threaten the world as a whole; and a quantitative increase in, and growth in importance of, transnational institutions and globally interlinked political movements. What is involved is the interpenetration of these processes both horizontally and vertically, and at national, subnational, and transnational levels [9].

According to Tetzlaff [9] and others, globalization is a complex multidimensional process of, on the one hand, de-bordering and de-spatialization, and, on the other, compaction and interlinkage. Tetzlaff believes that, in the current discourse about globalization, the term may signify any one of the following criteria:

- First, with globalization there is an attempt to convey the global scope of environmental risks that are not tied to the class or to the location (i.e., nation) in which they originate. This concept produces a worldwide bond between perpetrators and victims.
- Second, for some, globalization is taken to mean the expansionist takeover of the present-day developing countries by the Western economic system, that is, a system associated with the dissemination of a capitalist market-economy (capitalization) and with formal democracy (democratization). This dissemination can be perceived as either an opportunity or a curse.
- Third, globalization signifies the repercussive effect of this expansion by the industrial economies into the developing countries and of the latter's increasing integration into the world market and growing competitivity. This results in individual companies, sectors, and regions in the industrial countries being subjected to increased pressure to adjust, and, can lead to a globalization crisis.
- Fourth, although political and economic corruption has always been practiced, with the globalization of the economy and of systems of communication and transport comes the chance of an internationalization of negative effects such as unemployment, the feminization of poverty, crime, and drug-trafficking, that is, the globalization of crime [9].

Because the interwoven and interlinked processes of globalization encompass interpenetration both horizontally and vertically, and at national, subnational, and transnational levels, it is safe to speculate that all aspects of healthcare systems are affected and visa versa. Although coinage of the specific term "globalization" is new, the concept of transcultural influence through international contact is not. Frenk and Gomez-Dantes [11, p. 1] believe that what is new is "the pace, range, and depth of this shift of human affairs from the restricted frame of the nation-state to the vast global arena" [12]. They assert that this shift causes new challenges for health because all countries must now deal with the international transfer of risk through the microbial traffic of communicable diseases. Therefore, effective national policies must be coupled with global action. They believe that the globalization of health goes beyond diseases and risk factors to include healthcare and its inputs, the influence of the Internet on healthcare choice, and the growing commerce of healthcare services being sought by increasingly mobile healthcare consumers now referred to as "international health tourism" [11,12]. This international health tourism opens up new avenues for international collective action to develop policies for global standards for healthcare information, education, and service provision. These standards should include provisions for building the health capital of both providers and healthcare service consumers. To address these and other healthcare needs, the United Nations (UN) General Assembly Special Session created the Global AIDS (Acquired Immune Deficiency Syndrome) and Health Fund in June 2001 to raise funds and global awareness for the prevention and treatment of HIV (Human Immunodeficiency Virus)/AIDS and other devastating diseases. "This was

the first time in UN history that a session of the General Assembly was devoted to a health topic, thus underscoring the growing link between health, economic development, and global security" [11, p. 2; 12].

Previous to this, in 2000, the World Health Organization (WHO) performed a comparative analysis of the performance of all 191 healthcare systems of the world. This study was undertaken to understand the variations in outcomes among countries which seem to have the same resources and potential and to disseminate best practices to those whose key functions were at variance to group standards. "This report presented for the first time an index of national health systems' performance in trying to achieve three overall goals: good health, responsiveness to the expectations of the population, and fairness of financial contribution...while carrying out four vital functions: service provision, resource generation, financing, and stewardship" [13, p. xi]. It was the first time that policies were being enacted to address national and global healthcare needs and to contribute to the stability of healthcare systems as well as to evaluate the extent to which enacted policies met the ethical, professional, and economic concerns of healthcare practitioners—and the clients they served.

In addition, in March 2002, U.S. President George W. Bush called for "a new compact for global development, defined by new accountability for both rich and poor nations alike. Greater contributions from developed nations must be linked to greater responsibility from developing nations." The President pledged that the United States would lead by example and increase its core development assistance by 50 percent over the next three years, resulting in an annual increase of \$5 billion by fiscal year 2006. These funds would go into a new Millennium Challenge Account (MCA) "devoted to projects in nations that govern justly, invest in their people and encourage economic freedom." The MCA would "reward nations that root out corruption, respect human rights, and adhere to the rule of law . . . invest in better health care, better schools and broader immunization...[and] have more open markets and sustainable budget policies, nations where people can start and operate a small business without running the gauntlets of bureaucracy and bribery." President Bush believes that "We must tie greater aid to political and legal and economic reforms. And by insisting on reform, we do the work of compassion. The United States will lead by example." (President George W. Bush, Monterrey, Mexico, March 22, 2002) [14]. The following 16 indicators (with sources), chosen because of the relative quality and objectivity of their data, country coverage, public availability, and correlation with growth and poverty reduction, would be used to assess national performance relative to governing justly, investing in people, and encouraging economic freedom:

Governing Justly:

- Civil liberties (Freedom House)
- Political rights (Freedom House)
- Voice and accountability (World Bank Institute)
- Government effectiveness (World Bank Institute)

- Rule of law (World Bank Institute)
- Control of corruption (World Bank Institute)

Investing in People:

- Public primary education spending as percent of GDP (gross domestic product) (World Bank/national sources)
- Primary education completion rate (World Bank/national sources)
- Public expenditures on health as percent of GDP (World Bank/national sources)
- Immunization rates: DPT (diphtheria, pertussis and tetanus) and measles (World Bank/UN/national sources)

Promoting Economic Freedom:

- Country credit rating (Institutional Investor Magazine)
- Inflation (International Monetary Fund [IMF])
- Three-year budget deficit (IMF/national sources)
- Trade policy (Heritage Foundation)
- Regulatory quality (World Bank Institute)
- Days to start a business (World Bank) [14]

11.4 Sustainable Healthcare Related to Globalization

The WHO, the UN's specialized agency for health, was established in 1948. WHO's objective, as set out in its constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHO's constitution as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity [15]. It defines health systems as comprising all the organizations, institutions, and resources that are devoted to producing health actions. A health system needs staff, funds, information, supplies, transport, communications, and overall guidance and direction. And it needs to provide services that are responsive and financially fair, while treating people decently. WHO defines a health action as any effort, whether in personal healthcare, public health services, or through intersectoral initiatives, whose primary purpose is to improve health [13, p. xi]. WHO acknowledges that health is fundamentally different from other things that people want, and the difference is rooted in biology.

Health is a characteristic of an inalienable asset, and in this respect it somewhat resembles other forms of human capital, such as education, professional knowledge, or athletic skills. But it differs in crucial respects: it is subject to large and unpredictable risks, which are mostly independent of one another, and it cannot be accumulated as knowledge and skills. These features are enough to make health radically unlike all other assets which people insure against loss or damage [13, p. 4].

However, according to another perspective, good health is not just the absence of disease, but complete social and economic grounding. Unchecked diseases in the world threaten civil society and obstruct development. Therefore, a shift in economic thinking over the past few decades puts human capital, that is, health, educated workers, on a par with physical capital as a key determining factor in income production. Opportunity and security are the two keys to escape from poverty: education being key to wider opportunity and health being key to better security [5].

And though it would seem that a protocol created to treat a given disease in one society should therefore be applicable to treat the same disease in any other, this is not the case in reality. In reality, it is profoundly complicated by differences in social policy, political will, resource availability, government transparency, and social justice [16]. Globalization is not an end in itself, but an economic tool that can be adapted to lead people away from the margins and into the mainstream of health [17].

Globally, healthcare reform is a prevalent issue in all countries as delivery models, service standards, and quality of care continue to vary from country to country according to politico-legal, managerial, and financing structures. New financing structures are rapidly being put into place and include various public-private, private, and nonprofit/charitable arrangements to control costs that are outpacing realistic expense reimbursement. These changes in the global healthcare industry have occurred within the context of a new social order resulting in significant political, economic, and demographic pressures precipitating decentralized control, downsizing, consolidation, and competition based on the improvement of healthcare service standards [18]. However, to realize sustainable healthcare system improvement, the following areas were identified by Western donor organizations for future intervention activities:

- Healthcare financing
- Improving the continuum of care
- Improving quality of health services
- Mobilizing citizens and communities for better health
- Advancing public health [19]

In addition to these areas, another big challenge was in changing the way in which healthcare systems function based on the medical model. The medical model is not easy to change. It is hierarchical and based on the diagnosis and treatment of diseases in progress under the primary direction of the physician as chief provider of healthcare services and arbiter of the patient's progress along the continuum of care through the healthcare system. It creates interdisciplinary tension with other professional staff and, in particular, in relation to the allocation of economic resources for patient care. It is important to solve this by using an interdepartmental decision-making process that is incorporated in the Continuous

Quality Improvement (CQI) model. This shared governance model is now advocated in Western healthcare systems to bring into the care process the expertise of other healthcare practitioners, including nurses, patient advocacy groups, as well as the patient [20,21].

11.5 Healthcare Reform in the Information Age

Global healthcare system reform was intensified by what is known as the "Information Age," a term applied to the 1980s onward, where movement of information became faster than physical movement because of the use of the Internet. The Information Age also heralded the era where information was a scarce resource and its capture and distribution generated competitive advantage. But when information ceased being scarce, the Knowledge Economy commenced. It is estimated that the Knowledge Economy started around 1991. However, the new millennium has ushered in the current economic era, defined as the Intangible Economy, that incorporates four key resources of production from which economic activity and competitive advantage are primarily derived and delivered today. These resources include knowledge assets (what people know and put into use), collaboration assets (who people interact with to create value), engagement assets (the level of energy and commitment of people), and time quality (how quickly value is created) [22].

In other words, changes to the global healthcare industry were accomplished, in large part, through the growth of the role of the healthcare consumer and the part that information has fueled the health capital of this consumer to choose value in the healthcare services they need, that is, the use of their knowledge assets (what people know and put into use) [22]. In this Intangeble Economic Era, the Internet makes it possible for patients and practitioners to communicate globally on healthcare issues to build/fortify their health capital, that is, their personal production assets. However, Nash and Gremillion [23] believe that information technology and communication by way of the Internet is not only a competitive advantage of a healthcare organization, but also a fundamental commodity inherent in the delivery of their healthcare services. They also contend that the global interconnectedness of healthcare information and the healthcare consumer has the possibility of altering the provider—patient relationship by producing a more educated and involved consumer in their own care delivery decisions regarding wellness (optimizing their already good state of health), disease prevention, and medical treatments [23].

11.6 Public-Private Healthcare Partnerships

The consumer and the private sector have become major actors in global health policy because of a shift of emphasis from nation-based, health policymaking to a more universal strategy for healthcare structuring, financing, evidence-based health

management, and intersectoral and interdisciplinary participatory decision making and shared governance. Toward the end of the 20th century the UN increasingly collaborated with business. This was partly due to declining levels of development assistance by the participating countries of the Organization for Economic Cooperation and Development (OECD) to the UN and partly due to the fear that the UN would become marginalized if it did not increase its collaboration with the corporate sector, which had gained power in overall policymaking [24, p. 1].

Traditionally, promoting good health has been a major function of government. But the current emphasis on involving all sectors of a nation's economy in partnership has resulted in involving business more and more. According to the report, *The Business of Health—The Health of Business*, issued in Geneva in 2006 by the World Business Council for Sustainable Development (WBCSD) and the International Business Leaders Forum (IBLF), ill-health and disease impair business performance by hampering individuals, communities, and markets. Their report stated that in 2005, chronic diseases (i.e., heart disease, stroke, diabetes, and cancer) accounted for the deaths of 35 million people worldwide, and with 45 percent of these deaths occurring under the age of 70, thus directly impacting working populations [2].

According to the WBCSD–IBLF business scenario, health concerns burden corporate competitiveness through absenteeism, decreased productivity, and employee turnover. In developed, as in developing and transitional economies, employers often provide some percentage of health insurance. And, business activities in developing and transitional economies influence and include business's role in global health challenges. Businesses today rely more heavily on intellectual capital to confront technological advances, making the health of employees, on which creativity and innovation depend, critical for developing robust business organizations capable for long-term growth. For example, workplace interventions for chronic disease management in industrialized societies have proven effective at reducing associated costs, with an average return on investment of \$3 for each \$1 invested [2]. The WBCSD–IBLR offer a few general suggestions for effective health-related business interventions for sustainable development to show how companies can turn good health, previously viewed as simply a cost, into a business opportunity and competitive advantage:

- Be proactive: A positive preventive approach to health can help cut costs and avoid problems before they arise.
- Look for opportunities in the marketplace: By exploring the options for applying company expertise to health issues, many businesses can find commercial advantages.
- Adapt to local concerns: Specific industries, regional and cultural differences, and the varied health issues of target groups need tailored interventions.
- Impact the wider community: The health problems of a workforce are likely to reflect broad health concerns in the community, and internal approaches can be leveraged for wider community impact.

- - Work in partnership: Taking collaborative action and working with other companies as well as local authorities and civil society can help set standards and increase impact and influence. Collaboration can also help build local capacity.
 - Measure and evaluate: By measuring and evaluating programs, companies can raise awareness and further promote the case for increased corporate action on health [2].

11.7 Global Focus on Health

Eight Millenium Development Goals (MDGs), three of which are health-focused, were adopted by the UN General Assembly in the Millennium Declaration, that was signed by 189 countries, including 147 heads of state and government, in 2000 [25]. These MDGs are interrelated and represent a partnership between the developed countries and the developing countries to address various development issues ranging from halving extreme poverty, halting the spread of HIV/AIDS, and providing universal primary education, all by the target date of 2015 [26]. To track progress in achieving MDGs, international and national statistical experts selected relevant indicators to be used to assess progress over the period from 1990 to 2015 when targets are expected to be met [27]. The MDG goals with monitoring criteria are listed in Table 11.1 [27].

Although, at first glance at the MDGs listed in Table 11.1, there seem to be only three directly related health-focused goals (i.e., MDGs Nos 4, 5, and 6), it can be inferred that the promotion of healthy lifestyles is key to reaching most, if not all, of these goals. Methods of building the health capital of the population would include increasing women's and children's healthcare access and healthcare education, including family planning and improvement of nutritional status; increasing access to HIV/AIDS medications and disease prevention education; improving management of the environment to decrease mortality and morbidity through disease-free water supply; and increasing public knowledge for access to immunizations. These approaches would directly impact achieving the MDGs because a healthy population is best able to be educated to make informed lifestyle choices to improve their quality of life and their respective GDP and Gross National Product (GNP). These MDGs are achievable largely through a country's leadership in establishing healthrelated policies and legislation to effectively manage its healthcare system to ensure a health population. But this cannot be accomplished by dictatorial imposition of centrally controlled governments such as in the former Soviet Union [28]. It has been shown that more open, democratic, and market-focused economies are better able to implement effective and sustained general socioeconomic change. Recommendations on capacity-building by the Inter-Agency and Expert Group on Millennium Development Goals Indicators in October 2005 include that strategic national planning and development of reporting criteria for MDG statistics are

Table 11.1 United Nations Millenium Development Goals and Monitoring Criteria

UN MDGs	DGs
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress
Goal 1: Eradicate extreme poverty and hunger	
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day	 Proportion of population below \$1 purchasing power parity (PPP) per day Poverty gap ratio (incidence × depth of poverty) Share of poorest quintile in national consumption
Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	4. Prevalence of underweight children under five years of age 5. Proportion of population below minimum level of dietary energy consumption
Goal 2: Achieve universal primary education	
Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	6. Net enrolment ratio in primary education7. Proportion of pupils starting grade 1 who reach grade 58. Literacy rate of 15–24 year-olds
Goal 3: Promote gender equality and empower women	
Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	 9. Ratios of girls to boys in primary, secondary, and tertiary education 10. Ratio of literate women to men, 15–24 years old 11. Share of women in wage employment in the nonagricultural sector 12. Proportion of seats held by women in national parliament

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UN MDGs	DGs
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress
Goal 4: Reduce child mortality	
Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	13. Under-five mortality rate 14. Infant mortality rate 15. Proportion of one-year-old children immunized against measles
Goal 5: Improve maternal health	
Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	16. Maternal mortality ratio 17. Proportion of births attended by skilled health personnel
Goal 6: Combat HIV/AIDS, malaria, and other diseases	
Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	 18. HIV prevalence among pregnant women aged 15–24 years 19. Condom use rate of the contraceptive prevalence rate 19a. Condom use at last high-risk sex 19b. Percentage of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS 19c. Contraceptive prevalence rate 20. Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14 years

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	 21. Prevalence and death rates associated with malaria 22. Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures 23. Prevalence and death rates associated with tuberculosis 24. Proportion of tuberculosis cases detected and cured under directly observed treatment short course DOTS (internationally recommended TB control strategy)
Goal 7: Ensure environmental sustainability	
Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources	25. Proportion of land area covered by forest 26. Ratio of area protected to maintain biological diversity to surface area 27. Energy use (kg oil equivalent) per \$1 gross domestic product (GDP) in PPP 28. Carbon dioxide emissions per capita and consumption of ozone-depleting chlorofluorocarbons (CFCs) in ODP tons 29. Proportion of population using solid fuels
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	30. Proportion of population with sustainable access to an improved water source, urban and rural31. Proportion of population with access to improved sanitation, urban and rural
Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	32. Proportion of households with access to secure tenure

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UN MDGs	Gs
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress
Goal 8: Develop a global partnership for development	
Target 12: Develop further an open, rule-based, predictable, for nondiscriminatory trading and financial system. Includes a commitment to good governance, development, and poverty reduction both nationally and internationally Target 13: Address the special needs of the least developed countries Includes tariff and quota free access for the least developed countries exports, enhanced program of debt relief for heavily indebted poor countries (HIPC), and cancellation of official bilateral debt, and more generous ODA for countries committed to poverty reduction Target 14: Address the special needs of landlocked developing 36 countries and small island developing states (through the Program of Action for the Sustainable Development of Small Island Developing States and the outcome of the 22nd special session of the General Assembly) Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures to make debt sustainable in the long term	Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries, and small island developing states. Official development assistance (ODA) 33. Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors gross national income 34. Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary healthcare, nutrition, safe water, and sanitation) 35. Proportion of bilateral official development assistance of OECD/DAC donors that is untied 36. ODA received in landlocked developing countries as a proportion of their gross national incomes 37. ODA received in small island developing states as a proportion of their gross national incomes Market access 38. Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty

	39. Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries
	40. Agricultural support estimate for OECD countries as a percentage of their gross domestic product 41. Proportion of ODA provided to help build trade capacity
	Debt sustainability 42. Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)
	43. Debt relief committed under HIPC initiative44. Debt service as a percentage of exports of goods and services
Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth	45. Unemployment rate of young people aged 15–24 years, each sex and total
Target 17: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	46. Proportion of population with access to affordable essential drugs on a sustainable basis
Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	47. Telephone lines and cellular subscribers per 100 population 48. Personal computers in use per 100 population Internet users per 100 population

key to achieving MDGs. This entails having supporting legislation and governing arrangements for formulating a national statistical master plan which should be based on a country's needs and a mechanism to involve all stakeholders rather than be driven by international agencies' priorities [27].

In general, the MDGs have become an important mechanism for directing international attention toward a more focused and comprehensive socioeconomic development agenda. This agenda directs the international community to address socioeconomic development from a health policy issues and systems perspective with a new emphasis on health technological research and development funding from public–private funding partnerships [24]. According to Ollila [24], in 2002, the U.S. Agency for International Development (USAID) financed programs that now emphasize health-related issues related more to noncommunicable diseases and that mirror the MDGs. These programs emphasize the four Es: economics, effectiveness, efficiency, and evidence—the "new battle cries for the development community" (p. 3).

This new mission strategy of the U.S. Department of Defense and the USAID is to create a more secure, democratic, and prosperous world for the benefit of the American people and the international community ([24], p. 3).

One example of a USAID-sponsored, health-related program is the ACCESS program (Access to Clinical and Community Maternal, Neonatal and Women's Health Services) that aims to achieve sustainable improvements in maternal and newborn health and survival. ACCESS works with USAID missions, governments, NGOs, local communities, and partner agencies in developing countries to expand coverage, access, and use of cost-effective maternal and newborn health services through improving household health behaviors and practices. The program accomplishes this through

- Developing strategies and programs that integrate evidence-based maternal and newborn medical and nursing care into existing health delivery systems.
- Assisting in the development and implementation of policies designed to create an enabling environment to improve maternal and neonatal health.
- Bringing maternal and newborn health services closer to households and communities.
- Addressing operational barriers that prevent families from seeking care.

ACCESS improves health delivery by strengthening the healthcare facility, connecting the household to this facility, and mobilizing family and community members to make the links necessary to care for mothers and newborns. ACCESS seeks to draw national and international attention to the critical need for improving and investing in maternal and newborn healthcare. Other ACCESS maternal and child programs include Prevention of Postpartum Hemorrhage Initiative, Malaria in Pregnancy, Prevention of Mother-to-Child Transmission (PMTCT) of HIV/AIDS, and Prevention of Obstetric Fistula [29].

11.8 Human, Social, and Health Capital: Return on Investment

Human capital, defined in 1998 by the OECD as knowledge, skills, competences, and other attributes embodied in individuals that are relevant to economic activity, can be traced as a concept to the work of Theodore Schultz and Gary Becker in the 1960s [30].

According to Becker [31], all forms of capital (material wealth) are assets that yield income and other useful outputs to individuals or enterprises over long periods of time. But these tangible forms of capital are not the only forms of wealth. For example, education and expenditures on medical care are also capital because they raise earnings and improve health over much of a person's lifetime. Therefore, expenditures on education, training, and medical care are also investments in human capital. They are called human capital because people cannot be separated from their knowledge, skills, health, or values in the way they can be separated from their financial and physical assets [31].

We can see from Becker's, and from other economists' definitions, that health can be seen as a form of human capital because individuals are investing in themselves when staying in a healthy personal state. However, Grossman interjects the concept that health capital differs from other forms of human capital because while "a person's stock of knowledge affects his market and nonmarket productivity. .. his stock of health determines the total amount of time he can spend producing money earnings and commodities". In other words, he believes that "health can be viewed as a durable capital stock that produces an output of healthy time." He postulates that all individuals inherit an initial stock of health that depreciates over time and that death occurs when the stock falls below a certain level (not factoring in the part that accidents, risk behaviors, and disease have in this equation). However, he suggests that this depreciation in health stock can be lessened through investment in health and he believes that individuals choose their length of life by not investing in health through their choice of lifestyle and behavior. Therefore, he poses the concept that although consumers produce commodities with inputs of market goods, they do so with this amount of their own time that good health produces. Therefore, consumers demand good health to produce these money earnings, buy consumer goods, or invest in education/training as additions to their knowledge. But, according to Grossman in this model, the level of health of an individual depends in part on the resources allocated to its production. He believes that health is demanded by consumers for two reasons: as a consumption commodity influencing their preference function and as an investment commodity that determines the total amount of time available for market and nonmarket activities. In other words, an increase in the stock of health reduces the time lost from these activities (i.e., sick days are a source of disutility), and the monetary value of this reduction is an index of the return to an investment in health.

Social capital, on the other hand, is harder to clearly define. It is generally understood as a matter of relationships, as a property of groups rather than the property of individuals, and is used to explain a wide range of social phenomena, including general economic performance, levels of crime and disorder, immigrant employment, and health trends. It deals with relationships and norms that shape the quality and quantity of social connectedness within a society. Increasing evidence shows that social cohesion is critical for societies to thrive and be sustainable. Social capital is measured by things like engagement with religious bodies, clubs, community organizations, and work-related organizations like unions and professional societies. Therefore, it follows that the health, including mental health, of communities can benefit from the nurturing of social capital [32].

The relationship between social capital and health has been documented since 1901 when Emile Durkheim identified a relationship between the suicide rates and the level of social integration. Since then, research has continued to demonstrate that higher social capital and social cohesion, through shared values and norms, leads to improvements in health conditions [33]. According to the World Bank, social capital can impact health and nutrition through a variety of methods. Trust combined with formal and informal social networks help people to

- Access health education and information
- Design better healthcare delivery systems
- Act collectively to build and improve infrastructure
- Advance prevention efforts
- Address cultural norms which may be detrimental to health [33]

But, there is a growing understanding that these three economic-based concepts are closely interrelated, that is, human capital, social capital, and health capital. And that these concepts are mutually related to sustainable global socioeconomic development. However, for this discussion, human and social capital depend on the building of health capital within a nation's population.

A simple way of summarizing these economic paradigms is as follows. Human and health capital focus on the economic behavior of individuals, especially on the way their accumulation of knowledge, skills, and health enables them to increase their productivity and their earnings—and in so doing, to increase the productivity and wealth of the societies they live in. The underlying implication of these perspectives is that investment in knowledge, skills, and health brings an economic return on investment (ROI) both individually and collectively. In an economic context, the inclusion of social capital draws attention to the obvious but often under-regarded fact that individuals and their human and health capital are not discrete entities that exist separately from the rest of the organization, or from other social units. The acquisition, deployment, and effectiveness of skills depend crucially on the values and behavior norms within which these skills are expected to operate. Social capital focuses on social networks and relationships and the norms that govern these relationships,

implying that trusting relationships are good for social cohesion and economic progress [30]. The following table provides a framework for considering the relationship between human, social, and health capital and their ROI to individuals and society (see Table 11.2) [30].

According to Schuller [30], an important issue is the relationship between the different forms of capital, that is, how far are they convertible one into another and how does growth in one have an impact on the others. This is a crucial issue in the debate on sustainable economic development: how can current well-being be achieved or enhanced without prejudice to the well-being of future generations, raising questions about the relationship between stocks of natural capital and other forms of capital [30].

Health capital is an integral part, influential factor, and central to sustainable socioeconomic reform and development efforts. In the context of health, the private ROI in human health capital comes from the value individuals enjoy from additional years of healthy life. Some individuals will choose to devote some of these additional healthy years to market activities that increase their earning power and their output, that is, their GDP. Others will devote these additional healthy years to nonmarket activities such as raising children, caring for older relatives, personal development through hobbies, travel, or attending university courses, or changing careers. And, the public return, that is, output from private investment in improved health status, should also reduce the costs of future social interventions (e.g., the tangible and intangible social costs associated with premature unemployment or the need for extended healthcare services because of increased morbidity or premature mortality), thus contributing to a sustainable GNP [7]. Of course, all the above would depend on the type and quality of healthcare information one is able to access to build individual health capital.

Along with defining sustainability related to health projects, it is also necessary to formulate sustainability criteria to monitor and evaluate health projects. Blanchet and Yourkavitch [34] advocate that new strategies for capacity-building and partnerships. They believe that sustainability evaluation is essential to component of project management. This evaluation strategy would include specific and measurable indicators for the purpose of providing a long-term vision as well as milestones for the evaluator and decision makers from a holistic perspective where sustainability is viewed—reflective of the diversity of values, beliefs, paradigms, and perceptions existing in societies. This holistic paradigm would try to understand the health system environment as a whole within the national environment within the global environment where each of its elements interacts with many elements in complex relationships (much like an open systems approach). It would be seen as undergoing a dynamic and active process, within and between systems, to adapt to uncertainties and unpredictable events. The health system would be defined as a multidimensional concept encompassing a wide range of areas such as the continuity of health benefits, the survival of the institutions, the institutionalization of activities, the organizational capacities of institutions, and competent communities. This would

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Return on investment/ Direct: income outcomes and productivit Indirect: health civic activity	Direct: income and productivity Indirect: health, civic activity	Social cohesion Economic achievement More social capital	Individual and population health Building of human capital through education/training Individual and national productivity/ achievement leading to social cohesion and political stability influencing business investment
Model	Linear	Interactive/circular	Interactive/circular

make sustainability a dynamic process requiring continuous efforts to achieve—much like using a CQI model. They advocate the use of the Child Survival Sustainability Assessment framework (CSSA) set up by the USAID's Child Survival Technical Support project that was implemented and tested in Madagascar by the Adventist Development and Relief Association. It uses a limited number of qualitative and quantitative indicators that are understandable by all stakeholder and are uncomplicated and easily monitored [35].

Globalization and sustainable socioeconomic development require an integrated view of the world and multidimensional indicators that show links between a community's economy, environment, and society. For example, the GDP is a traditional indicator to measure the amount of money being spent in a country and a measure of the country's economic well-being. However, because GDP reflects only the amount of economic activity, regardless of the effect of that activity on the community's social, economic, and environmental health, GDP can go up when overall community health goes down [36]. In contrast, a comparable sustainability indicator is the Index of Sustainable Economic Welfare (ISEW) that takes into account the links between environment, economy, and society. For example, the ISEW subtracts from the GDP corrections for harmful bases or consequences of economic activity and adds to the GDP corrections for significant activities such as unpaid domestic labor, effects of air pollution, or money spent on medical fees, and so on. Using such an indicator can be useful to different communities to deal with health issues according to their specific social, economic, and environmental concerns [36].

11.9 Conclusion

According to the WHO, national Ministries of Health (MoH), governmental healthcare agencies, donor and business organizations, civil society groups, religious organizations, and local communities, better health is central to human happiness and well-being. It also makes an important contribution to economic progress, as healthy populations live longer, are more productive, and save more to sustain their present quality of life and future economic security. However, there are many factors and complex intersectoral links that influence health program implementation and management and impact a country's ability to provide quality health services for its people and achieving the MDGs. In particular, it is important to build leadership support across government levels for investment in health, and to ensure that health is prioritized within local and national economic development plans to reach these UN-set MDGs. In addition, donors need to provide aid that is effectively targeted to priority national health problems and goals. This is particularly important in the health sector because there are many different kinds of donors/development partners active in the health sector—all with different approaches and priorities. To improve the effectiveness of donor aid for health, the WHO initiated the following strategies:

- Sectorwide Approaches (SWAps): In a SWAp, donors and governments work together to agree on a single health strategy and a framework for implementing activities and monitoring progress. In some cases, this is extended to a single financing framework, with donors pooling their aid funds and providing them directly to governments.
- Global Health Partnerships (GHPs): The GHPs work to provide significant new financing for health-related projects and raise the profile of their target diseases at the highest political levels. They have funded global health initiatives such as The Global Fund to Fight AIDS, Tuberculosis and Malaria, The Global Alliance for Vaccines and Immunization, and The President's Emergency Plan for AIDS Relief (PEPFAR). However, the proliferation of GHPs has created or exacerbated problems such as poor coordination and duplication of programs by different donors, a high administrative burden on governments from having to deal with multiple initiatives, and lack of alignment with country systems. To address this need for more coordination, WHO has been working to develop a set of best practice principles, which are discussed directly with the GHPs [37].

According to WHO, a good health system improves people's lives tangibly every day. "The ultimate responsibility for the overall performance of a country's health system lies with government, but good stewardship by regions, municipalities and individual health institutions is also vital. Strengthening health systems and making them more equitable have been recognized as key strategies for fighting poverty and fostering development" [38]. But Balia and Jones [39] believe that inequality in health stems from evidence that substantial differences in health exist across individuals because of lifestyle differences, education, and the rate at which individuals discount the future when making health-related decisions. However, incomplete or incorrect information may influence this decision process. The aforementioned variables influencing "free choice" explain the variation in the distribution of health in a national population and between national populations. And free choice to make health-related decisions is influenced by constraints placed on them by political, economic, environmental, and social circumstances. Therefore, Balia and Jones believe that individual health decisions reflect both the constraints of personal circumstances and the consumption preferences [39].

In addition, national healthcare priorities might differ from global priorities because of national sovereignty or empowerment issues, resistance to reform and improvement because of fear of change, or an inherent system of corruption [28]. Migration of healthcare workers also needs to be addressed in relation to the brain drain of the health capital of healthcare workers. Because of this dynamic economic migration, international partnerships might have difficulty in synchronizing efforts within countries focused on developing their national healthcare systems. Local and international stakeholders will then have different and possible conflicting mandates, goals, and roles causing nonalignment with global MDGs. In addition, the inclusion

of the private sector within this public-private partnership might weaken the role (i.e., firewalls) of the public sector in setting policies, monitoring healthcare standards, and regulating normative behavior, increasing access to care, and financing healthcare reimbursement. These, as well as legal issues of intellectual property rights, profits, corruption when dealing with entrenched bureaucratic agencies regarding the development and implementation of policies and legislation, and procurement and distribution of supplies, materials, and pharmaceuticals, have many questions to various stakeholder arrangements [24, p. 3]. However, one of the many important qualities that the private sector has to contribute to the publicprivate partnership is that people in business have to confront market tests that include consumer preferences, choice, and satisfaction, whereas public servants are not subjected to such tests of performance. Therefore, according to UN MDG mandates, unless nations build human capital within their populations—with an emphasis on health capital—these MDG health challenges will not be met. Where such programs are driven by the private sector, they have worked. But there is a need for accurate information to indicate trends to measure efficient approaches for solutions to unmet medical needs [17].

In general, many of the following elements were incorporated into healthcare system restructuring programs for the nations of the former Soviet Union during their transition to market economies. These actions might also help achieve the global health goals:

- Strengthening capacity of the role of governmental and quasi-governmental institutions, particularly with respect to the new functions of the MoH and healthcare services reimbursement system (Health Insurance Funds). Changes in this sphere involved not only decentralization but also separating the payer and provider roles so that the same government agency no longer had a monopoly on both payment and provision of services.
- Promoting the concepts of "money follows the patient" and "patient choice," that is, payment based on patient choosing healthcare provider based on patient satisfaction for the quality of healthcare services received.
- Promoting new forms of provider payment with establishment of performance-based incentives (a "pay for performance" ethic).
- Restructuring and downsizing healthcare delivery systems—from polyclinics (hospitals) and specialization to primary care physician management.
- Introduction of management systems utilizing information technology, where feasible, for financial management (planning, control, accountability), human resources (building human capacity through building health capital), clinical care (professional and organizational development), and quality improvement (efficiency and effectiveness of healthcare services).
- Supporting the privatization of state-owned healthcare facilities, entrepreneurial initiatives in establishing healthcare service agencies and private physician and dental practices, NGOs, and professional associations.

■ Encouraging democratization and transparency of the healthcare system including the education of the consumer about their role within the healthcare system [20; 40; 41, p. 2].

However, when there were investigations into why economic restructuring attempts were not successful in post-Soviet healthcare systems, it was found that there was a high and pervasive level of socialized corruption preventing new leadership from setting an example. In 1997, the World Bank defined corruption as the abuse of public office for private gain that can take place in state, private, and quasi-private activities and classified it into four main types including bribes, theft, bureaucratic corruption, and misinformation. At least, within the context of the post-Soviet nations, it was found by Western donor organizations such as, WHO, World Bank, and USAID, that it was very difficult, if not impossible, to carry out economic, social, political, legal, and ethical reforms in an environment of corruption that encouraged unmonitored and unaccountable operational practices and an ingrained wariness and paranoia of the West [28].

Then, as now, change requires political will at the national level and determined leadership at the local (community) level to develop and implement change strategies. All parties involved in this effort would have to assume the responsibility to make changes work. Ideally, these restructuring strategies would charge leadership directly to government reforms with accountability to realizable goals set by stakeholders within a specific and workable timeframe. This means that within a more democratic environment, goals should include interdisciplinary communication with external donor organizations, NGOs, local and national governments, healthcare providers, as well as the community, to identify and correct system inefficiencies, enhance productivity, apply technology to government operations, and finance and procure cost-effective resources and service contracts. Thus, corruption is a major constraint to socioeconomic reform efforts. Corruption is still endemic in many parts of the globe and there still is an ingrained distrust of Western economic methods by nondemocratic, socialist/communist governments. It is, and will continue to be, a primary factor impeding healthcare system reform efforts for meeting global MDGs [42-47].

According to Becker [48], the growth in per capita incomes of many countries during the 19th and 20th centuries is partly due to the expansion of scientific and technical knowledge that raises the productivity of labor and other inputs in production. These new technological advances clearly are of little value to countries that have very few skilled workers who know how to use them, or are healthy enough to use them. Although economic growth closely depends on the synergies between new knowledge and human capital as well as the influence of government policies, sustainable socioeconomic development depends on a healthy, educable population and governments working in a socially responsible manner toward their populations and the international community at large. In addition,

health system reform largely depends on governance reform held to international accountability standards. However, these standards are increasingly being set through a new accountability agenda by public–private, national, or transnational partnerships. These partnerships are formulating new accountability models within an increasingly nebulous borderland.

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Chapter 12

Implementation of a Hospital Information System in Lithuania: Implications for the Role of Nursing

Patricia A. Cholewka

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12.1 Introduction

The process of reorganizing and improving the Lithuanian healthcare system began before it declared its independence from the Soviet Union and continues to this day, even after its accession into the European Union (EU) in 2004. To restructure national organizations, and remain viable within these new constraints, Lithuanian healthcare system administrators soon realized the need to utilize more effective management methods. One of the priorities of this reorganization effort was the improvement of the knowledge base and consultation ability of physicians in the diagnosis and treatment of medical–surgical conditions at Kaunas Medical University Hospital (KMUH), a large urban hospital in Kaunas, Lithuania, where most of the nation's medical and nursing practitioners are educated. The purpose of a recent local healthcare information technology (IT) initiative, known as the Litmed project, was to improve the quality of medical education, diagnosis, and treatment across distance, beyond the academic or hospital setting.

12.2 Background: Country and Healthcare Sector

Lithuania is the southernmost and largest of the Baltic countries. It covers 65,000 square kilometers and has a population of about 3.7 million. After severe social and economic shocks in the initial years after independence, the economy stabilized and growth began in 1995. After independence and during economic transition, aggregate health indicators for mortality and morbidity further deteriorated in comparison to its period under Soviet occupation. Lithuania was incorporated into the EU in 2004. However, even after accession, there is still a gap in health status compared to EU countries because of the fact that the Lithuanian health system suffers from problems similar to other countries in the post-Soviet regions that include excess hospital capacity, weak primary healthcare, overreliance on hospital inpatient treatment, outmoded equipment, inefficient purchasing practices, high level of corruption, and inefficient use of facilities and economic resources [1]. Growth in the country's Gross Domestic Product (GDP) has averaged over 7.5 percent since 2001, making it one of the fastest growing economies in Europe during this period [2]. Since independence, Lithuania borrowed a total of \$480 million for 17 operations to support structural reforms, reduce pollution in the Baltic Sea, and modernize their health, education, and infrastructure sectors. And, as of September 2007, Lithuania graduated from World Bank borrowing making future cooperation with the World Bank based on knowledge sharing and partnership [3].

Overall, healthcare reform in most countries of the former Soviet Union is still slow and fragmented. The nations of the former Soviet Union operated within the first decade of their independence with inherited Soviet-style healthcare systems. With a history of politically oppressed societies that stifled entrepreneurial thinking, inexperienced healthcare managers were unprepared for changing social welfare systems once centrally controlled. Their healthcare systems, judged by Western healthcare management models, were incapable of addressing patient care standards that were being implemented within consumer-driven environments of more established democratic countries. They were burdened by a lack of advanced medical technology, outdated clinical practice standards and administrative protocols, a lack of comparable academic knowledge and unbiased research base, and a static healthcare culture focused on therapeutics (based on institutionalization and specialization) instead of disease prevention [4]. Lack of the development of a national communication system, because of centralized political control, had also impeded individual access to immediate healthcare services and communication by practitioners to external sources outside the Soviet Union for current research-based practice.

Along with these post-independence challenges came new opportunities for improving diagnostic and treatment modalities to enhance the quality of health services, professional education, and system organization and management. The building of strong managerial capacity was needed to gather, interpret, and use information to focus performance and achievements to policy goals. A more open management style encompassing decentralization, delegation, and communication was also advocated. A 1999 World Bank initiative for Lithuanian healthcare system reorganization focused on improving activities that supported a costeffective, and financially viable, human development program, to help reestablish public medical services and a practice-based primary healthcare system. The objectives of this program would be to (1) support health reform activities for the development and allocation of regional resources, adequate investment funding, and provider reimbursement and contracting. A needs assessment would be undertaken regarding service planning, the development of a clinical protocol, and the restructuring of healthcare services; (2) strengthen the national health institutions' capacity through technical assistance provision, and training in management, cost-effective healthcare information, and matters of public health policy; (3) develop health information systems to support business practices; (4) restructure regional public health services to include health promotion, disease prevention, as well as improved hospital and ambulance services, for example, hospital conversions into long-term nursing care facilities; and (5) strengthen the Ministry of Health management capacity to effectively perform monitoring and administration functions [5].

At present, most physician managers are more interested in acquiring new computer-based technology and increasing remuneration from their independent primary care practices instead of changing system flaws, that is, high level of corruption, entrenched bureaucracy, distrust of outside influence on healthcare system management, and a disregard for patient input regarding the determination of their own care [4]. The country also needs to push ahead with efforts to foster the creation of a knowledge economy as a way of increasing Lithuania's global competitiveness [2].

The implementation and use of IT in healthcare systems warrants the involvement of all practitioners, including nurses. Nursing acceptance is a key determinant to a successful healthcare IT implementation because nurses are the largest group of stakeholders, that is, the majority of end users of such a system, and "they have always had a major communication role at the interface between the patient/client and the health system" [6]. However, in most of the nations of the former Soviet Union, nursing education is not keeping pace with the need for IT use in healthcare, especially focused on its use by and for nurses. Basic nursing education is still being developed to conform to EU standards. Although capacity building of healthcare personnel is being undertaken through the dissemination of information by means of conferences, presentations, training programs, meetings, Internet access, and educational exchange programs, the involvement of nurses in IT system development is still far less than that of physicians. The development of modern nursing practice is still very much controlled by physicians focusing on the medical model of care, and therefore, nurses are not able to acquire the education, current knowledge, professional autonomy and self-regulation, decision-making ability in patient care, or resources necessary to develop a distinct nursing practice in accordance with Western practice standards. Consequently, the application and use of IT within nursing practice is hampered due to the lack of hands-on development of a system that is responsive to their use. And this, in turn, impacts on the application of IT to the nursing care of the patient within the clinical environment, funding nursing materials and services at the patient care level, and professional development for performance improvement.

12.3 Health System Management: Paradigm Shift

According to the World Health Organization (WHO), post-Soviet transitional economies still have inadequate information management systems in place for financial and management accountability, monitoring, and evaluation of national and local system operations [7]. However, an evolving paradigm shift is occurring within the healthcare sector throughout the world from an obsession with curing diseases to an interest in prevention, from problem identification toward outcomespecification to systems designed for patients rather than physicians, from isolation to networking, from the bottom line and profit to community good, and from

competition to collaboration [4]. In tandem with these concerns, is the major focus of the WHO for restructuring post-Soviet healthcare systems for sustainable development that directs the reorganization of medical care toward health and wellness promotion, disease management, and primary healthcare through the application of eHealth strategies. The WHO defines eHealth as "the use, in the health sector, of digital data—transmitted, stored and retrieved electronically—in support of health care, both at the local site and at a distance" [8]. Richardson [9] expands this definition by implying that eHealth is "not only the application of new technologies, but also a fundamental rethinking of healthcare processes based on using electronic communication and computer-based support at all levels and for all functions both within the healthcare service itself and in its dealings with outside suppliers." (p. 1). By definition, this eHealth strategy would most likely have to incorporate community participation and intersectoral cooperation and involve four categories: clinical application (telemedicine), healthcare professional continuing education, public health information and education for patient empowerment, and public health policy development [9].

12.4 Sustainability of Healthcare Systems

More studies are being undertaken regarding the improvement of healthcare systems because of the increased global awareness that health has on socioeconomic development. An executive summary produced by PricewaterhouseCoopers [10] identified seven features that they determined were critical in creating sustainable health systems, managing costs, and providing equitable access to quality healthcare (see Figure 12.1). They are listed as follows:

- 1. Quest for common ground: A vision and strategy to balance public versus private interests in building an infrastructure and providing basic health benefits within the context of societal priorities.
- A digital backbone: The use of technology and interoperable electronic networks to accelerate integration, standardization, and knowledge transfer of administrative and clinical information.
- 3. Incentive realignment: An incentive system to ensure and manage access to care while supporting accountability and responsibility for healthcare decisions.
- 4. Quality and safety standardization: Defined and enforced clinical standards to establish mechanisms for accountability and enhance transparency, thereby building consumer trust.
- Strategic resource development: An appropriate resource allocation method to satisfy competing demands on systems to control costs while providing sufficient access to care for the most people.
- 6. Climate of innovation: Environment that fosters innovation, technology, and process changes to continuously improve treatment, efficiency, and outcomes.

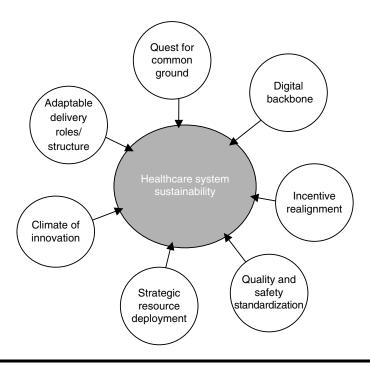


Figure 12.1 Seven features of sustainable healthcare systems. (From PricewaterhouseCoopers, *HealthCast 2020: Creating a Sustainable Future*, Pricewaterhouse-Coopers' Health Research Institute, 2005.)

Adaptable delivery roles and structures: Flexible care settings and expanded clinical roles to provide avenues for care that are centered on the needs of the patient.

12.5 Information Technology Applied to Healthcare System Management

In some cases, sustainability efforts can be eased through government decentralization of control of the functions of the healthcare facility to allow greater efficiency of operations at the organizational level. By controlling finance, personnel, and operations locally, facility managers can react faster to environmental changes and make decisions that are advantageous to the organization and population disease management. To evaluate the outcomes of operational management decisions, it is essential to establish management information systems that will require investment from various sources including the state, private business, and other investors. Information technology applied to healthcare services is seen as the means to improve the

safety and quality of healthcare services. eHealth, directed to healthcare delivery, encompasses applications that directly support the prevention of illness and disease, patient diagnosis, and patient care management. These applications include tele-consultations, tele-referrals, forward storage concepts, for example, tele-radiology and tele-prescriptions, and electronic patient records [8]. eHealth becomes the means to transform healthcare services by linking the many sources of data held by multiple healthcare organizations to provide a comprehensive health record with universal standards for content, security, and portability. This concept mirrors the national Regional Health Information Organizations (RHIO) initiative that is being undertaken in the United States.

The use of eHealth strategies complements the WHO main focus on primary healthcare. eHealth applications connect practitioners and clients to primary health centers and connect these centers to referral centers in hospitals for the exchange of data, ensuring access to appropriate, cost-effective healthcare [8]. For example, teleconsultations using tele-radiology connect the isolated practitioner or community health worker with an appropriate hospital-based specialist for the exchange of digitalized X-ray images, and bring the diagnosis to the primary healthcare level. It is hoped that these tele-consultations will reduce the need for patients to attend hospitals, saving time and money throughout the healthcare system. Hospitals can then focus their resources on patients who need more intense acute care services.

12.6 Information Technology eHealth Strategies

In the area of public health, the EU's principal objectives are to

- Promote a healthy lifestyle
- Prevent terminal illnesses such as AIDS and cancer
- Improve public health by combating diseases connected to infections, accidents, doping, and (rare) hereditary diseases
- Monitor and analyze improvements in public health in EU member states,
- Guarantee economic support for high-quality healthcare for the elderly
- Improve (access to) information [11]

However, the EU's central objectives for economic growth and better jobs are driving this eHealth focus, especially in the wake of the incorporation of new member states of the former Soviet Union. To reach these objectives, the EU eHealth strategy, proposed in May 2002, describes the application of Information and Communication Technologies (ICTs) across the full range of functions that affect the health sector. This eHealth action plan has a dual approach: (1) to make the most of new information and communication technologies in the health sector and (2) to obtain a better integration of eHealth policies and activities. It is hoped that this approach will provide a framework for exchanging best practices and

experience and enable the eventual development of common solutions to shared problems through the dissemination of health information and data [12].

The European Commission (EC) has supported research and development into eHealth since the second Framework Programme Report (1989–1990). This report, issued at the Employment, Social Policy, Health and Consumer Affairs (EPSCO) Health Council in June 2004, comprised the EC's eHealth action plan for Europe 2004–2010. This action plan included a sequential set of actions to be taken by EU member states and the EC from 2004 through 2010 in three targeted areas:

- 1. Common challenges including setting national roadmaps for eHealth, deploying eHealth systems, and health information networks (broadband, wireless, grids); setting targets for interoperability and the use of electronic health records; and clarification of legal framework.
- 2. Pilot actions accelerating implementation of, for example, tele-consultation, e-presciption, e-referral, tele-monitoring, and tele-care.
- 3. Evaluation, confirmation of benefits, and dissemination of best practices [12].

The main objectives of the action plan were to improve access and boost quality and effectiveness of eHealth services offered in Europe and enhance the European eHealth industry by making eHealth systems and services more interoperable and integrated. EU countries planned to assign 4–6 percent of their healthcare budgets to IT needs—especially, orienting them to patient-centered research and innovation projects [13].

Targeted dates for EU member states listed in the eHealth action plan included the following:

- Developing a roadmap for eHealth by the end of 2005
- Setting up a EU public health portal by the end of 2005
- Identifying a common approach to patient identifying data by the end of 2006
- Identifying interoperability standards for health data by the end of 2006
- Supporting the deployment of health information networks based on fixed and wireless broadband and mobile infrastructures and grid technologies by 2008
- Providing online services such as tele-consultation (second medical opinion), e-prescription, e-referral, tele-monitoring, and tele-care by the end of 2008 [14]

At present, a public health portal has been set up to complement the existing EC public health Web site [12]. This portal is intended to help build health capacity by providing citizens, patients, health professionals, policymakers, and other interested stakeholders with a single, pan-European access point for data and information on public health-related areas from various community, regional, and national Web sites. The ultimate outcomes of this eHealth strategy were planned to be the measurement of better access to healthcare; more efficient, cohesive services; improved productivity of the healthcare sector; more common usage of eHealth

technology by health professionals, patients/clients, and citizens; more adequately resourced budgets; an increased competitiveness within the healthcare industry; and the generation of jobs within the EU. The EU eHealth policy priorities included the following:

- Building on the European health insurance card with added functionalities such as medical emergency data and secure access to personal health information
- Developing health information networks to speed the flow of health information through the healthcare system
- Putting health services online such as information on healthy living and illness prevention, electronic health records, tele-consultation, and e-reimbursement [15]

As a means to meeting these EU eHealth policy objectives for promoting the dissemination of scientific, educational, environmental, and business information, Estonia, Latvia, and Lithuania were incorporated into the European Information Society Technologies (IST). It was also hoped that as a result of this project the market potential for IST telematics applications and products would progress significantly in both EU and Baltic States' markets [15].

12.7 eHealth Objectives and Lithuania

Lithuania focused on EU eHealth objectives by implementing a tele-radiology project called the Litmed IT project in KMUH. The scope of the Litmed IT project was to cover the concept of eHealth as defined in the context of eEurope, that is, the application of information and communications technologies across the whole range of functions and services which affect the health of citizens, specifically the following:

- Delivery of care to patients by healthcare professionals
- Health-related information
- Electronic trading of healthcare goods, for example, tele-radiology for diagnostic purposes [16, p. 3].

Within this framework, EU member states establish contacts with newly accessed healthcare entities, in this case, Sweden, with clinics for specific specialties in Lithuania and the other Baltic States, for the continuous development of information content and usability of shared medical information databases [17]. It was hoped that interoperability between information systems would be established to reduce costs and increase unimpeded access to quality, cross-border healthcare because EU expansion is promoting increased mobility of its citizens [16, p.7]. According to the

eHealth Standardization Focus Group [16], top priorities for the application of IT to health identified from national strategies and policies appear to be as follows:

- Building health/patient records, including the medication record
- Transferring of prescriptions
- Communicating between hospitals and primary care particularly results requests and reports and referrals
- Protecting personal information, for example, using public key infrastructure and professional data cards
- Reducing clinical errors, for example, through the use of e-prescribing systems with decision support [16, p. 9]

It was expected that this Litmed IT project would provide a model for continuation of national healthcare system restructuring and primary healthcare development programs. The objective was to improve access and quality of the primary healthcare system through investments in infrastructure, equipment, and training of practitioners (primary healthcare system gatekeepers) and auxiliary healthcare staff. In addition, it would strengthen the capacity of the Lithuanian Ministry of Health to effectively manage project activities, monitor implementation progress, achieve development objectives, and administer procurement and loan expenditures. This strategy was expected to establish conditions for the continued restructuring of healthcare services on a sustainable national level [1].

12.8 Goals of Litmed IT Project

In line with the Europe eHealth strategy, the short-range goals of the Litmed IT project included the following:

- Installing medical imaging equipment for use by various medical specialties.
- Creating capacity for database storage of medical image information.
- Creating the ability for physicians to edit information relating to diagnosis during the project.
- Publishing distance learning/education courses with assistance from Euromed Networks AB.
- Assisting the Baltic States in the development of Internet-based medical education and medical reference databases to increase specialist competence.
- Computerizing the Pathology department laboratory system to assist with the management of procedure/test ordering, analysis, and compiling statistics for diagnostic, treatment, and reporting purposes. It is hoped that this improved clinical practice and communication capability will stimulate professional academic exchanges, demonstrations, and seminars between the Scandinavian and the Baltic States [18].

The long-range goals of the Litmed IT project included the following:

- Enhancing the understanding on how healthcare in the Baltic Sea region can be supported by telemedicine.
- Developing general methods and infrastructure for telemedicine in this region.
- Developing specific telemedicine services.
- Forming a support organization for telemedicine development in this region.

Development of telemedicine services in Lithuania has great importance for the Lithuanian healthcare system. The use of distance training and consultation, using modern telemedicine techniques, would provide professional exchanges between clinical experts for clinical decision-support services to Lithuanian and other post-Soviet practitioners for reducing preventable disease, improving quality of healthcare, and increasing professional expertise (through clinical decision support) of practitioners. Along with support of clinical processes using telemedicine, and specifically, using tele-radiology, it was hoped that this cooperation between Swedish and Baltic pathologists would generate business opportunities for pathologists in the Baltic region with Swedish suppliers of medical information technology services. Collaboration between Swedish and Baltic pathologists would also facilitate building a regional pathology network and encourage study tours, seminars, and other practitioner health capital building activities.

12.9 Litmed Project Benefits to Stakeholders

"All who are, or may be, affected by a healthcare information IT resource (application) are considered 'stakeholders' in it since each has a unique interest and perspective of what constitutes benefit" [19, p. 285]. Stakeholders in this Litmed project included the Swedish government, Stockholm County Council, Skane Region, Uppsala University, Lund University Hospital, TietoEnator Trigon AB, and Informationslogik AB (project management); Euromed Networks AB, Sweden, and Siemens Solutions Medical, Germany (hardware and software developers); Lithuanian Ministry of Health, KMUH executive management, IT Department, Pathology Department, physician pathology specialists; Lithuanian and Swedish patient populations as well as Lithuanian and Swedish IT technologists and support personnel [20]. However, the primary users of the system were designated as physician pathologists, specifically, ophthalmologists and otorhinolaryngologists from Lithuania at KMUH and their respective colleagues in Sweden at Lund University Hospital. They receive IT technical support at both institutions [17]. Specific areas of common clinical interest to be addressed would be distance education, shared research and technical evaluation, handling of medical referrals and consultations, developing procedures for routine testing and analysis of results, and compiling statistics for follow-up care [21].

Physician stakeholders would be able to improve the quality of their medical education, diagnosis, and treatment abilities across distance through tele-consulting. They would also be able to give better and more effective treatments because the information stored in databases could be used for education, clinical consultations, research and development, reference, physician accountability, and quality assurance purposes. The overall goal, other than a successful completion of this pilot project, was to further IT business opportunities between Sweden, Lithuania, and the other Baltic States for eventual IT program expansion to other post-Soviet countries [17].

12.10 Project Team and Skill Sets/Characteristics of Members

An IT laboratory center had already been established in Kaunas where Swedish IT technology was installed and personnel trained through before Baltic Billion Funds projects. This laboratory provides the conditions necessary for Swedish suppliers of healthcare IT services to make use of KMUH for study tours, demonstrations, seminars, new business ventures, as well as to facilitate this project.

The project team was broad-based, interdisciplinary (according to medical specialty) with members from all segments of the healthcare spectrum. They worked together, under the direction of a project management team, to articulate the needs of system users, functionality of the system, standards of use, and to monitor implementation funding [17]. It did not appear, from available information, that issues related to organizational change, that is, change affecting organizational culture and hospitalwide routine business practices, were discussed.

However, the following is a listing of the tele-radiology system's basic functionality features determined by practitioner stakeholders:

- Selection of images
- Scanning of images from selected specialties
- Installation of images and registration of diagnoses and comments
- Testing the educational materials for ease of reference and quality control
- Building the information content of databases
- Ending the project with a fully operational system and producing a project summary report [18]

12.11 Litmed Project Implementation Plan with Timeframes

Phase I (Baltic MedWeb I, 2001): Installation of five workstations in KMUH Pathology department with operational support through Kaunas University of Technology for building and operating a telemedicine infrastructure for storing

and exchanging medical pictures within a contained geographical region, that is, the Baltic States and Sweden. The main goal being the establishment of high-quality image databases for storing images within the four chosen medical disciplines [13].

Phase 2 (Baltic MedWeb II, 2002): Connecting images created during Phase I (Baltic MedWeb I), that is, Electronic Medical Record (EMR) (Melior system) with Picture Archiving and Communication System (PACS) (Migra system). PACS is an image system that embraces all modalities (X-ray, CT, MR, nuclear medicine, ultrasound) and links users with display workstations over a high-speed network to an image server, an archive, the printers, and the radiology information systems (RISs).

Phase 3: Developing a national eHealth strategy for Lithuania, extending to university hospital units performing primary care according to an agreement made in August 2003 with the Lithuanian Ministry of Health and TietoEnator Trigon AB. However, at present, information about progress with this strategy is not readily available [17].

Phase 4: Seeking continued funding for ongoing maintenance, future system hardware and software upgrading and development, and research into the best way to organize and manage the system when faced with advancing technology, training, licensing, or accreditation requirements.

12.12 Evaluation of Return on Investment of Litmed System

Although considered successful, the Litmed IT pilot project was developed, implemented, and maintained as an isolated IT project focused on physician use. The IT system was structured to serve only a few users, namely, radiologists, ophthalmologists, and otorhinolaryngologists from Lithuania at KMUH and their respective colleagues in Sweden at Lund University Hospital pathology departments. The system and users were isolated from interacting with other healthcare disciplines within the organization. It is therefore difficult to judge how relevant the results of this pilot project would be if expanded to include more departments within the hospital. Reevaluation of organizational systems (system analysis) would need to be performed to determine the effects of expanding the IT system hospitalwide, or at the least, to additional departments. An expanded system would then have to address the functional needs of other stakeholders and users, that is, departments, and interdisciplinary users, as well as underlying organizational culture issues [22].

An IT system is successful as long as it fulfills and continues to fulfill the short-term and long-term goals set forth in an organization's mission statement, its management structure, its function, and its business focus [22, p. 270]. However, if this IT system is being planned for expansion, "systems [development and] testing

will ensure that application programs written and tested in isolation work properly when they are integrated into the total hospital system" [22, p. 722]. In addition, preparation of the rest of the organization is needed. Therefore, project reports, meeting minutes, and results from questionnaires used in the pilot phase should be reviewed by project managers and an interdisciplinary task force to determine issues that need to be addressed to prevent future problems. Because an expansion of this system represents a departure from the way business is currently conducted, a project manager must help users cope during transition by preparing and training them as system implementation progresses. Evaluation studies should also be conducted throughout the program to be sure participants (users and stakeholders) are satisfied with progress of the project. Coordination of the project should be managed by a cross-functional (interdisciplinary) project management team and project manager [23]. It is very important that the various adopter categories of stakeholders and users are involved in all aspects of the project, that is, those who are the innovators, early adopters, early majority, late majority, and laggards. All have their particular "manners and rates at which they respond to innovation or change"—and contribute to a successful completion of any project [24, p.138].

12.13 Role of Nursing within Healthcare System Reform

Noninvolvement of nursing personnel in the determination of their clinical practice and their role within healthcare system restructuring will result in a negative public image of the nursing profession, and more importantly, a paucity of interest of prospective students for joining an integral group of healthcare practitioners. Entry to the EU and subsequent acquired knowledge of more advanced, open nursing practice systems will only cause a brain drain of competent, but economically and professionally disadvantaged nurses, to the other EU healthcare systems to the detriment of those who leave. Although this phenomenon is not new to Western European nations, it is becoming very real to the transitional nations of the former Soviet Union. And because leadership at the national level and management at the local level in many of these nations are still maintaining past practices for system administration and professional development, the migration of their nurses to the more decentralized and dynamic healthcare systems that are responsive to nursing practice issues will occur. As a consequence, the more rigidly controlled and unresponsive systems will be even more unable to efficiently and effectively address the public health and primary healthcare needs of their populations owing to a decrease in the quality of services performed by unqualified healthcare personnel (see Table 12.1).

All participants (stakeholders) agreed that the Litmed IT Project was successful in improving physician practice and in establishing positive, collaborative IT relationships. In addition, the overall vision for this project to develop the KMUH as a

Table 12.1 Comparison of Litmed IT Project and Critical Features for Sustainable Health Systems

•	
Unmet Critical Features by Litmed IT Project	Reason
Quest for common ground: A vision and strategy to balance public versus private interests in building an infrastructure and providing basic health benefits within the context of societal priorities.	Project did not involve "all" stakeholders.
A digital backbone: The use of technology and interoperable electronic networks to accelerate integration, standardization, and knowledge transfer of administrative and clinical information.	Project did not encourage interdisciplinary integration, standardization, and knowledge transfer of administrative and clinical information involved in total patient care.
Climate of innovation: Environment that fosters innovation, technology, and process changes to continuously improve treatment, efficiency, and outcomes.	Although innovative, the project did not consider all issues involved in comprehensive patient care treatment outcomes.
Adaptable delivery roles and structures: Flexible care settings and expanded clinical roles to provide avenues for care that are centered on the needs of the patient.	Project was not centered entirely on the needs of the patient because the nurse/nursing care was completely absent from consideration.
Quality and safety standardization: Defined and enforced clinical standards to establish mechanisms for accountability and enhance transparency, thereby building consumer trust.	Clinical standards, including those involving nursing standards, for accountability, transparency, and the role of the patient were not factored into project planning.
Strategic resource development: An appropriate resource allocation method to satisfy competing demands on systems to control costs while providing sufficient access to care for the most people.	Project did not consider financial sustainability and long- and short-term consequences of cessation of IT application. The development of public-private partnerships will need to be addressed.
Incentive realignment. An incentive system to ensure and manage access to care while supporting accountability and responsibility for healthcare decisions.	Insufficient resources resulted in a failure to maintain momentum. Financial incentives/salaries were provided to physicians and IT technicians just as long as the project lasted.

Source: Adapted from PricewaterhouseCoopers, HealthCast 2020: Creating a Sustainable Future, PricewaterhouseCoopers' Health Research Institute, 2005.

premier IT center in the Baltic region for telemedicine has been accomplished. However, as seen in Table 12.1, much work is needed to involve all stakeholders to procure additional grants and ongoing financial support from the EU, the WHO, and the other IT investors to fund the maintenance, improvement, and eventual expansion of this IT project both hospitalwide and into a launching pad for a regional and national EU eHealth initiative for the use of information technology in healthcare.

In addition to the political will and cooperation of all stakeholders in this eHealth reengineering process, a very important factor that should be addressed regarding the sustainability of management reform programs, is the issue of a high level of corruption that existed, and still exists, at every level of organization and government entity in these post-Soviet nations [25]. Through trial and error during the reengineering of post-Soviet transitional healthcare systems, the World Bank has learned the following lessons that should be applied to future reform processes in these post-Soviet nations:

- Health reform is a lengthy, politicized process.
- A careful sequencing of reforms is necessary.
- A shorter project linked to a smaller, more realistic set of reforms is likely to be more effective.
- Participation of stakeholders (lawmakers, medical community, and the public/ community) in the reform process is critical.
- Simple investments with simple implementation arrangements are more likely to succeed.
- It is important to provide implementation support by strengthening managerial capacity of all stakeholders including program managers and Ministries of Health [1].

Along with technological improvements to healthcare systems of the post-Soviet transitional economies, the importance of professional development of healthcare practitioners, including nurses, within this reform process is of paramount importance. The reform process needs to incorporate information about preferences by all healthcare practitioners about their practice parameters, into strategies for this development that includes their education and professional autonomy. Not doing so will only negatively affect any sustainable socioeconomic reform efforts. In the United States, there are ongoing efforts to develop strategies to fully involve nurses in using IT in their patient care practice. These IT applications should be designed to specifically relate to the nursing process and workflow. Key recommendations are to integrate informatics competencies into the nursing curriculum, establish a more active role for nurses in the design and selection of nursingspecific informatics tools, and integrate industry standards for IT interoperability. However, many hospital nursing departments are unable to incorporate these recommendations because of the lack of financial resources, user acceptance, or administrative support [26].

My research has shown that various Western management models based on a team management approach, using participative decision making, human capital development, and fiscal responsibility, were proposed as prerequisites for joining the international community within a globalization framework. In the reshaping of the governance of social and public institutions, including those in the healthcare sector, emphasis was given to fostering the development of reflexive social stakeholders to act as change agents. This paradigm change process was seen as essential to moving these countries toward greater democratic participation and for defining sustainable solutions to strengthen new organizational structures. However, even after these management models were implemented, outstanding healthcare system issues still needed to be addressed. For example, the Litmed IT project did not address many issues seen as important to sustainable healthcare system function, structure, financing, and management (see Tables 12.1 and 12.2).

The process of reorganizing and improving the Lithuanian healthcare system continues even after accession into the EU. The ultimate goal of the national eHealth strategy for Lithuania is the improvement of the knowledge base and ability of practitioners to care for patients using IT. It calls for the introduction of management systems utilizing IT for financial management (planning, control, accountability), human resources (building human capacity), clinical care (professional and organizational development), and quality improvement (efficiency and effectiveness of healthcare services). However, the specific role of the nurse within this eHealth strategy is not specified but grouped under the term "provider." This term is usually used to denote the physician as a provider of medical–surgical healthcare services. Therefore, it is important to obtain the nurse's view of IT implementation and her or his role within any eHealth strategy.

Currently, in the United States, data is still very limited about the return on investment (ROI) from health IT implementation in various healthcare settings. There is an even scarcer availability of published information about the history of nursing or the nursing management of patient care processes in Lithuania or other post-Soviet transitional economies [27,28]. In addition, there is no readily available data describing the ROI of health IT implementation in any of these countries. However, in trying to understand what these results might be, it is important to involve nurses in determining the functionality and effectiveness, that is, the value or worth, of this implementation to their work because they are important members of any healthcare team and significant users of healthcare IT systems [29]. Therefore, it is important that additional data be gathered from primary sources within the Lithuanian clinical environment where nurses work to understand the issues involved for improving the quality and safety of patient care outcomes within EC and Lithuanian Ministry of Health eHealth standards.

Table 12.2 Status of Healthcare Services in Central and Eastern Europe Post-Reform

	•
Issues	Healthcare Systems Status Post-Reform
Health status of population	Country-specific mortality and morbidity rates still high.Need more emphasis on primary care disease management and preventive services.
Policymaking and system management	 Need for provision of services based on public expectations and needs, that is, community, home care, and mental health services to address diseases of aging population, post-traumatic stress disorders owing to socioeconomic changes and unresolved historical traumatic occurrences, and health risk behaviors. Inadequate information management systems for financial and management accountability, monitoring, and evaluation of national and local system operations.
Structure	 Centrally planned and funded by national Ministries of Health and administered by local governments and organizational managers.
Function	Lack of consistent monitoring of healthcare services, and improvements at behest of organizational managers.

	 Emphasis on keeping healthcare personnel/specialists employed in polyclinics. Lack of ongoing intersectoral collaboration. Inherent system corruption.
Resources	 Lack of effective managerial/administrative accountability systems for resource allocation and management.
Training, research, and development	 Emphasis still on institutionalized care (hospitalization) although primary care is being encouraged. Need for trained mental and community health personnel. Need for more outside influence for establishing standards for nursing and physician education, clinical practice, research standards, and professional associations.
Financing	 Need for more local control of budgeting process. Need for accountability and auditing standards for national insurance funds set up to finance system with fee-for-service payments by patients. Need efficient health programs funded and operated by private and nonprofit international donor organizations (NGOs).

Source: Adapted from World Health Organization, The World Health Report 2002, Health Systems: Improving Performance, World Health Organization, Geneva, Switzerland, 23–72, 83, 89.

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Chapter 13

Healthcare in the United States: A Matter of Right or Privilege?

Sharona Hoffman*

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13.1 U.S. Law Does Not Establish a Comprehensive Right to Healthcare

The United States is the only developed country in the world that does not have universal healthcare coverage and does not provide its residents with a right to healthcare services. This policy has left 46.6 million Americans without healthcare coverage at any given time, according to figures released in September 2006 by the U.S. Census Bureau [1]. Countless others are significantly underinsured because of health insurance limitations and exclusions. Health insurance policies often exclude or restrict coverage for speech therapy, vision care, hearing aids, foot care, infertility treatments, mental healthcare, dental treatments, procedures to address morbid obesity, and therapy for alcohol and drug abuse [2].

The U.S. Constitution is silent concerning a right to healthcare, and the courts have interpreted this silence as indicating the absence of such a right. In *Wideman v. Shallowford*, 826 F.2d 1030 (11th Cir. 1987), for example, the 11th Circuit was explicit in stating that Americans have no right to healthcare. The case involved a woman, Toni Wideman, who experienced severe abdominal pain when she was four months pregnant. Upon being instructed by her doctor to go to Piedmont Hospital, where he would meet her, she called 911 and asked for an ambulance to take her to Piedmont. The DeKalb County Emergency Medical Service employees took Ms. Wideman to Shallowford Community Hospital instead, because it guaranteed payment of the county's emergency medical bills. By the time she was transferred to Piedmont, after a substantial delay, it was too late for her doctor to save the baby.

The Widemans brought a Section 1983 case, claiming that they were deprived of "... their federal constitutional right to essential medical treatment and care." The court found that individuals do not have a right to the provision of medical care by a state or municipality based on either the Constitution or federal statutes. The court explained that the due process clause of the Constitution protects only negative liberties: "the Constitution is a charter of negative rather than positive liberties." The 14th Amendment provides only that the government cannot deprive individuals of life, liberty, or property without due process of law or in an arbitrary or discriminatory way. It does not command the government to furnish Americans with education, healthcare, housing, or anything else. In the court's language, the Constitution "tells the state to let people alone; it does not require the federal government or the state to provide services."

There is one segment of the U.S. population that does have a right to healthcare, namely, individuals in state custody. There are approximately 2.3 million people in

U.S. prisons at any given time [3], and others are in mental health institutions and other forms of state custody. Although many challenges are brought by prisoners concerning the adequacy of their healthcare, few individuals win their cases in court. The Supreme Court has ruled that medical care for those in custody violates constitutional standards only if prison officials reacted to a prisoner's medical needs with "deliberate indifference" [4]. To win a case, a plaintiff must show that prison officials (1) were aware of the individual's serious medical need, and (2) disregarded or ignored the need or refused to provide the inmate with treatment to address the need [5]. Courts most often rule that plaintiffs have failed to prove that these circumstances occurred.

Although national healthcare was contemplated as a component of the Social Security system during the Roosevelt era, this approach was ultimately rejected. Federal law does not establish a universal care mandate and does not require employers to provide health benefits to employees. Many employers choose to offer health insurance policies because of tax benefits or to compete effectively for the most qualified employees. However, because of the high cost of health insurance, large companies are more likely to offer benefits than smaller ones, and in certain industries, such as agriculture, retail, and restaurants, the provision of health benefits is less common than in others [6]. In 2000–2005, premium prices showed annual double-digit increases, and in 2004, only 62.4 percent of non-elderly Americans were covered by health insurance policies that were offered by employers [7]. In 2006, businesses that provided health insurance reportedly spent approximately \$8500 annually to cover the average family, and employees were required to add an additional \$3000 to pay for the full cost of premiums [8].

13.2 The Right to Healthcare in International Law

By contrast to the United States, many other countries have incorporated a right to healthcare into their constitutions. According to an article that surveyed all world constitutions, 67.5 percent of constitutions have a provision addressing health or healthcare, and almost all of these mandate universal healthcare systems [9]. Following are a few examples:

Angola: "The State shall promote the measures needed to ensure the right of citizens to medical and health care, as well as child, maternity, disability and old-age care, and care in any situation causing incapacity to work."

Greece: "All persons are entitled to the protection of their health and of their genetic identity." Separately, the Constitution provides that "the State shall care for the health of citizens and shall adopt special measures for the protection of youth, old age, disability and for the relief of the needy."

Kuwait: "The State cares for public health and for means of prevention and treatment of diseases and epidemics."

Of course, the fact that a national constitutional provision declares that all citizens have a right to receive state-provided healthcare does not necessarily mean that the government sufficiently funds healthcare services or that all citizens have access to state-of-the-art care. A constitutional provision is only the first step to supplying adequate medical treatment to all citizens.

Several international human rights documents establish a human right to health-care. The International Covenant on Economic, Social, and Cultural Rights, for example, provides that "[t]he States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health" [10]. The United States, however, is not a party to this Covenant [11]. The Convention on the Rights of the Child, to which the United States is also not a party, provides that "States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such healthcare services" [12]. The Universal Declaration of Human Rights similarly establishes that "[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care..." [13]. Because this document is a declaration rather than a covenant or convention, it has no signatories or parties.

13.3 U.S. Law Addresses Healthcare Coverage to a Limited Extent

The United States has not embraced the human rights approach to healthcare. Neither the Constitution nor any subsequent federal law establishes an absolute right to medical care. Nevertheless, the United States has enacted many federal and state laws that address healthcare coverage. Although these laws make an important contribution to the welfare of many Americans, they are all limited in scope, and they leave tens of millions of Americans without healthcare access.

13.3.1 Safety Net Programs

First, there are safety net programs that apply to limited segments of the population. Medicare was created in 1965, establishing a federal health insurance program with a uniform eligibility and benefits package for those 65 and above, those with chronic renal disease, and the non-elderly disabled who have received disability benefits for two or more years. Part A pays for hospitalization and limited nursing home care, home healthcare, and hospice services. Part B covers physicians' services, outpatient care, physical therapy, and a few other services. Part D is the new Voluntary Prescription Drug Benefit Program, which went into effect on January 1, 2006 and covers a portion of beneficiaries' prescription drug costs. Before Part D, Medicare covered only about 53 percent of the healthcare received by the elderly, while private insurance and out-of-pocket payments covered the remainder [14].

A second program, Medicaid, consists of federally funded state programs for those living in poverty. Medicaid is thus a joint program between state and federal governments, but individual states have discretion to establish income and coverage guidelines. However, federal rules restrict Medicaid eligibility to the so-called deserving poor. Poverty alone is not enough. One must also be pregnant, elderly, disabled, or the parent of a dependent child. In 2004, Medicaid covered 13.4 percent of the non-elderly population [7], but a significant portion of Medicaid funding is used to cover the costs of nursing home care for elderly people who have spent down their assets and become Medicaid eligible [14].

Similarly, the State Children's Health Insurance Program (SCHIP) is administered by the states and jointly financed by the state and federal governments. The program covers uninsured children younger than 19 whose families earn too much to qualify for Medicaid but whose income is under the amount established by their state's eligibility rules.

13.3.2 Federal and State Legislation

Outside of the Medicare and Medicaid systems, many other laws focus on healthcare coverage issues. At the federal level, a few laws establish specific coverage mandates. The "Women's Health and Cancer Rights Act of 1998," 29 U.S.C. Section 1185b, for example, requires all group health plans and health insurance issuers offering coverage for mastectomies to provide reimbursement for reconstructive surgery that is associated with a mastectomy. Another law, found at 42 U.S.C. Section 300gg-4(a), creates coverage mandates relating to childbirth. It requires insurers to pay for hospital stays of at least 48 hours following natural childbirth and 96 hours following a cesarean section.

A second category of federal laws prohibits discrimination in health insurance in particular circumstances. Title VII of the Civil Rights Act of 1964 prohibits employers from discriminating against individuals based on "race, color, religion, sex, or national origin," and this prohibition extends to employer-provided health insurance. The Age Discrimination in Employment Act prohibits age discrimination against people 40 years of age and older and has specific guidelines concerning health benefits. The Americans with Disabilities Act (ADA) prohibits both employers and insurers from engaging in disability discrimination, though it is quite liberal in the exceptions it allows for health insurers. Specifically, the ADA states that it does not restrict insurers from "underwriting risks, classifying risks, or administering such risks that are based on or not inconsistent with State law" so long as doing so does not constitute "a subterfuge to evade the purposes" of the ADA [15].

The United States also has federal laws that in a very limited way address the needs of the uninsured. The Health Insurance Portability and Accountability Act (HIPAA) mandates that group health plans limit to no more than 12 months their period of excluded coverage for preexisting conditions. Along with several other relevant requirements, the law also guarantees that individuals covered by group

insurance at one employer for 18 continuous months will be granted access to any group policy offered by a new employer [16]. The Emergency Medical Treatment and Active Labor Act (EMTALA) requires hospitals to screen all patients who arrive at their emergency departments and to stabilize them if they are found to be in an emergency condition, regardless of the patients' ability to pay for these services [17].

At the state level, there are approximately 1000 different laws that address coverage issues. They mandate coverage for AIDS/HIV treatments, bone marrow transplants, prescription contraceptives, prosthetic devices, drug and alcohol rehabilitation services, mental healthcare, fertility treatments, hospice care, and many other treatments [2].

Legislative interventions are thus frequent, but they are seemingly haphazard. The relevant laws are limited in scope and confined in their reach. They do not create a regulatory system that provides comprehensive coverage protection to healthcare consumers and ensures that Americans can receive the medical treatments that they need. Thus, in the United States, one of the wealthiest countries in the world, tens of millions of Americans have little access to care and can receive only sporadic treatment in hospital emergency rooms or free clinics.

Piecemeal legislation is problematic in other ways as well. It does not take into account the overall cost of increasing insurers' coverage responsibilities. If insurers are forced to cover more and more treatments through individual mandates, premiums will rise, more people could become uninsured, and even fewer employers might offer health benefits. Furthermore, statutes are often ambiguously drafted as a result of legislative compromise. They generate costly litigation and inconsistent court decisions so that insurers do not have clear guidance concerning which coverage decisions are permissible. Coverage mandates contained in state laws produce disparities among residents of different states, so that whether or not a patient obtains access to treatment could depend on her geographic location within the United States.

Finally, legislative mandates are often a reaction to high-profile cases that capture media attention and to lobbying by powerful interest groups. Thus, those with a robust political voice are rewarded with legislative responses to their needs, and those with a weak or nonexistent political voice are not. For example, Medicare pays for dialysis for non-elderly patients [18] but not for other treatments required by those under 65. Likewise, a federal law requires coverage for plastic surgery for breast reconstruction after a mastectomy, but patients with cancers other than breast cancer do not have laws that specifically address their needs for reconstructive surgery. These provisions of the law may have been enacted in large part because of strong advocacy on the part of individuals with access to the media and influence in Congress.

13.4 The Impact of the U.S. Health System

Lack of health insurance can have a dramatic impact on individuals' health status and welfare. Low-income uninsured individuals often do not have access to ordinary

sources of care such as a private physician's office, do not receive preventive care, and do not have their illnesses diagnosed at an early stage, before their condition requires an emergency room visit [19].

According to a 2004 Institute of Medicine report, 18,000 deaths annually are attributable to lack of health insurance, and the mortality rate among the uninsured is 25 percent higher than among those with insurance. In addition, the U.S. economy loses between \$65 and \$130 billion each year because of the poor health and early deaths of those without insurance [20,21]. Workers in poor health are less productive and have more absenteeism problems than those in good health. Many of them have to leave the workplace and require social services such as welfare payments, food stamps, and emergency room care in public hospitals, all of which are funded by the taxpayers [7].

Who are the uninsured? The vast majority are members of families that are headed by workers (83 percent in 2004), though 42.7 percent of uninsured employees work part-time or only part of the year. In 2004, 35.4 percent of the uninsured were members of families that had annual incomes of less than \$20,000, and only 9 percent were in families with incomes of \$50,000 or more [7]. According to a survey conducted by the Commonwealth Fund, 41 percent of non-elderly adults in the United States with annual incomes between \$20,000 and \$40,000 did not have health insurance during part or all of 2005, up from 28 percent in 2001 [7]. It should be noted that the 2006 federal poverty line for the continental United States was set at \$9800 for a single person and went up by \$3400 for every additional family member so that it was \$20,000 for a family of four [22]. According to 2004 figures, approximately 48 percent of the uninsured were white, 15 percent were African-American, and 30 percent were Hispanic. Put another way, 33 percent of Hispanics, 19 percent of African-Americans and Asians, and 10 percent of non-Hispanic whites have no health insurance. Individuals in the age group 21-24 were more likely than others to be uninsured (35.6 percent), as were single individuals and those in a single-parent family. Eleven percent of all children (8.3 million) were also uninsured [7,23].

Almost half of all personal bankruptcies are related to catastrophic health problems or a large medical debt. Although 79 percent of the families filing for bankruptcy have at least some health insurance coverage, their insurance benefits are grossly inadequate. According to a 2000 report, 326,000 families identified illness/injury as the primary cause of their bankruptcy and 270,000 others carried large medical debts at the time of bankruptcy [24].

13.5 Can Healthcare Reform Be Achieved in the United States?

U.S. Law does not recognize a human right to healthcare. At the same time, however, the level of legislative activity relating to healthcare demonstrates discomfort with a laissez faire attitude about it. Some commentators distinguish healthcare from other

goods and services that are left to the realm of the free market because one's ability to engage in almost any life function depends on one's health status. A well-known scholar, Norman Daniels, argues that society has an obligation to provide all its members with healthcare services "that promote normal functioning," just as we provide every child with a basic education [25,26].

The question remains whether healthcare reform could ever be achieved in the United States. A variety of polls conducted in the 1990s reveal that a majority of the American population believes that all Americans should have a right to adequate healthcare. However, when asked specifically about cost consequences, only about half say that they are willing to pay higher taxes to support universal coverage [2]. The remainder of this chapter will explore mechanisms by which the United States could move toward establishing a national healthcare system.

13.5.1 Expanding Existing Programs

One option is to expand existing programs such as Medicaid, Medicare, and SCHIP, so that an increasing number of uninsured are covered. Many would argue that this approach is the only politically feasible and astute way to proceed. Others would contend that meaningful change cannot be achieved without a radical overhaul of the system.

Some commentators argue that Medicare, a time-tested program that already covers all individuals who are 65 and older, should be extended to cover all those without alternative sources of insurance. Others would rely on Medicaid and other programs for Americans living in poverty.

The state of Vermont has aggressively pursued a reduction in the number of its uninsured, with some widely publicized success. Under then-governor Howard Dean, it enacted a program designed to cover all children under the age of 18 in otherwise uninsured families with incomes of up to 300 percent of the federal poverty line (\$60,000 for a family of four in 2006). Families were required to pay monthly premiums on a sliding scale basis and to reenroll annually. The program reduced the rate of uninsured children in Vermont to a noteworthy 5 percent. Unfortunately, however, the promotion of coverage for children resulted in the reduction of benefits and narrowing of eligibility criteria for adults [27].

Oregon also engaged in a well-known experiment with Medicaid reform in the 1990s. Oregon sought to increase the number of its Medicaid enrollees, but predictably, it had to pay the price of limiting the medical procedures that would be covered by the program. The process of determining which procedures would be covered produced much controversy, and Oregon was not as successful as Vermont in achieving an overall reduction in its number of uninsured [2].

Without a meaningful investment of additional funds, an expansion of existing programs could translate into some growth in the number of enrollees but cutbacks in the scope of coverage. Nevertheless, if policy makers were to dedicate significant resources to already established and proven programs, this approach might be a promising step toward achievement of universal coverage.

13.5.2 Mandatory Private Insurance System

An alternative, more comprehensive change would establish a mandatory private insurance system. President Clinton's proposed Health Security Act provided an example of this type of universal coverage program. The bill required employers to provide insurance for all full-time and part-time employees and their families. Employers would have paid at most 80 percent of the premiums, while employees covered the remaining cost. Self-employed individuals would have similarly been required to purchase insurance plans, while government subsidies were available for those in need. Regional and corporate alliances would have negotiated favorable prices from competing qualified health plans for employers and individuals [2,28].

Two states have been proactive in promoting universal coverage. For many years Hawaii was the only state to require employers to provide health benefits. Under the state's Prepaid Health Care Act of 1974, employers must provide health insurance that is comparable to the plan negotiated by unionized workers to all employees working 20 or more hours a week. Employers may require their employees to contribute up to 50 percent of the costs of premiums or 1.5 percent of their salaries to health insurance, whichever is lower. Employers also may request state funds in cases in which the cost of benefits is excessively burdensome [29].

In 2006, Massachusetts passed a sweeping healthcare reform bill. Under the law, employers with at least 11 full-time employees must provide their workforce with health insurance benefits or pay a fair share annual contribution of up to \$295 per employee. To avoid the \$295 assessment, employers must show that at least 25 percent of their full-time employees are enrolled in their group health insurance plans. In the alternative, employers may offer to pay at least 33 percent of the premium for individual policy coverage. Under the law, all individuals in Massachusetts must purchase health insurance by July 1, 2007 either through their employers or on their own, so long as affordable health plans are available. The law does not define "affordable," an omission that is likely to generate significant controversy. Penalties of up to 50 percent of the cost of health insurance can be imposed on individuals who fail to comply. The legislation also provides for government-funded subsidies for low-income individuals who need assistance to purchase coverage, and it extends the availability of Medicaid to children living at up to 300 percent of the federal poverty level [30,31].

A mandatory private insurance system has appealed to some legislators at both the federal and state levels. The future may well bring further efforts to implement such plans.

Single Payer System *13.5.3*

The most far-reaching and arguably effective solution to the problem of the uninsured and the underinsured in the United States would be the creation of a single payer, government-run system. Proposals for such a plan are admittedly controversial and thus far have garnered insufficient support to gain significant momentum. Nevertheless, many such proposals have been developed. During the Clinton era, for example, Representative McDermott and Senator Wellstone introduced a bill called the American Health Security Act, which would have established a single, government-sponsored insurance plan financed through tax dollars [32]. In 2003, the Physicians' Working Group for Single-Payer National Health Insurance published its proposal in the *Journal of the American Medical Association* (JAMA), and the plan was endorsed by over 12,000 physicians [23]. This proposal explicitly declared that "[a]ccess to comprehensive health care is a human right."

A national healthcare system can be designed in several ways. The government itself can pay for medical services, employ the healthcare providers, and own all hospitals and medical facilities. The existing Veterans Health Administration could serve as a model for such a system [33]. In the alternative, the government can pay for healthcare services while exercising less control over providers and delivery systems. Doctors could work as independent contractors and hospitals could be private nonprofits or religiously affiliated.

Opponents of national healthcare proposals will often cite concerns about costs. International experience, however, is encouraging in this regard. The developed countries that have instituted national programs spend less of their gross national products (GNPs) on healthcare than does the United States. In 2002, the United States spent \$5267 per capita on healthcare, while the next-highest-spending country, Switzerland, spent \$3446, Canada spent \$2931, Germany spent \$2817, and the United Kingdom spent \$2160 [34]. At the same time, in the United States, the infant mortality rate is higher and life expectancy is lower than in the other four countries. In the United States, the infant mortality rate in 2006 was 6.4 per 1000 live births, while in Canada, Germany, Switzerland, and the United Kingdom, it was 4.7, 4.1, 4.3, and 5.1, respectively. In the United States, life expectancy in 2006 was 77.8, while in Canada, Germany, Switzerland, and the United Kingdom, it was 80.2, 78.8, 80.5, and 78.5, respectively [35]. There is also significant debate as to whether U.S. residents enjoy shorter waiting periods for medical care than in other countries or receive a better quality of care by any measure [34,36].

One reason for the disproportionately high U.S. costs is the money the United States spends on administrative expenditures. A national healthcare system would eliminate the need for costly activities such as advertising, marketing, and underwriting. The Physician's Working Group proposal for a single-payer plan asserted that national health insurance program would save the United States at least \$200 billion annually.

Two 2003 articles in the *New England Journal of Medicine* compared administrative costs between the United States and Canada. According to one, the United States spends over \$294 billion annually on healthcare administration or \$1059 per capita, while Canada spends \$9.4 billion, or \$307 per capita. According to a second study, in the United States, administrative costs constitute 31 percent of total healthcare spending, while in Canada they come to just 16.7 percent. According to this study, the difference between United States and Canadian spending relating to administrative functions is \$489 per capita [37,38]. Other commentators point to the savings achieved by Medicare, which spends only 2 cents out of every dollar on administrative expenses [39].

Another factor that reduces costs in single-payer, universal healthcare countries, is the government's strong bargaining power. If the government has a monopoly over healthcare purchasing, it can negotiate very effectively with care providers, manufacturers, and suppliers, thereby controlling healthcare costs.

A second concern cited by single-payer opponents is the potential diminishment of quality of care. A 2001 survey showed that 88 percent of individuals who are insured through employers were extremely satisfied, very satisfied, or at least somewhat satisfied with their health plans [40]. Such individuals worry that a public system will reduce their level of satisfaction because it will require them to endure longer waiting periods and have fewer services covered and will restrict their choice of providers.

There are, however, several ways by which to address the quality of care concern. There could be opt-out provisions whereby individuals can choose private instead of public insurance. Thus, the private insurance system that serves the majority of Americans today would not be eliminated but instead, would constitute an alternative to the public system for those who can afford it. This approach creates the possibility of a two-tiered system—one for the rich, and a parallel one for the poor, but various incentives could be instituted to avoid significant inequities.

In Germany, for example, only 10 percent of the population has opted to purchase private insurance, and the remainder are enrolled in 300 state sickness funds. German private insurers charge different premiums to individuals of different ages. Those who wait to purchase insurance at a more advanced age, when they are more likely to require extensive care, are required to pay high premiums that deter many older consumers from selecting the private insurance option. The young, however, often find even relatively low premium charges to be unappealing because they are unlikely to utilize significant medical services for many years. Moreover, those who opt out of the sickness funds generally are not allowed to opt back in if they decide that the money they are expending on private insurance is not well spent. These incentives have been effective in maintaining a robust public healthcare system with a high level of customer satisfaction [41].

A second option is to require everyone to enroll in the public system but to allow individuals to purchase private supplemental insurance policies. Private insurance supplementation is available in many countries with national healthcare programs,

such as Canada and France. It is also offered to Medicare enrollees in the United States, who may purchase one of ten standardized "Medigap" policies from private insurers [42]. Supplemental policies could cover services that are not provided by the public system or provide enrollees with alternatives, such as private doctors and hospitals.

Conclusion 13.6

The United States does not embrace the norm of healthcare as a human right or a constitutional right. Nevertheless, considerable legislative activity, public opinion polls, and political commentary demonstrate a discomfort with the reality that healthcare coverage is a luxury in the United States, to which tens of millions have little to no access. The United States remains notoriously unique among developed nations in its failure to establish a national healthcare program.

Meaningful change would require a significant investment of effort and funds as well as a shift in public attitudes. Some believe that a transformation of the healthcare system is still not politically feasible. In the words of one commentator,

[t]he considerable inertia of the American political system, the generous campaign contributions available from health insurers, and the antigovernment ideological bent of the American people and their elected politicians present a phalanx too powerful to be overcome by mere empirical evidence and reason. [43]

Designing a blueprint for a flawless national healthcare system is beyond the scope of a book's chapter. The chapter, therefore, has attempted only to outline the problem of the uninsured and underinsured in the United States, to discuss its impact, and to very briefly explore a few alternatives for healthcare reform. The debate over healthcare reform has been dormant for too long and must be revived. The social and moral costs of continuing to ignore healthcare coverage inequities in the United States are simply too high.

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LEGAL AND POLITICAL DEVELOPMENT



Chapter 14

Social and Economic Benefits of Ending the "War on Drugs"

Colin Brewer

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14.1 Introduction

This chapter is rather different from most of the others in this book. Many of the abstracts give the impression that their authors hope and expect that some of the ideas discussed might be put into practice in the next decade or so, or are actually reporting the preliminary results of their implementation. In contrast, I have

little hope that any of the suggestions discussed below will be put into practice for several decades, if at all. This is not because there is no support for them from important individuals and institutions but because although Prohibition has proved itself repeatedly to be ineffective and harmful, it has engendered enormous national and international industries and bureaucracies that naturally do not want their employees to become redundant or their shareholders to lose money. It also suits the drug cartels just fine. How else would the illicit coca industry generate annual revenues of over 65 billion dollars [1]? And that's only cocaine. Estimates of revenues for the whole illicit drug trade are naturally several times that amount and up to 750 billion dollars, amounts "infinitely greater than the budgets of all the enforcement agencies [which] not only give the drug barons enormous economic and political power but also finance a horrifying amount of crime all over the world" [2]. Consequently, those of us who question Prohibition in the 21st century, like those who questioned the existence of God in the 17th century, know what we are up against and do not expect rapid changes in public and institutional behavior. We count ourselves lucky that the burning of dissidents has largely died out in the West and that an increasing number of people accept, at the very least, a pluralist approach to the problems that Prohibition was supposed to prevent or eliminate.

Words Are Important: Say "Intoxicants," 14.2 Not "Drugs"

Of the several powerful intoxicating drugs available legally or illegally in the developed world, alcohol remains our favorite by a very wide margin, as it is in most other countries. Neurophysiologically speaking, intoxication simply means taking sufficient quantities of certain drugs, which stimulate or inhibit various parts of the brain, to alter our feelings and perceptions, slightly or considerably. Here are examples from both ends of the spectrum. One American writer used a particular drug to let him "conceive visions that the unaltered [unintoxicated] brain has no access to" [3]. Pretty harmless stuff? OK. Try something stronger. This enormously seductive drug involves "taking psychic flight, ingesting a simple substance and leaving yourself behind.... Many of us [use it to achieve] new personalities,...[to] slide into someone else's skin . . . a [drug-induced] makeover from the inside out" [3]. The intoxicant, in both cases, was alcohol. Of course, some people use intoxicants not just to change their feelings but sometimes, in a state of temporary oblivion, to avoid all feeling. Whatever the intention, if this change falls short of actual sleep (or light anaesthesia, if you prefer) they often behave very aggressively or foolishly, even though they may, sometimes, genuinely have no recollection of doing so. This is really a kind of temporary drug-induced insanity. If you can convince a court that your uncharacteristic and criminal behavior occurred because someone spiked your lemonade, you have a perfect defense against even the most serious of charges, whichever the intoxicant, just as you would for a similar offence committed

following an epileptic seizure or a head injury. However, I shall exclude from this discussion two very popular but also rather weak intoxicants: coffee and tobacco, because although the latter is more addictive than heroin and much more intrinsically damaging to physical health, neither drug, even at the top end of the usual dose range, makes people behave in ways which can cause serious social or interpersonal problems. Until the 20th century, most cultures did not try to prohibit any particular intoxicant, though of course, they had their favorites. Some intoxicants were once geographically restricted, such as the cocaine that fuelled the superefficient Incas in their Andean empire and still sustains their descendants, though the Incas also had alcohol. Nicotine needed Columbus before it reached Europe. Opium was known in Britain from mediaeval times and was widely used from the 17th century, but alcohol was always our favorite intoxicant. In 1362, according to Jeremy Paxman, "given the opportunity, the English would binge themselves stupid" and then Archbishop of Canterbury complained "The tavern is worshipped rather than the church" [4]. In the 1750s, some people were very worried about the effects of gin, especially on the laboring classes (Hogarth's famous painting "Gin Lane" depicts the multiple degradations that it produced) but they were untroubled by opium. However, not many people suggested prohibiting gin. They taxed it instead. Taxing reduces consumption provided that you do not overdo it. If you tax too highly, people start smuggling. Indeed, around the same time, there was a sort of natural experiment—an informal, nonrandomized but very persuasive comparative study, with a control group—that showed the consequences, and the ineffectiveness, of Prohibition. In 1734, in the then British colony of Georgia, alcohol abuse became such a problem that the British Parliament in faraway London passed a law enforcing Prohibition of spirits in the colony and banning the export of spirits to Georgian ports. Even though beer was exempted from the law, Prohibition was ended in 1743 because "Georgian farmers were abandoning their crops to concentrate on [making illicit spirits] and ... contraband liquor from South Carolina was entering Georgia on a huge scale." Furthermore, Georgian jurors often refused to convict offenders and "some Colonial enforcers of the law took bribes to look the other way" [5]. Does that sound familiar?

Islam's Prohibition of alcohol was an exception, but cannabis and opium made up for it and khat—a drug very similar to cocaine or amphetamine—remains extremely popular in southwest Arabia and the Horn of Africa. Indeed, in these countries, the communal chewing of khat leaves is an important daily ritual. Everything stops for it in the heat of the afternoon and even when war breaks out, as happens all too often in that troubled area, growing and trading khat continue with little interruption. We shall return to khat later.

If we go a little further east, alcohol, cannabis, and opium coexisted happily in India and still do. The Meo hill-tribes of Laos still cultivate and smoke their own opium. Even if they like beer, it is rather expensive for a subsistence-farming and barter economy and most Meo villages lack the electricity to keep it cool. Even further east, Pacific islanders traditionally preferred kava, a drink made from an

intoxicating root belonging to the pepper family. When alcohol arrived with European traders and colonists in the late 18th century, it devastated some Polynesian societies, though they seem to have adapted during the next two centuries.

14.3 Using Intoxicants: How Much Is "Too Much"?

In any society, a minority of people will have problems from the excessive use of one or more of the prevailing intoxicants. It is a statistical inevitability because some people always do more or less of some particular activity than the average, whether that activity is eating, drinking, copulating, working, playing, sleeping, traveling, or worrying. In Britain, as in many other countries, about half of all alcoholic drinks are consumed by barely 10 percent of drinkers while about 10 percent of the adult population do not drink at all. Just as you cannot really have cars without car accidents, you cannot have intoxicant drugs without problems of intoxication or dependence. There are people who proclaim that if Prohibition saves even a few people from disablement or death, it is justified, but most of them would probably oppose legislation banning private cars and imposing very low-speed limits on commercial vehicles on pain of long prison sentences, even though that would undoubtedly prevent many lethal or disabling accidents.

Introducing an unfamiliar drug into a society usually causes some problems. (Sigmund Freud notoriously got badly hooked on cocaine, the trendy drug of the Victorian fin-de-siecle [6,7].) So does introducing a familiar intoxicant—like beer or wine—in an unfamiliar and more potent form—like gin or brandy. The introduction of spirits helped Europeans to destroy and subdue many indigenous peoples whose own traditional recreational drugs were sometimes much more varied and sophisticated and usually much less toxic. Ironically, it was early Islam's invention of distilling that enabled Christian Europe to produce the numerous local varieties of firewater. Breughel's paintings indicate that drunkenness was common in European peasant societies and it became a growing problem of industrialized ones. Temperance movements flourished but they used exhortation, not compulsion and until the 20th century, no Western government felt compelled to tell its citizens that it was so seriously wrong to intoxicate themselves with drugs other than alcohol or nicotine that it was to be made a criminal offence. In 19th century France, Baudelaire, and de Nerval smoked hashish. In England, Coleridge and de Quincy sipped laudanum and so, it seems the poet and hagiographer of the British Empire, Rudyard Kipling who wrote as if he were familiar with its effects. "Certainly Rudyard was remarkably unperturbed about the use of the raw drug—'an excellent thing in itself and in moderation about as harmful as tobacco'... adding...' I know that the opium habit in India is nothing compared to the ordinary effects of liquor in a town full of white Christians..." [8]. (Italics in original.) In 1903, the guardians of the jewel in Britain's imperial crown produced the report of the Indian Hemp Commission, which concluded that the common and long-established use of cannabis in various

forms by the Indian population caused no major harm. It certainly did not imply that such problems as it caused were an order of magnitude worse than those caused by alcohol. Opium-smoking, or the communal drinking of opium (another old Indian tradition, which continues even today in the Northwest), also rated an official enquiry, linked to concerns about the opium trade. It came to similar conclusions, though it has been criticized for being biased in favor of the traders and the colonial government, which gained substantial tax revenues from opium.

Then as now, prisons existed and many of the inmates were there because of violent crimes. (Homicide, of course, often led then to execution rather than imprisonment. Fortunately, improvements in trauma care have greatly reduced the risk of death from potentially homicidal behavior, so that homicide rates often remain misleadingly stable even when violent crime has increased enormously.) Much of this violence would not have happened, or might have been less serious, if the aggressor or the victim had not consumed large amounts of alcohol shortly beforehand. In contrast, opiates such as heroin, methadone, or laudanum virtually never cause or increase aggression. Quite the reverse. Depending on the dose, opiates generally induce in most users a relaxed and often introspective state, which may be quite compatible with doing a job, even a demanding one. Larger doses of opiates usually induce somnolence and the user is generally much more a danger to himself than to others. A recent study of the role of "alcohol and drugs" in British homicide confirms that alcohol is a much commoner factor in violence than heroin or cocaine [9]. (I use inverted commas for "alcohol and drugs" to make the point that even in academic journals, people continue to imply—perhaps without intending to—that somehow, alcohol is not to be classed as a "drug." And not just academics. The European drinks industry got quite agitated when it was proposed that alcohol should be classed as a mood-altering drug.)

However, this is an appropriate place to introduce the notion that the same drug can have different effects in different people, or in different circumstances. Some opiate users are consistently stimulated by it and regard it as an energizer. The journalist Michael Davidson reported that when in China, someone "took me to see his friend Mr Wu, who kindly helped me to make my first, and last, attempt to enjoy opium. Mr Wu was an author... But he was able to compose only after several pipes; he would smoke during the later hours of the day and devote the night to writing" [10]. Is this different in principle from the numerous Western writers who used alcohol for the same purposes? Conversely, some users of cocaine (and presumably of khat, though like most aspects of khat use, it is not well documented) find that it has a paradoxical calming effect. That is the basis for the demonstrable effectiveness of similar prescribed drugs in a proportion of "hyperactive" children and adults.

Coca (the active ingredient of which is cocaine) and khat (active ingredient cathinone) are stimulant drugs. Taken in daily quantities that are typical of the Andean plateau and the Horn of Africa respectively, they typically increase energy, wakefulness and endurance and—in an appropriate social setting—facilitate

conversation and social interaction. Considering the millions of people involved in this kind of intoxicant use, relatively few people come to grief as a consequence. As with alcohol-drinkers and opium-smokers in other cultures, a small minority of these regular, traditional users will, for various reasons to be discussed shortly, use more of their preferred intoxicant (i.e., in this case, chew more coca leaves or khat leaves) than is appropriate for the occasion or for their particular biological and psychological makeup. If it happens just once or twice and if the results are not too serious, it may be put down to experience. If it happens more often or more regularly, it may constitute a problem for the user, his associates, and the society in which they live. "An Indian," wrote Nevinny in 1886, "chews an average of 35-55 grams of coca [leaf] per day, and even twice, or three times as much, on festive occasions": boys start using it "from about the age of 10" [11]. As with drinking alcohol—or indeed, almost any activity—too much coca-chewing can do harm. The most devoted friends of coca are known as "coqueros". They are immediately recognizable "by their unsteady...gait, their flaccid, greyish yellow skin, their hollow, dull eyes . . . tremulous lips . . . and generally apathetic behaviour" [11]. If this does not sound familiar, you have probably spent most of your life in a strictly Islamic country, because many of the more obvious alcoholics, easily visible in any Western town, have much the same appearance and behavior.

However, even though alcohol seems to be by far the most aggression-promoting intoxicant and even though significant numbers of people in all Western countries experience the often serious problems of excessive drinking, hardly any of these countries have tried to prohibit alcohol. Those who did try (notably the United States and Norway) soon abandoned the attempt. Why, then, has such a distinction been made between alcohol and other intoxicants? Why is alcohol legal and widely promoted in almost all non-Islamic countries although most other equally traditional and often less socially and physically damaging intoxicants are outlawed on pain of ferocious penalties up to and including life imprisonment or death?

Before answering that question, we need to understand a bit more about some basic terms, such as addiction, dependence, and abuse, among others. Even though the word "addiction" appears in the titles of several specialist journals, it is often replaced in professional discussions by "dependence," which is thought to do more justice to the frequently complex reasons why people come to grief because of intoxicants. However, addiction remains in common use, even among the professionals. There are many definitions but one of the most helpful contributions, in my view, is the statement by Lemere [12] that "despite many attempts to define alcoholism, the one thing that all alcoholics have in common is that they drink too much." This neatly reminds us that people do not have to use alcohol, heroin, cocaine, or other intoxicants every day to have problems. Every dog, as the lawyers say, is allowed one bite but repeated binges or excesses can be catastrophic even if they only occur once or twice a year, or even less frequently. Conversely, people can use an intoxicant almost every day, as many people do, without causing significant problems for themselves or others. Even, as with tobacco, if they are physically

addicted or dependent, in the sense that they get withdrawal or abstinence symptoms typical of the drug in question when they stop using it.

The suggestion that some drugs are very likely to cause instant physical addiction after a single dose is not really supported in life or in the laboratory. Millions of people have injections of powerful opiates before or after surgery. Many of them describe the effects as pleasant but it is very rare indeed for people to develop problems following such experiences. When they do, it is not because they had withdrawal symptoms after one or two doses but because they liked the effects and were sufficiently interested, for various good or bad reasons, to want to experience them again. Similarly, many people who become alcoholics describe how their first experience of getting intoxicated was pleasant and a powerful reason for repeating it. Here is a classic example from a U.S. journalist, who later developed a severe alcohol problem, describing how it helped her, in adolescence, to deal with her kindly but rather intimidating father. "But then the wine glass came, one glass and then a second. And somewhere during that second glass, the switch was flipped. The wine gave me a melting feeling, a warm light sensation in the head, and I felt like safety itself had arrived in that glass...the discomfort was diminished, replaced by something that felt like a kind of love" [3]. The same is true for many impressive nonpharmacological experiences, ranging from sex to reading good poetry. However, some people have to persevere after an unpleasant or unremarkable first experience before they learn to enjoy subsequent ones. "Abuse" implies that the use of a particular drug, even sporadically, is causing problems but in some definitions, anyone who uses an illicit drug, or uses licit ones other than alcohol or nicotine (i.e., typically, prescription drugs such as sedatives) for nonmedical purposes is automatically an abuser. "Dependence" implies that the intoxicant in question has come to occupy too prominent a place in the life of the user and is starting to crowd out more important or everyday concerns. Dependence has the advantage that the concept can be applied to nonpharmacological problems such as gambling or eating, which is outside the scope of this chapter.

Some intoxicants are more likely than others to give rise to withdrawal symptoms after a period of regular use, which for some people may be only a few days. Nicotine usually tops the list, followed by opiates, alcohol, cocaine, and cannabis but individual users vary considerably in their vulnerability to physical dependence. I have treated alcoholics who had no withdrawal symptoms despite drinking a bottle of spirits a day for years and others who became very shaky despite drinking only the same quantity of wine. Heroin addicts share this variability. Some can withdraw easily without much trouble or discomfort and their problem is staying off it. Others are highly motivated to stop but cannot tolerate withdrawal symptoms which are not only very unpleasant but also, unlike those of alcohol, often fade only slowly over many weeks or even months. Conversely, hallucinogenic drugs such as LSD (Lysergic acid diethylamide) or psilocybin do not appear to cause physical withdrawal symptoms. Cannabis, once thought to have no specific withdrawal syndrome, is now thought to be able to produce one in some heavy and constant users.

The concept of the addictive personality is not widely accepted in academic circles. It certainly does not usefully explain, for example, the considerable increases in drinking among women or, indeed, the relatively sudden appearance of substantial numbers of heroin abusers in Britain, in the last 40 years. Are we expected to believe that unusually large numbers of people underwent a rapid personality change or were born with a personality disorder in that period? External (i.e., social) rather than internal factors are surely more important. These include, most particularly, changes in the availability and price of various intoxicants and in the fashion for taking (or not taking) them. In the 1960s and 1970s, many orthodoxies were challenged and some of them never recovered from the experience. Large numbers of people started eating, dressing, traveling and thinking in ways that were largely unimaginable in the 1950s. Is it not likely that people—especially teenagers—take to foreign drugs for much the same reasons that they eat foreign food, listen and dance to foreign music, dress in exotic clothes, and travel to foreign countries? Why should anyone imagine that intoxicants can somehow be effectively isolated from this universal urge to broaden one's experience of the world? It was a pity, of course, that this trend included not only using a wider range of intoxicants, but also, inevitably, a wider range of methods for ingesting them including, most particularly, by injection. There was nothing really new about most of the new drugs and injection had been increasingly used since the mid-19th century. Smoking opium rather than eating it, or drinking spirits rather than wine or, possibly, the replacement of pipe-smoking and tobacco-chewing by mass-produced and convenient cigarettes, all made for quicker and larger effects from the relevant intoxicants, but all of them could also cause more harm. The same was true for injecting intoxicants rather than smoking them. The same is true of accidents involving automobiles and aeroplanes rather than horses or ships. These examples merely confirm that technical progress often has costs as well as benefits.

Yet Prohibition long preceded the changes that largely started in the 1960s. Its roots lie in China and it was designed for a very different world. Opium eating has a very long history. Possibly even longer than alcohol because morphine, the chief active ingredient of opium, is found in simple herbal preparations and does not require processing or fermentation. It was known to the ancient Mesopotamian societies and well established by the time of the ancient Greeks. The opium poppy (*Papaver somniferum*) grows readily in many climates and thrives on poor soil. Crude opium consists of the dried resin that exudes from the seed-head, especially if it is incised, but significant opiate effects can be obtained from a simple infusion of the untreated seed-head or by crushing and eating it. Opium typically contains 10–20 percent of morphine, so that a single gram of opium may contain 200 mg of morphine. Because the usual postoperative morphine dose for a nonhabituated patient rarely exceeds 30 mg (repeated four to six times daily as necessary), the productivity of an opium crop is easily imagined.

It does not matter, for our purposes, whether the uses of opium were first discovered in ancient China and then spread to ancient Mesopotamia, or vice versa.

Like alcohol, it has been used medicinally and recreationally for a very long time and like alcohol, the extent and pattern of its use has changed repeatedly over the years. Naturally, in an area of human activity with so many moral and religious overtones, the history of intoxicants is not short of commentators writing with a particular point of view—for or against any individual intoxicant, or intoxicants in general. This needs to be kept in mind. However, it seems fairly uncontroversial that opiate use was not a big problem in China until around the time when colonial powers began to intrude on Chinese society in the 18th century—first as traders and later as missionaries, overlords, or occupiers. They probably increased the smoking of opium, usually with the tobacco that they also introduced, and this gradually supplanted the more traditional drinking and eating of opium for recreational and medicinal purposes, though opium-smoking was well established in parts of China before Europeans seriously intervened [2]. Like gin in 18th century England, the habit was also taken up with regrettable but unsurprising enthusiasm by the large number of people at the wretched, impoverished, care-filled, and disease-ridden base of the social pyramid. In both cases, although this might bring temporary relief from their troubles, it had the effect of rendering significant numbers of them unfit, or much less fit, for work. It also made some of them keener to cultivate poppies than the basic crops necessary for local and national survival, rather like the farmers of 18th century Georgia.

As is well known, the colonial and trading powers not only exploited this growing taste but also, in the case of Great Britain, enforced at gunpoint their right to import opium from British India against the protests of the Chinese authorities. However, that does not mean that China would not have had an opium problem but for European interference. Habits may have spread more slowly then but they still tended to spread, despite several edicts by the Emperor imposing gruesome penalties for smoking opium. Communist China has the distinction of being the only major society to have ever successfully enforced the Prohibition of opium, but it did so only by enforcing with great savagery the Prohibition of many other things during the relatively brief period when China was gripped by a totalitarian cultural frenzy which is now admitted to have been a terrible and costly mistake and which few people—even among convinced drug-war veterans—would want to repeat. Over the past 20 years, China, though still a heavily controlled and policed society, has experienced a big resurgence of opiate abuse. Unfortunately, this time around, the users usually take their opiates by intravenous injection. The new opiate epidemic is thus compounded by a growing HIV epidemic. (The USSR also had plenty of policemen even in communism's dying days, yet by the 1980s, the use and abuse of a variety of illicit drugs had started to become noticeable among Soviet youth. It too now has a major epidemic of both intoxicants and HIV but alcohol remains by far the largest public health problem. Alcohol abuse is widely regarded as the main cause of post-Soviet Russia's unfortunate achievement—unique in Europe—of a reduced life expectancy during the 1990s.)

Among the people who were concerned about the previous 18th-19th century epidemic were the numerous missionaries, many of them American, who were trying to convert the Chinese to Christianity. In this respect, they were not very different from the missionaries who tried to persuade the British working man to exchange his taste for alcohol and-all too often-getting blind drunk for something healthier and more improving. (The upper classes were not averse to excessive drinking, of course, but could be drunk for days at a time without necessarily interrupting the productivity of their estates or factories, or affecting their incomes.) The precursors of International Prohibition were organizations with a much more limited aim—to reduce the opium problem only among the Chinese. In 1874, the Anglo-Oriental Society for the Suppression of the Opium Trade was formed. It sought a common front with the Total Abstinence movement, which was mainly concerned with alcoholism in Britain. Although the Anglo-Oriental prefix was soon dropped, it is clear that their main concern was with the plight of the Chinese and the morality of the highly profitable export of opium to China. Indeed, 1874 also saw the first example of Western Prohibition legislation, but that too was aimed specifically at Chinese immigrant laborers in California and it had no nationwide application. The San Francisco Opium Exclusion Act also reflected fears of racial mixing between the Chinese and the white population, especially white girls [13].

In most of Europe, there was never any significant chance that electors or governments would vote to prohibit alcohol but in the United States, things were different. Perhaps Max Weber's famous "Protestant Ethic" was a bit too close to the "Puritan Ethic" that pervaded New England's founding fathers. Some white Americans were also concerned that the recently liberated black slaves might get high on alcohol, or on the morphine and cocaine that were becoming fashionable, and go around molesting white women. (Many cocaine-containing drinks were marketed before almost everything but the name of the leaf was removed from Coca-Cola.) Henry Ford said that sober workers made more and better cars than drunk ones. This is surely true but not necessarily a sound argument for prohibiting alcohol altogether. The First World War interrupted the United States' crusade but in 1919, its missionaries really got to work. Literally, in some cases, for one of the chief Prohibitionists was an American Bishop, Charles Brent. He was certainly a puritan and, as is not uncommon with puritans, wanted a world fit for puritans to live in. Dr. Hamilton Wright, a U.S. appointee to the 1908 Shanghai Opium Commission, was cast in the same righteous (or at any rate, self-righteous) mould but was "not above bending facts to achieve legislative ends" [14]. Opium consumption actually declined in the United States between 1900 and 1910, but Wright combined scare tactics with deliberately misleading data, a tactic not unknown today.

Another prominent alcohol Prohibitionist, Bishop James Cannon, was not only a Puritan, who "had never been known to laugh" and was opposed to dancing, and theatricals and any other public activities that involved even transient exposure of

female flesh. He was also a hypocrite of the most odious and despicable kind, because it eventually emerged that he was guilty of assorted financial irregularities, that he consorted with at least one prostitute, initially using a pseudonym and that he spent a night with her barely hours after his wife suffered a severe and ultimately terminal stroke [5].

The United States wanted to ban all intoxicants, but in Europe and its colonies, we liked our wine and beer even more than we liked Americans for helping us beat the Kaiser. So we seem to have said that we would let them ban everybody else's intoxicants provided they left our own intoxicants alone. And of course, if they wanted to ban alcohol in their own country, we would watch the outcome with interest and some cynical amusement. What happened is well known. Although alcohol was prohibited in the United States after due democratic process, it was unprohibited again after only 13 years, partly because many Americans were missing their traditional pleasures but also-and very importantly-because Prohibition had given rise to large amounts of organized crime and corruption. It was also far from being universally effective. Many people for whom alcohol was not all that important adapted to the new laws with more or less resignation and this led to significant falls in alcohol-related disease (e.g., cirrhosis of the liver), but the initial drop in consumption was soon reversed and serious drinkers rapidly overcame all the obstacles. So, not surprisingly, did curious or rebellious teenagers and the Women's Association for National Prohibition Reform noted that "young Americans were growing up in an atmosphere when drinking was fashionable and were losing respect for the law."

The other intoxicants were also affected by Prohibition, but they were not at that time widely used and those who did use them in the United States were often on the margins of society—especially of influential, law-making society. Not many people campaigned for the decriminalization of these alien intoxicants, even though they too had not disappeared but had gone underground and thus inevitably became associated with organized crime—often the same organizations that had thrived on the large-scale smuggling of alcohol and its smaller-scale version, boot-legging. Consequently, although the puritans reluctantly accepted that alcohol, and thus intoxication with alcohol, was to remain a normal part of American life, getting intoxicated with opium, cannabis, or cocaine remained "evil". For some reason (probably because they had not heard of them), kava and khat escaped.

Previous generations of Christian missionaries—or at any rate, of Christian clergymen—declared war against witches and the members of other Christian sects. As in most wars, this involved well-organized efforts to depict the enemy as evil or even subhuman creatures who could be persecuted or destroyed with a clear conscience. (When asked how wicked Albigensian heretics could be distinguished from good Catholics after the French city of Beziers fell in the 13th century, one of the leading Catholic besiegers famously replied: "Kill them all; God will recognise his own.") Tens of thousands of harmless but slightly dotty or even quite ordinary women were burned as witches because the men with a mission said they were

a threat to society. Catholics killed Protestants. Protestants killed Catholics. Both Catholics and Protestants killed other Christians, Jews, or atheists. In all cases, it was because the missionaries saw to it that the victims were defined as alien, different, "not like us," and therefore threatening, even if in most other respects the victims were really much like everyone else.

This is how the Prohibition missionaries have persuaded many citizens, legislators, and journalists to view the users of some or, quite frequently, all illicit drugs. We speak, not always unsympathetically, about alcoholics or alcohol abusers, but the image of the dope fiend, carefully cultivated by the early Prohibitionists, evidently inhabits our collective consciousness and influences public policy. People who, in many other contexts, are very interested in Western history seem often completely unaware that currently illicit drugs were legal for a lot longer than they have been illegal. The story [15], told by the late Prof. Bob Kendall, of how cannabis came to be added to the pharmacological *Index Expurgatorius* would be hilarious had its Prohibition not ruined quite a few lives by causing the imprisonment of people simply for preferring one herbal intoxicant to another.

In 1925, the League of Nations Second Opium Conference took place in Geneva. As its title suggested, its purpose was to tighten the controls on opium and—less importantly, it would seem—on cocaine, that had first been negotiated rather unenthusiastically at The Hague in 1914 and then steam-rollered through the Treaty of Versailles by the United States. Cannabis was not on the agenda and was not mentioned until the fifth session of the conference, when the Egyptian delegate, Dr. Salam el Guindy, intervened. He declared that cannabis was "at least as harmful as opium, if not more so" and asked the conference to include it in the list of prohibited narcotics. He elaborated on this theme at subsequent meetings, claiming that hashish accounted for between "30 and 60 percent of the total number of cases [of insanity] in Egypt and insisting that prohibition of cannabis would be welcomed by every Egyptian...from His Majesty King Fuad...down to the humblest fellah of the Nile valley." This, as Kendall points out, was inconsistent with the vast quantities of cannabis which Dr. el Guindy conceded were being grown by the fellahin and, sometimes, seized by the police. The representatives of Greece and Brazil also claimed that cannabis was in the same league as opium or worse. Neither country can be said to have distinguished itself, then or subsequently, for the quality of its epidemiological psychiatric research. The delegates of China and the United States supported these assertions, although Mr. Sze, for China, admitted that he knew next to nothing about the subject and even Mr. Porter, the American, conceded that his knowledge was quite limited. Porter is said to have been bombastic and a loose cannon, but he was a moderate compared to the other American delegate, Bishop Brent. The Bishop, who had previously presided over the 1909 Shanghai commission and the 1912 Hague conference, was a man of evangelical fervor and righteousness who regarded any nonmedical use of opium as immoral and was an extreme Prohibitionist.

Several delegates expressed reservations about the lack of opportunity before and during the conference to inform themselves adequately about cannabis, but the conference nevertheless decided to add cannabis to the list of banned substances. The president believed they had "... struck a most powerful blow at the drug evil" and "started on a road which eventually can lead only to success." Even so, the conclusions were not firm enough for the United States, which withdrew from the conference because the colonial powers were unable to commit themselves to eliminating opium from their oriental territories within 15 years. One reason for their hesitation was that 15 million kg (i.e., about 15,000 tons) of opium were still being produced in rebellious Chinese provinces and stamping out smuggling was much easier said than done. Reviewing the history of cannabis in Egypt, Kendell notes that attitudes to it oscillated over the centuries since its introduction around the 10th century. One school of Islamic law even refused to regard it a prohibited substance in the same class as alcohol. Furthermore, the annual report of the larger of Egypt's two psychiatric hospitals attributed only 2.7 percent of admissions in 1920 to hashish—barely a third of the proportion attributed to alcohol. Thirty years earlier, the Indian Hemp Commission had also looked into the psychiatric consequences of cannabis use in India. They concluded correctly in my view—that cannabis can be the sole cause of psychosis but not very often. Their own figure was 4.5 percent of admissions and they concluded that Prohibition was "neither necessary nor expedient." Recent research suggests that although like many other drugs that affect brain function, cannabis can exacerbate preexisting schizophrenia, it increases the total number of cases by no more than about 8 percent [16]. This is hardly surprising given that the incidence of first episodes of schizophrenia has not changed much during a couple of generations when the smoking of cannabis in Western countries changed from being an eccentricity indulged in by a small number of jazz musicians and other artistic people to something approaching a majority experience, at least during adolescence—even, as has been quite readily conceded, for many future British parliamentarians in government or opposition.

Before moving on to the depressing effects of Prohibition, we should remind ourselves that in communities that have been wrenched from their roots and have not yet found new and successful ways of living, the damage caused by legal intoxicants can be so enormous that it must be doubted whether the addition of illicit ones could make matters much worse. Remote Inuit communities, in which illicit distribution networks surely cannot easily exist, have been devastated by alcoholism and also by the inhalation of ubiquitous volatile substances such as glue and gasoline. Their suicide rates are among the world's highest. Similar problems are seen among Australian aborigines. Happily, nobody has so far thought to compound the problem by making the possession of such everyday and vital substances a criminal offence and Prohibiting them would probably not be a vote-winner.

14.4 The Costs of Prohibition

The story of Prohibition is rich in irony and one group of people for whom the financial costs of Prohibition have actually fallen in many countries is the actual users of illicit drugs. When I first started treating heroin addicts in the mid-1980s, the street price of heroin in London was about £60-£80 a gram. The dollar equivalent (currently £1 is worth about \$2) is irrelevant because the important point is that when I retired about a decade and a half later, the street price had dropped to almost exactly half that range, despite a rise in the cost of living of over 50 percent in that period and an even greater corresponding increase in average salaries. Such a marked fall—by about two thirds—in real prices hardly suggests that attempts to prevent the manufacture and importation of heroin are having much success. In any case, the illicit drug industry shows the same enterprise and flexibility as other large and successful industries. A recent heroin drought in Australia, possibly related to reduced production by Australia's nearest poppy fields in the Burmese Golden Triangle, has seen a compensatory increase in the availability of synthetic opiates and of the brown heroin from the booming opium fields of post-Taliban Afghanistan that was previously almost unknown in Australia. It is regularly admitted, even by agencies charged with preventing smuggling, that they intercept only a small percentage of the contraband. As Karch says of another facet of the illicit drug industry: "With a net value of at least US \$100 million a ton, is it any wonder that Mexican drug cartels can and do lose that much cocaine in a few shipments, with no discernible effect either on the amount of cocaine on the streets, or the amount of money accruing to the cartels" [1].

In Britain, expenditure on tackling drugs in the National Drug Strategy was just over a billion pounds in 2002-2003, of which approximately two thirds was spent on enforcement. In 2000, the United States spent more than that just on international interdiction efforts outside the country [1]. In addition, because of the large amount of crime that historically has inevitably followed Prohibition, a large proportion of expenditure in the criminal justice system—policing, courts, prisons, and probation—is due to these manifestly unsuccessful attempts to enforce Prohibition. I qualified in the mid-1960s, when illicit intoxicant use in Britain was much more of a minority interest than it is now, but the prison population in Britain was nearing 40,000 at the time, amid dire warnings of the crisis that would occur if it got much bigger. It is now pushing 80,000 and a large proportion of the offences that led to this increase and overcrowding are related to both licit and illicit intoxicant uses. However, while alcohol-related offences are overwhelmingly due to the direct intoxicating effects of alcohol on behavior, offences related to illicit drugs—chiefly heroin and cocaine—are overwhelmingly due to the almost inevitable generation of repeated theft to fund an illicit intoxicant habit, which Prohibition ensures will always cost much more than an alcohol habit in all but the strictest Muslim societies.

Prohibition also maximizes the harm that intoxicants can cause to users. Illegal drugs are of unknown strength and purity, often contain unspecified contaminants,

and come with no health and safety information. The United Kingdom now has one of the highest levels of drug-related deaths in Europe. In 2000, over 50 people died from a single batch of heroin contaminated with an unusual bacterium of the Clostridium type that was resistant to the usual addict method of heating and preparing heroin for injection. In the dry states of India, reports of similar disasters from illicit alcohol are common, the usual contaminant being methyl alcohol, which can and does cause blindness and other severe complications. During alcohol Prohibition in the United States, there may have been over 50,000 deaths from adulterated liquor [5]. Although commercially methylated, denatured alcohol (methylated spirit) is sometimes deliberately consumed (usually in desperation) by the most refractory and dilapidated kind of homeless alcoholic in Britain, its accidental or unknowing consumption does not occur when ordinary uncontaminated alcoholic drink is affordable and available without unreasonable trouble to those who want to drink it.

Corruption of police, especially those specifically involved in the war on drugs, is depressingly common and happens even in Britain, where we like to think—doubtless rather naively—that our own policemen are relatively untouched by that sort of thing. In countries where corruption has a longer and more entrenched history, it can affect not only high-ranking policemen but also judges and politicians. (Australia is probably not one of those countries but I recall that when abortion was still illegal there in the early 1970s, the second-in-command of the police in a large city was convicted of running a protection racket for gynecologists.) Prohibition also means that many young and immature people get sucked into the illicit trade and face penalties up to and including death for acting as small-time couriers, while the drug barons themselves can usually obtain immunity by paying for it or by convincingly threatening the appropriate public servants—or quite often, both at once.

Some countries, such as Malaysia, have a mandatory death penalty for possession of more than very small amounts of certain drugs, but it does not stop them from having quite a large number of home-grown opiate addicts and there seems to be no shortage of local and foreign volunteers to smuggle the stuff abroad. In the late 1980s, I was a psychiatric witness for the defense of a British man who was clearly guilty as charged of trying to take about half of kilogram of very pure heroin out of Malaysia. His well-documented medical history showed that as a child, he had suffered from a severe viral brain infection that badly affected his development and left him somewhat intellectually handicapped. He was not an addict and had never even been out of England before he was recruited as a courier. Conviction was inevitable but I cannot feel that his subsequent hanging—the first of a British subject in post-colonial Malaysia, I believe—did much for the cause either of justice or of deterrence. Recent studies show that Malaysia's drug problems continue to grow, as does its HIV-positive population, of whom 74 percent are infected through IV (Intravenous) drug use [17,18].

14.5 Alternatives to Prohibition

Let us now look at some possible alternatives to Prohibition. It is obvious that the "most powerful blow at the drug evil," struck by those confident Prohibitionists 80 years ago in Geneva has very definitely not started any country or society "on a road which eventually can lead only to success." Fortunately, we do not have to look very far because the main alternatives are modifications of the systems that existed before Prohibition arrived, namely some kind of controlled availability as with alcohol and tobacco. Indeed, it is interesting and probably relevant that the one great success in persuading large numbers of people to reduce their consumption of a particular drug, or not to start consuming it in the first place, has involved tobacco in many Western countries. And yet tobacco has not, until relatively recently, been the focus of major government campaigns and has never been Prohibited in Europe except for a few local, half-hearted attempts by mainly Calvinist rulers in the 17th century [19]. The undoubted changes in public attitudes to smoking have probably been due largely to sensible education—mainly through the media—and by informed debate rather than scare tactics. Furthermore, although it is not difficult to portray or regard the illicit drug barons as seriously ruthless and wicked people, at least they have never tried, as the tobacco barons most certainly tried, to muddy the waters of public debate by claiming that their product was not merely harmless but might actually be good for health.

As with the problematic consumption of other intoxicants, heavy cigarette-smoking is found disproportionately among the least educated, the least employed, and—all too often—the least employable section of society, which naturally happens also to be the poorest and the most prone to violent and property crime. Courtwright correctly points out that whereas opium use had once been a predominantly middle-class and female phenomenon in America, the increasing involvement of this high-crime section of society with opium and cocaine at the turn of the 20th century was an important factor in the demonization of both certain intoxicants and of some of their users. However, it is surely precisely because users from this underclass have, by definition, so little respect for society and its regulations that they found it so easy to evade Prohibition and to satisfy their habits illegally. That is presumably why the gangsters and mafiosi were able to move in so quickly. The criminal connections were already in place.

This underclass also begets a large proportion of those children whose upbringing is far from ideal and whose prospects of escape from its various ghettoes are therefore even lower than usual. It would, of course, be a rather good thing if poverty, ignorance, parentless children, and so forth could be abolished or even seriously reduced and it would probably lead to a significant reduction in the number of problematic heroin and cocaine users. However, rather like Prohibition, attempts to abolish them have hardly been crowned with success, even in our own Western backyards. For a brilliantly jaundiced view of this underclass and of the depressing unlikelihood of its foreseeable improvement, as well as for an interestingly dissident

view of the nature of opiate addiction and of its treatment, I recommend a recent book by Dalrymple [20], the nom de plume of an exceptionally well-read and well-traveled psychiatrist, recently retired from working in prisons as well as hospitals—a background that powerfully informs his prolific journalism. He argues that both the pleasures and the pains of opiates have been exaggerated by several generations of opium-obsessed poets and novelists from Coleridge and de Quincey to Cocteau and Burroughs, that the alleged horrors of withdrawal are grossly exaggerated and are used by prisoners to manipulate doctors (especially in prisons) to prescribe opiates for hedonistic rather than alleviatory reasons, and that many addicted prisoners would still be criminals even if heroin were legalized. There is some truth in all of these arguments, but only some. His claim that there is a moral and volitional dimension to addiction is important and justified and I have often made it myself [21,22]. However, to argue that therefore attempts to help addicts with medication or psychosocial interventions have no positive evidence-base and are doomed to failure requires the massaging or discounting of much robust and convincing evidence.

The first point to make is that ending Prohibition does not mean ending controls. On the contrary, it means, at the very least, that control could pass from the gangsters, drug barons, and other "hard men" to the community and its representatives. The legal regulation of production and supply and controlled availability at prices that do not make acquisitive crime almost inevitable should return us to something like the situation that existed in the late 19th and early 20th century. It would probably not have any immediate effect on the numbers of people using and abusing the various illicit intoxicants but it would remove a very important incentive for such people to steal or worse to pay for them. Appropriately taxed, the sale of these decriminalized intoxicants would, as with alcohol and tobacco, add significantly to government revenues. The realization in the United States, in the early years of the post-1929 depression, that Prohibition was depriving the government of very large amounts of tax revenue, and that its more prosperous citizens were paying much higher income taxes in consequence, was a powerful reason for its repeal a few years later [5]. The reduction in prosecutions and incarceration would also save significant amounts of singularly unproductive expenditure. There is even an argument for taking the manufacture of these intoxicants out of the normal capitalist framework and entrusting it, at least partly, to a nationalized industry. This has happened with alcohol in some countries, including Britain, which set up a government brewery to supply the newly prosperous munitions workers of Carlisle during the First World War. (Indeed, there were similar local initiatives in English towns like Dorchester and Salisbury in the 1630s.) As well as beer, they provided work for the unemployed and revenue for poor-relief and other municipal obligations [23]. The government also introduced restricted drinking hours nationally at the same time. The brewery survived, still nationalized, until the 1970s. The restricted drinking hours are still with us, though recently much relaxed in spite of a steady increase in alcohol-related illness and mayhem in the last 20 or 30 years, especially among women.

In some ways, the excessive use of intoxicants by a smallish minority of people is not so much a drug problem as a youth problem. The thing that I always found rather shocking when taking a history from my heroin patients—in the sense that I never quite got used to it—was the frequent admission that their regular use of intoxicants so often began when they were barely into their teens. Tobacco use started even earlier, usually at 11 or 12 if not sooner, but cannabis and alcohol use were often well established by 15, ecstasy, LSD, amphetamine, or cocaine by 16 or 17, and heroin by 18–20. (Solvent abuse—glue-sniffing—other than experimental or transient was not common among my patients and was regarded as a loser's game by most of them.) In other words, most of these people became regular users of powerful intoxicants when they were still of school age, were legally obliged to attend school and, most importantly, were not regarded as meriting full adult rights and freedoms.

That is why I differ from many of the people who, like me, argue for decriminalization but who also argue against the idea of increased or random drug testing. It seems to me that by not testing school pupils up to the age of 16 (or whenever education stops becoming compulsory) we ignore a very valuable opportunity to influence the age at which intoxicant use starts. At the very minimum, a few controlled studies seem indicated but I believe that if 15 or 16 year olds knew that their choice and use of intoxicants of all kinds would be measured and made known both to the school and to their parents as routinely as their height, weight, eyesight, and school grades usually are, it would probably deter many of them from starting to use them until they could do so without making the fact semipublic. Especially, if there were some sanctions against persistent noncompliers, such as having to attend somewhere for work, instruction, or merely for detention on Saturday or Sunday afternoons. Testing, both random and focused on pupils who appeared to be intoxicated, might greatly improve the attendance and performance of many pupils who at present come to school in an acutely or chronically intoxicated state and thus leave school considerably less literate, numerate, and socialized than they might be. They are thus immediately at a strong disadvantage in the market for satisfying jobs, not to mention satisfying relationships or further education, when they leave school. To maximize this benefit, of course, we need to take very seriously the massive problem of truancy, but truancy is even easier to detect than the use of intoxicants and the resources freed up from ending the generalized war on drugs could profitably be redeployed in a much smaller, simpler, more focused, and probably more winnable war against underage drug use—of all kinds—and the truancy that is often associated with it, both as cause and effect. Far too many of the relatively small but disproportionately troublesome core group of damaged and damaging users were already heavy users at an age when they could have been identified and, in at least some cases, diverted from lives that too often turn out to be truly nasty, brutish, and short.

Apart from Maoist China, about the only other reasonably developed society that does not, yet, seem to have much of an illicit intoxicant problem is Cuba.

One cannot always believe what even fellow-physicians tell one in a totalitarian society, but I tended to believe the several doctors who told me that they had never seen or heard of a typical teenaged or young adult injecting drug user. Of course, Cuba too is a repressive police state and geographically isolated as well. Those are surely important factors, but Cuba also takes very seriously the education of its children and Cuban teachers convincingly assured me that truancy was regarded there with equal seriousness. If pupils are not at school when they should be, their teachers will soon sound the alarm and the police and other organs of social control will usually locate them and return them to education very promptly. If necessary, under-duress. Research in Britain back in the late 1970s showed that such comparatively forceful interventions had a much more positive effect on truancy and the crime that is often associated with it than merely requiring the errant pupils to talk about their problems with a social worker [24].

It seems obvious to me that any attempt to reduce the number of children and young adults who develop problematic intoxicant use must include a similarly vigorous approach to both truancy and education. That is one obvious contender for the extra money that would become available following the end of Prohibition. And if, as we are regularly told by Prohibitionists, the war on drugs is such a serious threat to life as we know it that it requires and justifies the major erosion of some basic civil rights, then let us at least try focusing this erosion on a part of the populace—children up to the age of 16 or so—who are universally agreed not to merit the same range of civil rights that adults take for granted in Western societies. In this respect, incidentally, scientific and technical progress has made life easier for the monitors and more difficult—but also more dignified—for those who would rather not be monitored. For urine tests, the collection of the specimen needs to be directly observed if cheating is to be prevented and discouraged. This is undignified at best and raises obvious additional problems when the private parts of young, sexually aware, and sometimes very manipulative pupils have to be observed by adults. Fortunately, while urine testing still has an important role, testing of saliva, breath, sweat, hair, and blood from a tiny finger-prick are alternatives that not only minimize indignity but also increase the range of potential intoxicants that can be detected [25]. Naturally, these testing programs should cover alcohol and nicotine, for if we do not take cigarette-smoking seriously, we are in effect saying that we do not much mind if a pupil of 10 or 13 gets addicted to a habit that is more likely than any other choice of intoxicant to damage his health and shorten his life. Hair testing, in particular, has a unique ability to detect intoxicants that have been used not just in the last few days but in the last few weeks or months, even if only occasionally. When people know that they are very likely to be detected and held to account for actions that are widely deemed unacceptable, the incidence of the actions in question usually falls, often sharply. It should be much easier to deter and reduce the incidence of underage intoxicant use than of underage sex.

Once teenagers get beyond the age at which a well-intentioned Big Brother can legitimately watch them, a different approach is needed, based on controlled

availability at affordable prices. In Britain, a typical moderately severe alcoholic drinking the equivalent of a bottle of spirits a day needs to find about £10 daily, alcohol being more heavily taxed than in most European countries. Probably because few alcoholics are nonsmokers—this will be in addition to 20 cigarettes, which will set him back another £5. In contrast, his heroin-smoking equivalent with a 1 g habit will have to find nearer £40 a day (plus cigarettes). Yet, pharmaceutical heroin (diamorphine) is a relatively cheap drug. As powder, 1 g (equivalent to about 2.5 g of British street heroin) retails at about £5 (c. \$10/€7) in Britain. Without Prohibition, our typical user might only need to find about £2 a day. Even with high taxation, the cost might not exceed the sort of daily expenditure on beer or wine and cigarettes that a sizeable minority of citizens regards as pretty normal and affordable. Something of that sort was the immediate response of many U.S. towns and doctors to the initial criminalization of opiate consumption by the Harrison Narcotic Act in 1914. Numerous morphine prescribing clinics were set up which enabled opiate addicts to get a regular supply of opiates—and thus, in many cases, to be able to continue to function and to work—without resorting to crime. Their addiction, in effect, was medicalized rather than criminalized. This system—so obviously similar to the Methadone Maintenance/Harm-Reduction approach that is now widely accepted to be an effective intervention—functioned well until the courts decided that it breached the Act.

Because Prohibition is governed by the United Nations (UN) drug conventions of 1961, 1971, and 1988 that require over 150 countries to incorporate into their laws criminal sanctions for the production, supply, and use of certain drugs, it is truly a global affair. This provenance also makes it much more difficult to change the laws because those which affect the Prohibited status of these drugs are supposed to be handled only at an international level rather than in the parliaments of individual states. However, in response to the failures of Prohibition, the relevant national laws have been greatly modified in many countries, so that the mere possession of modest amounts compatible with personal use, as opposed to trading, is not an offence, or is dealt with administratively, rather like minor traffic offences. It is also becoming increasingly common for senior policemen, judges, and politicians to question the fundamental basis of Prohibition and to point to the contrast between what its proponents claim and what actually happens. The British House of Commons considered the issue of decriminalization in the 2002 report of the Select Committee on the Home Office, to which, as it happens, I was invited to give evidence [26]. They stated that they still resisted the arguments for decriminalization, but that if the situation did not improve significantly in a few years, they would have to look at them again. I do not think that anybody believes any such improvement has happened or is likely to do so, but I do not imagine that this means that fundamental reform is just around the corner. Transform—the main British group working for a change in the laws and whose Web site www.tdpf.org.uk is a useful source of statistics, official reports, and other information—believes that substantial change is likely by 2020. I suspect the process, if it happens at all, may move rather more slowly.

Non-British readers may be surprised to know that in Britain, prominent citizens, such as academics, entertainers, athletes, retailers, and industrialists as well as those who give generously to the major political parties, can be appointed to the House of Lords (also called the House of Peers), our parliamentary system's Second Chamber. It has powers to initiate and, up to a point, to amend legislation and until very recently, there was a majority of hereditary peers. In consequence, it has several members whose fame, fortune, and influence rest partly or wholly on their ability (or the ability of their ancestors) to manufacture, sell, export, advertise, and generally encourage the consumption of enormous quantities of alcohol and tobacco. Personally, I think societies that give peerages and other marks of approval and respectability to the manufacturers and distributors of alcohol and tobacco (if they do it on a large enough scale), while giving prison sentences to people who grow a few cannabis plants for their own use or supply cannabis to those who cannot be bothered to grow their own, deserve all the problems that they get.

Ironically, given that Prohibition in the United States was often described by its supporters and even its historians as "the noble experiment," to reverse nearly a century of Prohibition would now almost inevitably be regarded in its turn as an experiment and there will be understandable concerns about increased availability leading to increased use. There are several responses to that. Firstly, increasing use does not mean that all those who use an intoxicant will experience significant problems in consequence. All studies indicate that nonproblematic use, or transient, experimental use, of the most problematic illicit intoxicants—heroin and cocaine is much commoner than heavy or addictive use. The use of currently illicit intoxicants is often a passing phase, closely bound up with adolescence and usually fading away, like adolescence itself. Secondly, it is clear that many adolescents use cannabis but relatively few use cocaine and even fewer ever use heroin. This gradient persists even though those who use one illicit intoxicant will inevitably be part of a network in which access to other illicit intoxicants is not very difficult and where detection is highly unlikely. Furthermore, in some places, it is said to be even easier to obtain some illicit intoxicants than legal ones. Finally, in an age that increasingly demands hard evidence, it is essential to keep pointing out that Prohibition was and remains an experiment with no positive evidence-base at all.

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Chapter 15

Salud Para Todo: Cuba's Revolutionary Approach toward Fulfillment of the Right to Health

Dabney P. Evans

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15.1 The Right to Health under International Law

In a famous 1964 case on obscenity, U.S. Supreme Court Justice Potter Stewart coined what is now known as the Casablanca Test, which is simply, "I know it when I see it" [1]. Human rights are in many ways just the opposite. You know it when you do not see them or do not have them, you know it when your rights are being violated. Human rights are a set of beliefs about the societal basis of human well-being and about what people need to maintain their human dignity. Human rights describe the relationships between individuals and society, specifically government. They are a kind of pact; we pledge our loyalty to our country, and our respective governments pledge to respect, protect, and fulfill our human rights.

More than a set of aspirations, human rights are an arm of international law based upon documents including the United Nations (UN) Charter, the 1948 Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights among others.

The first mention of human rights as an international undertaking can be found in the preamble of the UN Charter which seeks to "... reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small..." [2]. The first mention of health as an international concern is also found within the Charter in Article 55, which states that "... the United Nations shall promote... solutions of international economic, social, health and related problems..." [2].

As a part of the 1997 UN Programme for Reform, Secretary General Kofi Annan called on UN agencies to mainstream human rights horizontally into their programs and activities. Although many of the UN agencies attempted to do this, a standardized conception of human rights—based approaches to programing did not exist. A 2003 interagency workshop resulted in the development of the "Common Understanding" which has now been adopted across many UN agencies. The Common Understanding makes three main points:

- 1. All programs should further the realization of human rights set forth in the Universal Declaration of Human Rights (UDHR) and other international human rights instruments.
- 2. Standards and principles put forth in the UDHR and other international human rights instruments should guide programing activities.
- 3. Development cooperation assists in the development of both duty-bearers and rights-holders [3].

Additionally, the Common Understanding identifies the following human rights principles important for programing:

- Universality and inalienability
- Indivisibility

- Interdependence and interrelatedness
- Equality and nondiscrimination
- Participation and inclusion
- Accountability and the rule of law [3].

Although originally created for the purposes of development programing, the Common Understanding has broad utility across many disciplines attempting to incorporate human rights principles into programing activities. In particular, the Common Understanding has great relevance to rights-based approaches to public health. As states develop and implement public health programs, they should strive to incorporate the principles espoused in the UN Common Understanding.

Health has existed as a codified human right since the earliest of the modern human rights documents [4]. In simplest terms, the relationship between health and human rights can be described threefold as follows:

- 1. Impact, positive or negative, of public health policies and programs on human rights.
- 2. Impact of human rights violations on health.
- 3. Synergistic and interdependent relationship between health and human rights [5].

Article 25 of the UDHR provides a broad definition of the right to health in stating, "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control" [6]. The human right to health and other health-related rights exists in other international documents, and every nation state in the world is a party to at least one treaty that includes a reference to the right to health or other health-related rights [7].

Article 12.1 of the legally binding International Covenant on Economic, Social and Cultural Rights states, "...The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health...," while Article 12.2 outlines the specific steps to be taken by states party to the Covenant [8].

The obligation of states with regard to human rights is best exemplified by what this author refers to as the mantra of human rights "respect, protect, fulfill" [10]. The maxim of respect, protect, fulfill specifies the obligations of governments to their citizens. Specifically, the obligation to respect means that state governments pledge not to directly violate rights themselves. The obligation to protect ensures that states will not allow other state or nonstate actors to violate human rights. Finally, the obligation to fulfill means that states will promote and facilitate the fulfillment of human rights and at times provide for such rights directly. At the level of individual health professionals, human rights have special significance. Many

public health programs are a function of government and therefore public health professionals acting on behalf of the state maintain the same obligations to respect, protect, and fulfill human rights within their public health practice.

International treaty monitoring bodies interpret the legal language found in treaty texts and provide for their enforcement. General Comments identify the ways in which states must proceed to live up to their obligations under international law [9].

Of special note is General Comment 14 issued by the Committee on Economic, Social and Cultural Rights that highlights the instrumental role of nondiscrimination and equality in fulfilling the right to health [11]. General Comment 14 provides further interpretation of the normative content of the right to health including the elements of availability, accessibility, acceptability, and quality. Normative guidance for states in the development of health systems can be gleaned from General Comment 14.

Similarly, other international and regional bodies have also contributed to the international understandings of the right to health. In 2000, the UN appointed a special rapporteur on the right to the highest attainable standard of physical and mental health (hereafter referred to as the special rapporteur on the right to health), Paul Hunt, who has adopted the twin themes of poverty and discrimination in focusing his work. In his 2006 report to the Economic and Social Council, the special rapporteur on the right to health calls for "an effective integrated health system accessible to all" [12]. In this report as well two previous reports, the special rapporteur has rightly suggested a methodology for the selection of indicators for the measurement of the fulfillment of the right to health. Although such measurement techniques are still in their infancy, the special rapporteur has provided great leadership in this area.

The constitution of the World Health Organization (WHO), Declaration of Alma-Ata, and resolutions of the World Health Assembly (WHA) also provide insight as to the meaning of the right to health at the international level. At the regional level, each of the three regional bodies (the Council of Europe, the Organization of American States, and the African Union) have treaty documents that include the right to health [7]. Although Cuba is not a member of the Organization of American States, the Protocol of San Salvador, an optional protocol of the American Convention of Human Rights, does include an article on the right to health which states, "... Everyone shall have the right to health, understood to mean the enjoyment of the highest level of physical, mental and social well-being" [13].

At the nation state level, over 100 constitutions have provisions which include the right to health, the right to healthcare, or health-related rights such as the right to reproductive healthcare or the right to a healthy environment [12].

15.2 A Country Snapshot: Why Cuba?

To better understand how the right to health is enacted at the level of the nation state it is helpful to explore an example, even if briefly. For the purposes of this

chapter, Cuba has been selected. The reasons for selecting Cuba are many. Cuba is a developing country, and so an obvious choice for a text on sustainable development. Like many developing countries, Cuba faces considerable economic constraints, however, in the case of Cuba these constraints are exacerbated by the U.S. embargo.

Cuba has been accused of violating civil and political rights, although economic, social, and cultural rights (including the right to health) are enshrined in its national constitution. The division between civil and political rights on the one hand and economic, social, and cultural rights on the other is a product of the cold war influence on the development of international human rights treaties. However, 15 years after the end of the cold war, Cuba finds itself "beyond the axis of evil." The political differences between the United States and Cuba make Cuba an obvious foil to the standard notions of economic development (free markets, increasing GNP [gross national product], structural adjustment programs, and democratic governance).

Health has been a national priority in Cuba since the 1959 revolution. Cuba has international and national legal obligations regarding the right to health. Perhaps more importantly the government of Cuba has demonstrated significant and consistent political will in progressively realizing the right to health. In spite of the challenges Cuba has faced both economically and politically, Cuba has for many years demonstrated "First World" outcomes in regards to health. In recent years, Cuba has expanded its health programs to other Latin American and Caribbean nations demonstrating that even with limited financial resources developing nations can work toward fulfillment of the right to health.

Finally, the author of this chapter has visited Cuba on numerous occasions and has witnessed the way in which the Cuban public health system operates allowing for firsthand, if anecdotal, accounting to supplement other sources of data.

15.3 Cuban Legal Obligations for the Right to Health

We are in a decisive period. We still need to see if the human species will survive or not. We are born with instincts, but no one is born kind. The only living being able to fight instinct is man. If we are to be saved, then we will be saved by ideas, which should be disseminated. What is the use of money beyond what we need? What people need the most is dignity, and it costs nothing. (Cuban President Fidel Castro, [14])

Cuba has ratified numerous international human rights treaties relevant to health including the Convention on the Elimination of all forms of Racial Discrimination (CERD), the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW), the Convention Against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment (CAT), and the Convention on the Rights of the Child (CRC) [15].

In addition to its international obligations, Cuba has significant constitutional and national law related to health and health-related rights. The Cuban Constitution was adopted 24 February 1976 and amended in July 1992 and June 2002 [16].

Several articles of the Cuban Constitution make specific mention of sickness, health, and medical care. Article 9 states, "The state as the power of the people and for the people, guarantees...that no sick person be left without medical care..." [17].

Three articles outline a policy of nondiscrimination and the protection of vulnerable groups. Article 43 designates a policy of nondiscrimination in stating, "... The state consecrates the right achieved by the Revolution that all citizens, regardless of race, skin color, sex, religious belief, national origin and any situation that may be harmful to human dignity...be given health care in all medical institutions" [17]. Article 44 recognizes the equality of women and guarantees maternity leave in stating, "Women and men have the same rights in the economic, political, cultural and social fields, as well as in the family... The state looks after women's health as well as that of their offspring, giving working women paid maternity leave before and after giving birth and temporary work options compatible with their maternal activities" [17]. Article 49 affirms the protection of workers, "The state guarantees the right to protection, safety and hygiene on the job by means of the adoption of adequate measures for the prevention of accidents at work and occupational diseases. Anyone who suffers an accident on the job or is affected by an occupational disease has the right to medical care and to compensation or retirement in those cases in which temporary or permanent work disability ensues" [17].

Finally, Article 50 guarantees the right to healthcare and protection of all Cuban citizens and the means by which it plans to fulfill this right, "Everyone has the right to health protection and care. The state guarantees this right;

- by providing free medical and hospital care by means of the installations of the rural medical service network, polyclinics, hospitals, preventative and specialized treatment centers;
- by providing free dental care;
- by promoting the health publicity campaigns, health education, regular medical examinations, general vaccinations and other measures to prevent the outbreak of disease" [17].

Public health legislation further outlines the ways in which the state intends to fulfill its commitments related to health. Article 4 of the Public Health Act of 1983 (Law 41) sets out the underlying principles of the Cuban public healthcare system:

- Specialized medicine as a government responsibility
- Universal and free healthcare
- An emphasis on preventive care

- Participatory approaches to healthcare
- Scientific and medical advancement in the prevention and treatment of disease
- Medical cooperation with other nations (Law 41, 1983) [18]

These principles, thought drafted before, find parallels with the principles of universality and participation outlined in the UN Common Understanding as well as other principles enshrined in human rights documents such as nondiscrimination.

15.4 Cuban Health: Past and Present

Before the 1959 revolution, the principles of universality and participation were far from the norm. The state did not guarantee health or medical care as a human right, nor was the improvement of the health of the population a national objective. Although the health of the Cuban people was considered good for that of a developing country, many deaths and cases of diseases went unrecorded and medical treatment was generally limited to those who could afford it with the public health sector virtually nonexistent. Sixty percent of the country's 6000 physicians lived and worked in Havana and 80 percent of the country's hospital beds were found in the capital city limiting health services to the urban elite. Data were reported in aggregate form potentially masking disparities across racial, gender, age, and other vulnerabilities [19].

Dramatic changes to the public health system in Cuba began taking place shortly after the start of the revolution. In 1961, the Cuban Ministry of Public Health (MINSAP) replaced the former health department. Throughout the 1960s, local hospital and medical posts were developed along with programs addressing infectious diseases such as malaria and tuberculosis. By the end of the decade, an integrated national health system had been established and health indicators had begun to reflect this new reality.

By the 1970s the Cuban public health system had already established one of its hallmark characteristics, an emphasis on primary prevention. Community polyclinics which provided a variety of specialized outpatient services expanded with an emphasis on health education and preventive health services (see Figure 15.1). In 1980, the Pan American Health Organization set the goal of two medical visits per capita annually. By 1981, Cuba had achieved more than five visits per capita [20,21]. In 1984, this model of primary prevention was taken one step further with the adoption of the family doctor and nurse team [22]. The doctor–nurse team is now the pillar of the Cuban healthcare system. Each team works out of an office or "consultorio" based at the neighborhood level and serves between 600 and 800 clients (see Figure 15.2). The consultorio is generally a small two-story building, the bottom floor of which serves as the medical clinic while the top story provides a residence for the physician. The family doctor–nurse team sees patients in the office each morning and makes home-visits to patients each afternoon. The family



Figure 15.1 Cuban children in Polyclinio de Jaruco, Havana Province. [Photo credit: Dabney Evans.]

doctor–nurse teams compile basic surveillance data allowing for detailed epidemiologic analysis, and tailored interventions and programing. A team of physicians consisting of an internal medicine physician, a gynecologist, an obstetrician, and a pediatrician based at the nearest polyclinic supervises each consultorio. Each polyclinic serves between 30 and 40 consultorios and each polyclinic feeds into a municipal or provincial hospital.

Because they are based in the community, the family doctor–nurse teams are familiar with the environmental and social conditions of the neighborhood. They are supported in the neighborhoods by community groups such as the Committee for the Defense of the Revolution and the Federation of Cuban Women who provide civil society vehicles for the community to express concerns. In addition,



Figure 15.2 A medical student, nurse, and doctor of family medicine outside their consultorio, Isle of Youth Province. [Photo credit: Dabney Evans.]

the community groups serve as a resource for the public health system in times of need. For example, during the 1997 reemergence of dengue, community brigades conducted a massive sanitation campaign to eliminate the breeding grounds for the mosquitoes that carry the disease [23].

Even with sound public health programing and strong legal and political backing, the modern Cuban public health system has faced almost constant challenges. Aside from the economic difficulties facing most developing countries, Cuba has the added burden of being on the receiving end of the longest embargo in modern history [24]. As an island nation, Cuba is extremely import-dependent exacerbating the impact of the embargo. U.S. restrictions (and influence) further limit potential trading partners resulting in diminished negotiating power even as

Cubans seek to purchase medical supplies and equipment. Several events of the 1990s, which have come to be known as the periodo especial, placed considerable strain on the Cuban public health system [25]. The collapse of the Soviet Union resulted in the loss of Cuba's main trading partner and a one-third decrease in the overall Cuban economy between 1989 and 1992 [26]. In 1992, the US Congress passed the Cuban Democracy Act (CDA), which further limited Cuban access to medical products [27]. The Inter-American Human Rights Commission of the Organization of American States determined that the CDA regulations were a violation of international human rights because of the limitations placed on humanitarian goods such as food and medical supplies [28]. Sadly, the damage to the Cuban public had already been done. The protein and caloric consumption of Cubans decreased dramatically as food staples were strictly rationed and many supplies became unavailable [25]. This food shortage directly contributed to the epidemic of neuropathy seen on the island in the early 1990s [29]. Even in this resource scarce environment, the Cuban public health system responded with programs of antismoking campaigns to prevent, and vitamin supplementation to treat cases of neuropathy [30].

The responsiveness of the Cuban public health system has not always been praised. In the early days of HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome), Cuba implemented policy, which mandated HIV testing, and required that HIV positive individuals be housed in sanitarium facilities for the prevention of disease transmission. The isolation of individuals with an infectious disease is a widely known and extremely effective method within the field of public health. However, Cuba was widely criticized for violating the rights of HIV positive individuals [31]. This example illustrates the competing obligations that nation states face between respecting individual liberties on the one hand and protecting the public interest (as in the case of an infectious disease) on the other. As prevention and treatments for HIV/AIDS have become more widely understood Cuban policy has evolved. HIV testing has been mainstreamed into annual physical examinations [32]. Residence in sanitariums is no longer mandatory for HIV positive individuals. However, many HIV positive Cubans now choose to reside in the sanitariums to receive nutritional and medical support [32,33]. Cuba maintains one of the lowest HIV prevalence rates in the Western hemisphere perhaps, in part, because of its rigorous prevention methods at the outset of the disease [31].

15.5 Beyond the Special Period

The results of the combination of codified legal obligations, political will, emphasis on primary prevention, and responsiveness of the public healthcare system is best evidenced in the health outcomes of the Cuban people, which may serve as proxy measures for the fulfillment of the right to health.



Figure 15.3 A women in old Havana. [Photo credit: Dabney Evans.]

Throughout the life cycle, from birth to death, Cubans health indicators are on par, if not better, than those of some developed nations. Skilled medical personnel attend 99.9 percent of births [34]. The infant mortality rate is 5.8 per 1000 live births and life expectancy is 75 years for men and 80 years for women [34,35].

Immunizations rates are between 98 and 99 percent with the exception of the Hib3 injection for which 94 percent of the population is covered [34]. The leading causes of death in Cuba are the same as those in developed nations, diseases of the circulatory system, cancers, and cardiovascular disease resulting in the common Cuban colloquialism, "We live like poor people, but we die like rich people" (see Figure 15.3) [35].

15.6 Conclusions and Ways Forward

It is the duty of man to raise up man. (José Martí, Cuban revolutionary and poet)

The Cuban public health system is entirely state run and operates primarily in a top-down model. Although this approach may not be useful in all country settings, it has proven successful for this small island nation. Cuba's success in health begins with international and national level legal obligations toward the right to health. The obligations are supported through political will at the national level with public health legislation and financing. The public health budget as a percentage

of GDP (gross domestic product) was 7.3 in 2003 [34]. The funds allocated for public health are used efficiently with an emphasis on primary prevention. The Cuban public health system is further characterized by its accessibility, affordability, acceptability, and quality, characteristics recommended under General Comment 14 of the UN Economic and Social Council [11]. Cuban public health services are universally available to all Cubans across the country for no cost reiterating the principle of equity, which is inherent to the system. An epidemiological basis and rigorous surveillance at the local level allow the system to provide rapid responses to public health needs.

Cuba has had limited economic resources, but has virtually unlimited human resources. These human resources are a vital part of the success of the Cuban public health system. Public health activities are primarily based at the local level and community involvement is extremely important. Ongoing political commitment to health has meant that superior health services have become a popular expectation. Community level organizations and individuals provide feedback regarding these expectations at the family–doctor level on an ongoing basis. The participation of lay members of civil society in public health campaigns further strengthens the system.

Public health professionals provide another important human resource for the public health system. Although there were just over 6000 physicians in Cuba in 1959, by 1981 there were over 16,000 and now the doctor/patient ratio of 62 physicians per 10,000 residents is the highest in the world [35]. When asked in 1978 by a U.S. official about the possibility of having too many physicians, President Fidel Castro stated, "Why not have a physician on every corner, every boat, in every factory?" [36]. By 2004, Cuba had over 68,000 physicians and over 380,000 health workers [37].

Now Cuba is working toward providing a physicians on every doorstop in every nation to fight one of the developing world's most pressing problems—the brain drain. Cuban doctors have long served abroad. In 1961, the first Cuban physicians served abroad in Algeria [22]. This tradition has continued through the present day and 25,000 Cuban doctors are now serving in 68 countries [38]. In addition to sharing its own human resources throughout the world, Cuba is also committed to developing South—South partnerships. In the aftermath of Hurricanes George and Mitch in 1998, Cuba opened the Latin American School of Medicine that by 2005 had already enrolled 10,000 students from 27 countries [37]. Through its humanitarian missions and growing global medical education efforts, Cuba has demonstrated a commitment to solidarity through health with its sister nations around the world.

The case of Cuba provides a model that despite economic challenges developing countries can achieve health successes. There is little doubt that the Cuban public health system will face future challenges in regard to its financing, chronic disease management for the Cuban population, and new public health challenges because of the growing tourist industry. However, the adaptive nature and tenacity already

exhibited by the Cuban public health system bode well for its future and for other nations who adopt similar principles based on the right to health.

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Chapter 16

Looking for More Inclusive and Sustainable Health Policies: The Role of Participation

Ariel Frisancho Arroyo

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This chapter is based on the author's presentation at the Roundtable on Social Participation in Health and Human Rights: Examples from the field. *Third International Conference on Health and Human Rights: Lessons Learned from Rights Based Approaches to Health.* Emory Conference Center. Atlanta, GA. April 14, 2005.

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16.1 Introduction

Is it possible for citizens and civil society organizations to propel participatory strategies for making public policies and institutions to contribute decisively with the realization of health rights?

Increasing understanding grows on the importance of participation as a key principle for the development of legitimate and sustainable social policies. This chapter draws on the experience of the "Improving the Health of the Poor: A Rights Based Approach" Program (hereafter referred to as "the Program") implemented by CARE and the United Kingdom Ministry for International Development (DFID [Department for International Development]) at Peru. The chapter develops four issues: (a) a brief explanation of the country context and chief challenges for health rights in Peru, (b) why to consider social participation a paramount issue to both improve healthcare systems and to contribute with the realization of health rights, (c) which strategies were emphasized along the experience, and (d) lessons learned:

four layers to address when working a model of governance and rights engagement—capacities of both right-holders and duty-bearers; the quality of the point of interface between the people and the duty-bearers, where interchange of ideas, negotiation, and service delivery occurs; the broader policy environment; and the role of international community—and the importance of increasing not only quantity, but also quality of citizen participation.

16.2 A Challenging Background

Peru is the third largest country in South America, located at the middle-west of this region, with a population near 27 million, with 70 percent living in cities, most of them in a narrow coastal strip. The greatest part of the country is a more sparsely populated mountainous area of deep valleys and high plains that drop down on the east to the tropical forest zone of the upper Amazon and its tributaries. Political division comprises 24 regions, organized upon provinces, made up by districts. In the Andean area, a district could be related up to 20 or 30 rural communities, each one with elected community leaders, though with no management of public resources. Districts are the basic units for Peruvian political and geographical ordering.

With its average annual income, Peru is considered by the international aid community as a middle-income country. However, Peru is highly unequal, with many people suffering deprivation. One half of Peruvians live in income poverty and a fifth in extreme income poverty. Most of the extreme poor are indigenous people living at isolated communities in the rural areas of the Andes (highlands) and the rain forest [1].

The right to health is far from being universally achieved by the Peruvian society. Social rights—specially, health rights—have not progressed at the same pace as civil and political rights. When compared with the latter, the realization of the right to health at Peru—as happens at many countries of the Latin American region—faces strong challenges. First, there is a visibility problem: Peruvian society has developed still limited knowledge on what health rights mean, and common people are not even aware of their existence. Moreover, people and human rights organizations count with limited legal mechanisms of claim and demand. Although National Health Law includes an article which establishes rights of health service users, its incomplete regulation—eight years after the Law's sanction—prevents its implementation. Finally, this reality is associated to a high degree of social tolerance: most poor people are significantly excluded from mainstream Peru and frequently suffer discrimination and poor access to public social services. However, those conditions do not motivate public claim or indignation [2].

It seems to be generally agreed that health rights realization demands a long-term process, excessively tied to the availability of resources. Nevertheless, questions rise on the pace of this progressiveness, on how public resources are allocated to this

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purpose, and on the effectiveness of their use, as health rights realization still faces limited political willingness toward the fulfillment of state obligations.

These premises stress the paramount importance of public policies, particularly social public policies, for the complete realization of health rights. The progress toward a situation in which the right to health is translated into inclusive strategies and actions that contribute decisively with universal access to qualified healthcare demands more effective, legitimate, and sustainable social policies.

Going Right to the Rights: The Importance 16.3 of Citizen Participation

International literature suggests that citizen participation is a necessary condition to ensure the sustainability and legitimacy of social policies and the development of better democratic practices. It is also argued that successful citizen participation would only be possible when decentralization of decision making and resource management occurs, empowering people [3–6].

The Program's goal is to improve the health of the poor and excluded population of Peru, by the improvement of the relationship between the Peruvian society and the state. Through better relationships and improved institutions to interact with state officers and authorities, people would be involved in the health policy design and implementation, propelling a meaningful role of citizens' needs and demands in government decisions.

Most of social rights initiatives developed in Peru focus their efforts on surveillance and legal demand for appropriate fulfilling of state obligations (claim and shame approach). Additionally to this essential approach, the Program has raised the importance of social participation as a means, looking for advocacy for more inclusive policy contents and increased accountability from the state, but also participation as an end itself, for empowerment, and citizenship building. Therefore, the Program initial approach emphasized the promotion and guarantee of the right to health on the basis of demand-oriented strategies [7].

The Program outputs are as follows: (a) civil society organizations develop and strengthen strategies for making health sector policies and institutions respond to, protect, and promote health rights of the poor and excluded people and (b) people and health providers have implemented participatory and inclusive mechanisms for planning, provision, and evaluation of health services.

16.4 The Experience: Strategies Developed for **Strengthening Participation of Right-Holders**

The Program carried out (a) strategies to raise awareness and disseminate information about health rights at the national, regional, and local levels; (b) strategies for the development of capacities for the realization of health rights, strengthening civil society health networks, and citizen participation for analysis and decision making on health actions, through their direct participation at invited spaces or by making social surveillance of health policy implementation; and (c) strategies for building partnerships and advocacy for realizing health rights for poor people, and promoting alliances with organizations committed with a rights approach to increase the scope and sustainability of the Program efforts.

16.4.1 Constructing Policy Proposals from and with the People

First efforts were oriented to strengthen social participation improving capacities among regional and local civil society networks for carrying the voice of the people, especially those living in poverty, to the policy design and public debate process.

The Program technical team identified ForoSalud as a key partner for this purpose. ForoSalud grew along 2002 as a network of networks, a social health movement integrated by many actors from civil society (health associations, individual professionals, non-governmental organizations (NGOs), and community-based organizations), brought together to promote and defend citizens right to health, by analyzing health policy and formulating alternative proposals to those of the government. With aspirations to become a national movement, ForoSalud propelled along 2003 and 2004 the constitution of regional networks and their positioning into public policy dialogue.

Along 2004 the Program became a close partner of ForoSalud for capacity building processes among its national directorate and seven regional civil society networks for developing national and regional health policy proposals with a bottom-up approach, which become agendas for public health policy dialogues with national and regional authorities and other civil society members. This "strengthening voice" process launched with the civil society networks trained them on different methods by which civil society representatives ran local selfdiagnosis exercises on health issues among poor people. Successive workshops on reflective analysis focused on the potential of participation for the realization of health rights and building their own capacities to participate at invited spaces and for making social surveillance of public policies. A particular interest of the Program was bringing representatives of the rural communities and provinces which constitute the region to the workshops, to increase democratization of the regional ForoSalud itself. Moreover, some of the policy dialogues to construct the civil society proposals were entirely discussed in quechua, the native language of the rural people, as happened at Huancavelica and Puno (the poorest Andean regions of Peru).

As a result of these processes, regional policy proposals and agreements began to be constructed with the participation of a wide range of local health organizations, and have become a sort of navigation letter to facilitate the systematic surveillance from civil society and the transformation of evidence in pro-poor health policies [8].

16.4.2 Constructing the Concept of Health Rights within Rural Communities

Bringing the voice of those traditionally excluded to the assessment of their health rights contributes to share a direct view of their needs and demands and the way people with different cultures understand health determinants and health rights [9]. The Program also developed a variety of strategies to identify and work upon conditions which limit the realization of health rights: implemented a pilot intervention for the participatory construction of the concept of health rights at selected rural communities of Huancavelica. Through different participatory methods, with close respect to their native language, customs, and local culture, the Program enabled poor and mostly excluded people to participate in the evaluation of health actions. A second phase of this pilot experience endeavors rural people to oversee the quality and coverage of public health services and the realization of their health rights in association with health providers and Shared Administration Local Committees (Comités Locales de Administración de Salud, CLAS). The former make part of a Peruvian Ministry of Health (MoH) National Program, where community representatives elected by the people, altogether with the health professional in charge of a district health facility, integrate a local committee to realize a joint management of that public health facility and health services [10].

16.5 The Experience: How to Improve "Voice" Listening?

When analyzing the chief challenges of the strategies and actions developed, the Program technical team realized that strengthening "voice" was not enough to strengthen governance. Although important achievements on the democratic construction of voice with the bottom-up approach, it become increasingly clear for the need of a two-partner approach, so the initiatives undertaken by the people and their organizations could meet adequate responsiveness from the state, contributing with more accountable and responsive public health services. Moreover, it would develop better learning conditions on the factors and circumstances which increase or limit improved governance on the basis of democratic participation at different levels of the health system. Therefore, the Program team took a strategic decision: to advocate the National Health Authority, the MoH herself, on the importance of developing an institutional health rights approach.

16.5.1 How to Begin Looking for a "Common Language"?

A key issue was trying to engage Health Authorities with a Rights-Based Approach (RBA) on the basis of common interests and views. It turned paramount to construct that institutional view in a participatory way. In successive coordination meetings with the Peruvian Minister of Health and her main advisers, the Program team tried to sensitize them on the importance of developing a process of institutional engagement with an RBA.

There was an appropriate timing for that purpose: Paul Hunt, the United Nations (UN) special rapporteur for the right to health was visiting Peru one month after (June 2004). The National Health Authority, led by the MoH herself, wanted to work a proposal. There was an initial political will, but not necessarily all the institutional capacities to work it out.

Program technical team and MoH officers in charge of the design of the process decided to launch a joint construction of what would be the first orientation guidelines for an institutional approach to health rights, using the same methodological principles for working with the Andean rural communities: to begin from the public health officers own view and experience.

Institutional workshops were made to ground an appreciation of health rights and strategic guidelines for health rights realization in the own understanding of MoH officers. After the review of workshops outputs, five main guidelines were defined to analyze main institutional practice, chief challenges, and proposals: national dissemination and sensitization on the contents and meaning of health rights, universal access to qualified health services, social participation, reproductive and sexual rights, and cultural adaptation of health strategies to reach the indigenous people.

16.5.2 The Five Principles of the Rights-Based Approach

Additionally, for the construction of the institutional proposals, five crosscutting principles of the RBA were suggested: "inclusion," for building societies based on the values of equity and nondiscrimination; "participation," as a right, and also as a transformative process toward empowerment and citizenship building; "democratic deliberation within the public sphere," creating and strengthening national and regional invited spaces for building consensus between public policy makers and people representatives and strengthening mechanisms for dialogue and debate; "shared responsibility," promoting the fulfillment of state obligations, and also those collective and individual responsibilities on health determinants; and "collective action at the local level," respecting the diversity and culture of the population.

MoH main officers participated along two workshops drawing proposals for the realization of health rights on the basis of their specialized knowledge. The main conclusions were systematized and shared with the MoH. Paul Hunt, already

finishing his two-week visit to Peru, was invited together with DFID and the Pan-American Health Organization Representative in Peru to share and comment the workshop outputs in its closure meeting. That day, the MoH proposed the beginning of a public dialogue on this key issue, and transformed the institutional inputs developed by the MoH officers into a proposal for a National Mobilization for Health Rights and Responsibilities, based on the five workshop guidelines.

Although the new institutional approach was disseminated nationwide, it was not evident among all health authorities' attitudes neither reflected in immediate implementation of specific decisions in the health services provision. Nevertheless, some attitudes of the MoH officers were significant. A sound, specific change occurred in the MoH approach to its relation with civil society representatives. There was an opening, participatory promoting with ForoSalud and other organizations, especially those from the feminist movement, previously excluded by ideological hegemonic nontolerant trends led by former MoHs of Toledo's government (2001–2003). Different initiatives, both from the MoH and ForoSalud tend to improve those relations from previous nonexistent, when not confrontational ones.

16.5.3 A National Mobilization for Health Rights and Responsibilities

The National Mobilization for Health Rights and Responsibilities was presented by the MoH to the health community and public opinion at the Second National Health Conference (Lima, August 2004), which was a first public encounter between the state authorities and the national and regional civil society network representatives. The Program, among other main partners (Policy Project, Ford Foundation), supported the realization of this massive meeting, led and organized by ForoSalud, where nearly 3000 nationwide delegates discussed and presented the health policy proposals constructed with an RBA (see previous section) to the Peruvian Minister of Health, who attended the conference. When inaugurating the meeting, the MoH also announced the Health Rights National Mobilization.

A key note of that meeting, also observed at the regional meetings where the civil society representatives presented their health policy proposals, was the way visions differ among MoH officials and civil society participants: while the approach of MoH participants were essentially based on sickness and traditional risk factors, most civil society representatives brought to the discussion table the importance of water and sanitation, education, and adequate nutrition as key health determinants, which required coordinations with more public sectors than health sector alone. The health determinants approach, lately developed by the MoH, evidenced different, enriching views and concerns brought by lay, nonspecialized people.

The MoH prioritized two main guidelines for implementing its national health rights and responsibilities initiative. They were (a) the dissemination and

sensitization on health rights and responsibilities and (b) the promotion of citizen participation as a means for the construction and dialogue around health policy proposals. As a first initiative, MoH launched a "Health Letter" inviting the people to present their perception of their main needs and views on their health, to meet state responsiveness.

Additionally, along eight nationwide macroregional workshops, the main Ministry officers analyzed the way to propel health rights and responsibilities at the regional and local levels. In these meetings, national and regional health officers and civil society representatives coming from different regions shared concepts on health rights, the importance of social participation, and strategies for increasing governance among the health sector. Key actors of these health rights dialogues organized by the MoH were public health officers who were currently participating in an International Health Rights Diploma launched by the Program and the Ombudsman Office. One of the principal issues of attention and debate was the participatory performance of Regional Health Councils, invited spaces propelled by the Peruvian MoH to coordinate the regional health policies.

16.5.4 Challenges for Engaging with a Rights-Oriented Health Policy

Would the speech turn into concrete strategies and actions for fulfilling state obligations on the right to health? Having raised the importance of a complex, public institution initiating an engagement process with a health rights perspective, there is still a long way to go. Peruvian MoH is just committing itself with a rights speech. By the early 2005, it was created as a functional unit of health rights, gender equity, and crosscultural issues, with the commitment of grounding conceptual guidelines into concrete practices throughout the Ministry of Health.

That becomes an important signal, but definitely nonsufficient, bearing in mind the still limited capacities of health workers for a correct understanding of the right to health and how to implement an institutional RBA; moreover, the traditional reluctance among some health authorities, unions, and professional bodies (mainly physicians) to allow people participation in the design, implementation, and evaluation of public health policy or simply their rejection to change the Ministry of Health's current way of conducting its services. This issue turns paramount when analyzing that both the civil society health policy proposals and the first reports of people opinions collected by the Health Letters address in the very first place the limited quality of public health services, tackling issues as discrimination, and abuse from some health providers.

Peruvian MoH has stressed a participatory approach, strengthening the National Health Council and the implementation of Regional Health Councils. However, the analysis of the composition of those invited spaces evidence the hegemonic presence of health providers and a limited representation of civil society. The next section

analyzes conditions and factors which influence the success of participatory spaces for strengthening both governance and health rights engagement.

The realization of health rights also needs a strong political will to overcome the traditional sector approach: The UN special rapporteur on the right to health's primary recommendation after his 2004 visit to Peru was that the government should formulate a comprehensive health policy and strategy, underpinned by the right to health, specifically designed to address inequity, inequality, discrimination, and the situation of those living in poverty (a pro-poor equity-based health policy). The recommendation anticipated a health policy, strategies, and economical resources allocated accordingly [11]. Although advances on some specific issues of health policy and new strategies and actions to promote participation and to address the different cultures of the people when receiving healthcare services, little progress has been made to set an integral, comprehensive pro-poor, equity-based health policy.

16.6 Analysis and Lessons Learned

16.6.1 Setting a Health Rights Initiative from the State

A first question raised from the Program experience would be how a traditionally closed and complex institution as an MoH could be interested in developing an institutional rights approach.

Walt stresses policy design is not only linked with policy contents, but also with policy context and actors [12]. Peruvian MoH, Pilar Mazzetti, had just initiated her mandate and was interested in improving relations and dialogue with civil society and constructing a rights-based speech for the MoH. The Minister was supported by many of her advisers. Most of them came from previous experiences in civil society organizations. The interest of National Health Authorities met the Health Rights Program's offer of technical assistance to strengthen listening capacities.

From other source of analysis, Kingdon's three stream model for agenda setting conceives policy being made when a major window of opportunity opens up at the same time for three different streams: the problem stream, which gathers social issues with more or less visibility; the politics stream (also called the solutions stream), which carries alternatives to face the social issues; and the policies stream, which selects from both problems and politics stream those proposals which will become public policy [13].

The announced visit of the UN special rapporteur on the right to health became this window of opportunity to take a closer look to conceptual developments and practical experiences carried by civil society organizations on this important issue. Adding to this, the good relations of the Program with some of main MoH advisers and the nonconfrontational approach of CARE's proposal were also factors that could influence the Minister invitation to design the institutional workshop for the

joint construction of the MoH's first conceptual approach to health rights and responsibilities [14].

16.6.2 New Opportunities for Citizen Participation

A key issue brought by the Program to analysis with MoH officers was the characteristics of social participation. In many countries around the world, conventional models of political participation have come to be complemented with new spaces to which civil society organizations and community representatives are invited to contribute with the policy shaping and implementation process. These new institutions or structures gather state representatives and other stakeholders in deliberation over resource allocation or priority-setting, and are creating new opportunities for public involvement in governance rather than traditional implementation-focused mechanisms. The major promise of this new approach of democratic decentralization is that strengthening social participation and accountability, government will become more responsive to citizen needs and more effective in service delivery [15–17].

Similarly, the ongoing decentralization process at Peru is "installing more chairs at the regional and local decision-making tables." This is also happening at the Peruvian health sector, through the recently created Regional Health Councils, where representatives of health organizations and civil society gather for coordinating health-related issues and discussing proposals for regional health policies. However, the hegemonic presence of health providers (six out of eight members of the councils with only one social organizations representative) poses concerns on how professional or group interests could limit democratic decision-making processes.

Participation in invited spaces at the district level of Peru has gotten both more interesting and challenging: in 1994, the MoH launched a Shared Administration Program (SAP), by which six elected community representatives joined the district health service head, mostly a physician, and constituted the so-called Local Health Management Committee (CLAS). SAP was created for the citizens integrating a CLAS to administer the public health facility to implement population-based local plans. After being negotiated and agreed, those plans were financed by the MoH. Moreover, the CLAS can use the financial resources coming from health services' fees in a more flexible way than traditional health services, which includes the possibility of contracting its own health personnel. At the present time, almost 35 percent of public health facilities of the first level of service provision (local and rural areas) are run by CLAS. Different studies have shown CLAS success as a means of increasing the effectiveness of primary care delivery [18–20]. Nevertheless, such initial success was achieved despite a strong opposition from the MoH Medical Association and some regional government bureaucracies, which resent the loss of direct control over the clinics and did not provide the required technical support to the CLAS [21,22]. Challenges for the SAP have persisted until today, weakening its

potential to promote real democratic participation at the local level, and raising questions on people representation, the way decisions are taken within the CLAS, and the real potential that innovations in the institutional design could have to foster transformative practice.

16.6.3 Three Layers to Attend When Propelling Better Rights Engagement

As seen, government bodies could indeed show appropriate awareness of their obligations related to health rights and promotion of citizen participation and political will to meet them, which is not always the case, but they often lack the capacity to engage in a proper dialogue with civil society. The Program initial intention of advocating for the development of a health rights approach at the MoH soon turned to a process of joint construction of that institutional approach. This is a stage of health rights promotion where technical assistance plays a key role.

A paramount component of this new institutional approach is the promotion of governance for a rights engagement, both from the people and the state authorities/ representatives. Along its development, the Program experience evidenced the need of giving attention to a multilevel intervention (see Figure 16.1), analyzing (a) capacities of both right-holders (civil society networks and rural communities) and duty-bearers (MoH, Regional Health Authorities, Ombudsman Office, local authorities, and health providers); (b) the quality of the point of interface between the people and the duty-bearers, where interchange of ideas, negotiation, and service delivery occurs (this area is comprised of the formal and informal structures, processes, and mechanisms of governance); and (c) the broader policy environment, which enables or constrains that relationship. These three layers of a model for governance and rights engagement need to be worked altogether, if there is a real intention to propel more sustainable and effective rights-based initiatives.

If capacities and conditions are improved among the three layers referred, the initiatives undertaken by the people and their organizations would meet an adequate responsiveness from the state, seeking for more accountable and responsive public health services and developing appropriate learning conditions [23]. This and next sections provide some reflections drawn from the Peruvian experience.

16.6.4 Strengthening Capacities for a Shared Construction and Implementation of Health Policies

Capacity building comprises basic requirements each party needs to be able to enter into that relationship effectively. For the community, those capacities involve a wide range of key issues, from a stable livelihood to basic knowledge about rights and entitlements and capacities for negotiation, and so on.

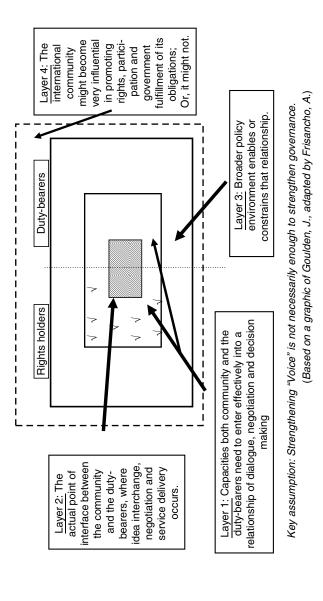


Figure 16.1 Model for governance and rights engagement.

Program partnership with national and regional civil society networks for the participatory construction of health policy proposals constituted itself in a process for voice improvement, altogether with an opportunity to increase internal democratization and debate.

A key issue in the capacity building is the construction of voice. The process demands specific participatory methodologies and different forms of expression (drawing, on pictures, creating songs, dramatization of community episodes) standing in the particular, diverse realities where rights initiatives take place. Little progress could be achieved if a real appreciation of rights and the vision of rights' realization are not grounded on people's own understanding and assessment of their rights and on their own strategies and actions to realize them.

Capacity building has traditionally focused on right-holders. However, it evidences important to work with duty-bearers. Which would be essential capacities to be built among duty-bearers (government bodies)? Giving attention to local and regional diversity and specific context, those capacities might be resources to commit to the relationship, trained personnel, mechanisms for effective communication with people representatives, and so on.

Drawing from the Program experience, a first step for capacity building among complex institutions like the MoH would be the participatory construction of a common language on what health rights mean to the MoH officers. Working with an RBA will demand from health workers the construction of a common "way of seeing and understanding" their own practice, so they could develop a "different way of acting" [24]. Is only with those common glasses that day-to-day work would be analyzed and transformed. Nevertheless, a public institution which engages with an RBA would need to change institutional culture and practices, learning to dialogue and to negotiate with people representatives, overcoming the traditional genetic difficulties for health providers, and authorities to consider and treat them as equals.

When analyzing invited spaces, Cornwall stresses that effectiveness of these participatory methods for consultation increases where institutional willingness to fulfillment of obligations is championed by high-level advocates within organizations [25]. The Peruvian experience could make the case, with the MoH herself supporting the rights initiative. However, it is also true that big and complex public institutions are built on different groups of interest, each one competing for power and influence not to be shared. Increased participatory spaces and greater accountability mechanisms could raise natural resistance from different institutional actors.

16.6.5 The Broader Policy Environment

Attending the broader policy environment, social communication strategies could be implemented to raise awareness on the importance of health rights among common people and public opinion, to create social demand on the fulfillment of state obligations for the realization of health rights. A particularly challenging task is the development of innovative options for communicating concepts on what health rights mean among diverse cultural environments, where people understanding of life and health could be different from a more occidental point of view. On the other hand, the possibility of articulating strategic alliances with the media could be valuable. Journalists could spread information, influencing public opinion and helping to install health rights on the political agenda [26].

Actors who are not usually involved in these health policy dialogues are the political parties and its representatives. Health Rights Program has joined other institutions and ForoSalud to extend the policy dialogues on key health issues to the political parties that will challenge the Regional Government Elections in 2006, advocating for a better understanding of the political decisions which are needed to fulfill the state commitments toward the realization of the right to health.

16.6.6 The "Interface Space": Not Only Quantity, but Also Quality of Social Participation

The analysis of invited spaces as vehicles that support transformative participation, leading to increased representation and empowerment turns relevant not only the observation of the quantity of participation processes (extension, number of additional chairs), but also their quality. More attention needs to be paid to the way the intermediary institutions (formal interface between right-holders and duty-bearers) promote inclusion, representation and (equitable) shared responsibility, and decision making.

The analysis of the quality of social participation processes raises concerns on representation—if, as said, decentralization process at Peru is "installing more chairs at the regional and local decision-making tables," who is sitting at those "new chairs"? Whose voice is brought to the decision-making table?—and also on the ways voice is constructed with those excluded from participatory process to decide on their lives and possibilities for self-development. Attention must be paid to how much democratic and inclusive are civil society organizations, especially civil society networks which bring together actors from diverse environments (professional, academic, activists, grass-roots leaders, etc.), most of them sharing common purposes, but with significant differences in status and in social and political abilities.

Working on issues of difference and inclusion, Cornwall comments the heterogeneous set of actors brought together by invited spaces, each one with significant differences in status, situation that challenges the abilities of people representatives to enter and exercise voice. For that, they would need to overcome "social and power relationships that exist within the range of domains of association across which people move in the course of their everyday lives" [27]. Both Regional Health Councils and SAP are examples on how health authorities try to preserve hegemonic relations over people representatives, especially at the local, less-educated, and less-informed level.

Finally, issues to be analyzed are the characteristics for these new dialogue spaces and structures created by the state: How are the rules of the game defined? What about conflict issues to be covered? Are all health providers and authorities considering people representatives as equals for a proper dialogue and negotiation or they just need spaces with people to legitimate decisions already taken? How are the outcomes from these spaces taken up by formal policy institutions or pursued by civil society organizations?

Cornwall raises awareness that

transformative participation is not just about interventions in and through "invited spaces" to transform the way that they work, strengthening their inclusiveness and representation... even where institutions are designed to be inclusive, and new rules of the game are established within "invited spaces", strategies like popular education, assertiveness training, building argumentation skills, informing people about their rights and about the policies that they are being consulted about, mobilizing to put pressure on from "outside" or constructing political strategies to influence other moments in the policy process, may be needed to make the most of channels for citizen influence. [28]

Throughout years, NGOs and civil society organizations have developed alternative methods and initiatives to promote participation and empowerment. This rich experience turns paramount to draw on concrete experiences developed by the Program and other key actors of Peruvian health sector (and abroad) and work on strategies and tactics to strengthen engagement and real transforming participation.

16.6.7 A Fourth Layer: The Role of the International **Community**

The key role played by the UN special rapporteur on the right to health supporting the health authorities interest on how to increase the realization of health rights, evidence the need of paying increased attention to a fourth layer: the international community, which might become very influential in terms of promoting government willingness to fulfill its obligations or might decide not to, and keep doing business as usual. Economic-oriented visions and measures for efficiency developed along health sector reform process promoted by multilaterals are examples of the sound influence of donors in shaping health sector development [29]. It is still pendant a more rigorous analysis of the influence of the donors and international community agents over the government performance, especially the "room for manoeuvre" left to governments for the fulfillment of their obligations on health rights while honoring their commitments with donors.

16.7 Synthesis

The realization of the right to health at a highly unequal country as Peru faces strong challenges. Adding to the still limited knowledge on what health rights mean and the limited legal mechanisms to claim and demand health rights, there is a key dependence on the way public policies are designed and implemented. In this context, citizen participation becomes a necessary condition to ensure legitimacy of more inclusive and effective social policies.

The experience of a Peruvian Health Rights Program leaded by CARE Peru and the decisive action of Peruvian civil society in health and the National Health Authorities evidence conditions and factors that could influence the success of participatory spaces for strengthening both governance and rights engagement. The analysis highlights that strengthening voice is not enough to strengthen governance. There are four layers to attend when working a model of governance and rights engagement: (a) capacities of both right-holders and duty-bearers; (b) the quality of the point of interface between the people and the duty-bearers, where interchange of ideas, negotiation, and service delivery occurs; (c) the broader policy environment; and (d) the role of international community. As a key note, the author stresses the importance of increasing not only quantity, but also quality of citizen participation.

The promotion, protection, and guarantee of the right to health are still in their early stage at Peru. The success of the different initiatives for the complete realization of health rights will relay on the quality of the processes to be promoted, both from the civil society and the state, particularly those attending the voice from the poor and excluded population; on the learning achieved; and on the social capacity and willingness to make effective use of the knowledge generated, transforming the results into public policy proposals that contribute to the complete realization of the right to health.

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Chapter 17

Healthcare for Children in Sub-Saharan Africa—A Gordian Knot?

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A Gordian Knot is a seemingly unsolvable problem. However, a bold innovative solution can be its undoing. Healthcare in sub-Saharan Africa represents such a problem. Unique policy measures must be enacted and enforced by local governments to untie the knot. Graca Machel, the former first lady of Mozambique* said that because of the AIDS (Acquired Immune Deficiency Syndrome) pandemic "we are facing extinction" [1]. Although this rings true, AIDS is not the only health issue responsible for the inordinate number of sub-Saharan African deaths, particularly when considering the death of children. The "extinction" is not solely an AIDS issue, it is a right to healthcare issue. That issue affects the entire world.

Regardless of political structure, human rights are the basis of any free society. Although often ignored, or referred to as secondary rights, economic and social rights, including the right to health, are equally as important to a healthy democratic society, as civil and political rights. Mary Robinson, former United Nations (UN) high commissioner for human rights correctly stated,

The right to health does not mean the right to be healthy, nor does it mean that poor governments must put in place expensive health services for which they have no resources. But it does require governments and public authorities to put in place policies and action plans which will lead to available and accessible health care for all in the shortest possible time. To ensure that this happens is the challenge facing both the human rights community and the public health professionals [2].

A healthy populous ensures sustainable development. It should be among the top public policy issues a nation addresses. The ability to assert all other human rights is meaningless if one does not have their health. Of what use is the right to vote if you are too ill to go to the polling station? How does one practice their right to free speech if they are too weak to speak? Obviously, having sufficient healthcare for all does not mean that no one will fall ill. It does however protect the vulnerable sections of the population that otherwise grow ill or die from easily curable disease. Adequate healthcare aids in giving everyone an equal voice and helps to sustain development within a nation. Therefore, a government's policy cannot be to try and

^{*} Subsequently, the first lady of South Africa after marrying Nelson Mandela in 1998.

solve the AIDS pandemic while turning its back on other health issues. It is critical that public resources and public policy address all health issues. Not surprisingly, the Economic Community of West African States (ECOWAS)* and the Southern African Development Community (SADC)† have linked children and a healthy population to development [3,4]. These organizations understand that a crucial tenet of survival and development is human capital.

"Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures" [5]. The right to health is particularly important in relation to children's health, as they are among the most defenseless segment of a states' population. Children have neither the ability nor the understanding needed to protect their health. Yet, it has become commonplace to hear reports of scores of children dying in sub-Saharan Africa daily, because they are not provided with the bare essentials of healthcare. Tragically, they die from mostly preventable causes [6,7]. A modest amount of effort on the part of the state and the international community could save many of these lives.

There are a plethora of human rights protections in the area of healthcare. However, as shown below, I do not believe that these protections sufficiently protect the children of sub-Saharan Africa. Generally, there are four tiers that address children's healthcare rights: (i) international (UN), (ii) regional, (iii) national, and (iv) local. A critical review of each level is offered below, along with data from 11 sub-Saharan African countries.[‡]

17.1 The Numbers

HIV/AIDS is the number one cause of death in the African countries reviewed, except Sierra Leone. As such it garners the highest profile, and research efforts for a cure receive the most funding. This fact does not absolve the international community of its obligation to address other healthcare issues. The *Lancet* reports that "neither deaths in newborn babies nor in children... appear on the agenda at high level forums, such as the G8 summit, the Commonwealth health Ministers meeting, and the World Economic Forum" [8].

^{*} ECOWAS countries include Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

[†] SADC countries include Angola, Botswana, Democratic Republic of Congo, Kingdom of Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Kingdom of Swaziland, United Republic of Tanzania, Zambia, and Zimbabwe.

[‡] The 11 countries reviewed include Ghana, Kenya, Malawi, Mozambique, Namibia, Nigeria, Sierra Leone, Swaziland, Tanzania, Uganda, and Zambia.

This is further demonstrated by the fact that one of the Millennium Development Goals (MDGs) (#6: Combat HIV/AIDS, malaria and other diseases) specifically addresses the problem, as one of its targets to "have halted by 2015 and begun to reverse the spread of HIV/AIDS." (United Nations (UN) Development Programme 2006).

	•	<u> </u>
Country	#1 Cause of Death (Percent)	#2 Cause of Death (Percent)
Ghana	HIV/AIDS (15)	Malaria (11)
Kenya	HIV/AIDS (38)	Lower respiratory infection (10)
Malawi	HIV/AIDS (34)	Lower respiratory infection (12)
Mozambique	HIV/AIDS (28)	Malaria (9)
Namibia	HIV/AIDS (51)	Perinatal conditions (4)
Nigeria	HIV/AIDS (16)	Lower respiratory infection (11)
Sierra Leone	Lower respiratory infection (13)	Diarrheal disease (10)
Swaziland	HIV/AIDS (64)	Lower respiratory infection (5)
Uganda	HIV/AIDS (25)	Malaria (11)
Tanzania	HIV/AIDS (29)	Lower respiratory infection (12)
Zambia	HIV/AIDS (43)	Lower respiratory infection (12)

Top Two Causes of Death—All Ages **Table 17.1**

Source: From World Health Organization (WHO), Mortality Country Profiles, 2006, http://www.who.int/whosis/mort/profiles/en/index.html (accessed June 13, 2006, except Nigeria accessed November 30, 2006).

Myopic attention to HIV/AIDS deaths continues despite the fact that "initiatives targeted at specific diseases have not helped nations to build sustainable strategies and systems for delivering health services" [9]. Statistics from the World Health Organization (WHO) for 2002 give the following as the top two causes of death (Table 17.1), as a percentage of deaths for all ages [10].

Although these numbers are disheartening, when you look at the distribution of causes of death for children under five from 2000-2003 (Table 17.2), as a percentage of deaths, there is a stark difference.

With the exception of Swaziland, which has the highest HIV/AIDS prevalence rate worldwide [11], and Namibia, HIV/AIDS does not rank as either the first or second cause of death for children under the age of five in the countries reviewed. For children five and under, neonatal deaths are killing the youth of Africa.* According to the Disease Control Priorities Project, the leading causes of neonatal

There has been a movement to include neonatal mortality rates as an indicator under MDG 4 regarding child survival, but as yet it has not been included [8]. The writer understands that some neonatal deaths could be HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome) related; however, providing adequate healthcare interventions would still result in extended life spans for children.

Country	#1 Cause of Death (Percent)	#2 Cause of Death (Percent)
Ghana	Malaria (33)	Neonatal causes (28)
Kenya	Neonatal causes (24)	Pneumonia (20)
Malawi	Neonatal causes (24)	Pneumonia (23)
Mozambique	Neonatal causes (29)	Pneumonia (21)
Namibia	HIV/AIDS (53)	Neonatal causes (39)
Nigeria	Neonatal causes (26)	Malaria (24)
Sierra Leone	Pneumonia (25)	Neonatal causes (22)
Swaziland	HIV/AIDS (47)	Neonatal causes (27)
Uganda	Neonatal causes (24)	Malaria (23)
Tanzania	Neonatal causes (27)	Malaria (23)
Zambia	Neonatal causes (23)	Pneumonia (22)

Table 17.2 Top Two Causes of Death—Children under Five

Source: From World Health Organization (WHO), Mortality Country Profiles, 2006, http://www.who.int/whosis/mort/profiles/en/index. html (accessed June 13, 2006, except Nigeria accessed November 30, 2006).

death are (i) infections (diarrhea, tetanus, pneumonia);* (ii) preterm birth; and (iii) asphyxia [13].

Although it is difficult to make conclusions about overall death rates in Africa—as recordkeeping is not a priority and each country has different epidemiologic factors—the mortality rates indicate that the prevention of neonatal deaths can stem the death rate in most sub-Saharan countries. States' failure to provide clean facilities, access to healthcare, and the availability of common vaccinations is responsible for the enormous death toll of sub-Saharan African children. Moreover, a report by the international organization, Save the Children, estimates that in 2003 African states spent an average of \$6.2 per person for health services, despite the fact that the World Bank recommends minimum health services spending of \$15 per person, and developed countries spent an average of \$62.50 per person [9]. The amount spent by African governments is less than half of the bare minimum recommended, one-tenth of that spent by developed countries, and obviously is

^{*} A study in the United States found that a majority of infants with very low birth weight, under 1500 g, had a 100-fold greater diarrheal mortality rate than infants with a low to normal birth weight (over 1500 g) [12].

not enough. Governments in Africa must reprogram their priorities and put the lives of their children and the health needs of their citizens first. No one expects the African nations to match the spending of developed countries at this time, but there needs to be a firm commitment to redistribute funds available to improve health services.

It should be noted that there are simple effective low-cost interventions available to reduce neonatal deaths. These include "tetanus toxoid vaccination, exclusive breastfeeding, kangaroo mother care* for low birthweight infants, and antibiotics for neonatal infections" [7]. In fact, there is evidence that "a set of about 20 proven interventions could reduce child mortality by over 60%, if they were made available to all mothers and children who need them" [15]. Although the numbers of underfive deaths from neonatal causes are discouraging, there are viable solutions if political will can be shifted toward the problem of neonatal mortality.

17.2 International Protection[†]

The right to health has been recognized in the international community for some time. Indeed, the idea was first promulgated on an international level in 1978, with the Declaration of Alma-Ata [16].[‡] Subsequently, numerous international treaties have included requirements for protecting health. Each state party to these agreements holds primary responsibility for implementing their provisions. In reality, the majority of the obligations related to health are ignored by governments because they cannot afford to meet the most basic requirements, or other policy objectives (e.g., attracting international investment) are given a higher priority. A review of the most pertinent provisions in international law regarding the right to healthcare for children follows.

17.2.1 International (United Nations) Provisions

17.2.1.1 United Nations Charter

The drafters of the UN Charter were aware of the importance of health to the stability and development of its member countries. Although the majority of Africa

^{*} Kangaroo mother care is "A universally available and biologically sound method of care for all newborns, but in particular for premature babies, with three components: (1) Skin-to-skin Contact, (2) Exclusive breastfeeding, (3) Support to the mother infant dyad" [14].

[†] No reservations were made by any country to any of the international agreements discussed herein.

[‡] The Declaration was developed at the International Conference on Primary Health Care in Alma-Ata (now in Kazakhstan), which brought together 134 countries and 67 international organizations [16].

was still under colonial rule when the Charter was drafted, Article 55 remains relevant today, stating that

With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote: . . . b. solutions of international economic, social, *health*, and related problems (emphasis added) [17].

17.2.1.2 Universal Declaration of Human Rights

The General Assembly of the UN proclaimed the Universal Declaration of Human Rights (UDHR) "as a common standard to achievement for all peoples and all nations" [18]. This illustrious declaration is the document from which all contemporary human rights were born.

Article 25(1) of the UDHR provides the following guarantee, "[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care..." [18].

17.2.1.3 International Covenant on Economic, Social, and Cultural Rights

Article 12(1) of the International Covenant on Economic, Social, and Cultural Rights (ICESCR) recognizes "...the right of everyone to the enjoyment of the highest attainable standard of physical and mental health" [19]. The UN Committee on Economic, Social, and Cultural Rights* (CESCR), in its General Comment 14 interpreted the right to health in Article 12(1) "as an inclusive right extending not only to timely and appropriate health care but also to the underlying determinants of health, such as...healthy occupational and environmental conditions, and access to health-related education and information" [20].

In complementary Article 12(2)(c), states are required to take steps to realize the highest standard of physical health including those needed for "the prevention, treatment and control of epidemic, endemic, occupational and other diseases" [19]. The CESCR has interpreted Article 12(2)(c)'s right to treatment to include "the creation of a system of urgent medical care in cases of accidents, epidemics and similar health hazards, and the provision of disaster relief and humanitarian assistance in emergency situations" [20].

The ICESCR took the spirit of the UN Charter and the guiding principle of the UDHR and made a concrete legal provision that state parties provide adequate

^{*} This Committee is charged with interpreting the International Covenant on Economic, Social, and Cultural Rights (ICESCR) and assisting in its implementation.

healthcare to all. Unfortunately, Article 2(1) of the ICESCR requires a state party to "take steps...to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized...by all appropriate means, including particularly the adoption of legislative measures" [19]. Many countries have used this article, to the detriment of their citizenry, as an escape clause claiming that they do not have the resources to provide for the right to health.

17.2.1.4 Convention on the Rights of the Child

The UN Convention on the Rights of the Child (CRC) was drafted recognizing the special needs and vulnerable position of children [21]. As shown above, this is particularly true when it comes to healthcare for children under five in the countries reviewed. Article 6 of the CRC maintains that "1. States Parties recognize that every child has the inherent right to life. 2. States Parties shall ensure to the maximum extent possible the survival and development of the child" [21]. Moreover, Article 24 of the CRC requires the following:

- 1. States parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health.
- 2. States parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:
 - (a) To diminish infant and child mortality
 - (b) To ensure the provision of necessary medical assistance and healthcare to all children with emphasis on the development of primary healthcare
 - (c) To ensure appropriate prenatal and postnatal healthcare for mothers [21]

17.2.2 Deficiency in the UN System

The UN Charter provision quoted above, although elaborating an important policy perspective for governments, was not meant to bind states to any particular action, but rather to provide for international cooperation, peace, and security [17]. Similarly, the UDHR has no enforcement mechanisms and is a General Assembly resolution, not a binding treaty [18]. Therefore, many governments (and scholars) consider the UDHR's provisions as merely directive principles.*

^{*} Many would argue, including the author, that the provisions of the Universal Declaration of Human Rights (UDHR) have acquired the force of law as international customary law. This topic is well outside the scope of this chapter. For more detail see, Louis B. Sohn, The New International Law: Protection of the Rights of Individuals rather than States, 32 Am. U.L. Rev. 1.

The CRC and ICESCR are clearly binding treaties and have reporting mechanisms and committees that oversee their implementation. Under both the CRC and the ICESCR, state parties are required to report on implementation within two years of ratification of or accession to the treaty and thereafter every five years [19,21].

The relevant committee reviews reports received from the states parties, monitors implementation, and makes recommendations for the realization of all rights within the treaty. However, there is still no mechanism for enforcing the treaties, despite the fact that the treaties are binding on the states parties. Moreover, neither committee is empowered to receive individual or interstate complaints [19,21].* As Table 17.3 shows, it is difficult to even obtain states party reports in a timely fashion [22].

Periodically, committees consider the state parties reports. Generally, a presessional working group will identify some key issues of concern—a list of issues—so that the state will be prepared to respond to questions from the committee in those areas. However, the committee is permitted to ask questions in any area related to the treaty. The state is given the opportunity to engage in a dialogue with the committee in a forum that is open to the public. The committee will then issue concluding observations regarding the state's effectiveness in implementing the relative treaty.

One of the positive aspects of the open forum consideration of state party reports is that the committee has the opportunity to hear from sources other than the state party. Non-governmental organizations (NGOs) and civil society members are encouraged to submit shadow reports. These shadow reports generally review section by section the state party's report submitted to the committee and indicate where the author believes the state party has failed to fully implement the treaty. The shadow report is an extremely useful tool as governments are apt to report their advances in detail to the committee although glossing over areas of difficulty in implementation. In sub-Saharan Africa, however, the NGO community is very poor. They do not have the resources to write shadow reports or to travel to the committee hearings to lobby the members to inquire about issues the government does not address. Without input from the NGO community, there is no way for committee members to be

^{*} The Human Rights Committee, the Committee on the Elimination of Discrimination Against Women, the Committee Against Torture, and the Committee on the Elimination of Racial Discrimination are all empowered, through the base treaty or Optional Protocols, to hear individual complaints.

[†] On occasion committees will consider the situation in a state party when they have failed to report for an extended period of time. The information used for review is cobbled together from any sources available. Such was the case with Kenya in 1993.

Table 17.3 State Party Reporting under United Nations Human Rights Treaties

Country	Treaty	Ratified/Acceded	Date Last Report Submitted (Date Due)
Ghana	CRC	2/5/90	3/04 (9/97)
	ICESCR	9/7/00	None
Kenya	CRC	7/30/90	9/05 (9/97)
	ICESCR	1/3/76	8/93 (6/78)
Malawi	CRC	1/2/91	8/00 (1/93)
	ICESCR	12/22/93	None
Mozambique	CRC	4/26/94	6/00 (5/96)
	ICESCR	N/A	N/A
Namibia	CRC	9/30/90	12/92 (10/92)
	ICESCR	11/28/94	None
Nigeria	CRC	4/19/91	3/03 (5/98)
	ICESCR	7/29/93	2/96 (6/95)
Sierra Leone	CRC	6/18/90	4/96 (9/92)
	ICESCR	8/23/96	None
Swaziland	CRC	9/7/95	11/05 (10/97)
	ICESCR	3/26/94	Due this year
Uganda	CRC	8/17/90	8/03 (9/97)
	ICESCR	1/21/87	None
Tanzania	CRC	6/10/91	10/04 (7/98)
	ICESCR	6/11/76	None
Zambia	CRC	12/6/91	11/01 (1/94)
	ICESCR	4/10/84	7/03 (6/90)

Source: From UN Treaty Body Database, available at www. ohchr.org.

aware of, and make recommendations regarding some of the problems in implementation.*

On a whole, the UN system fails the children of sub-Saharan Africa. Governments are not complying with the provisions regarding the protection of health and there is no mechanism to force them to. Moreover, many African countries do not have the resources, or desire, to comply with the reporting requirements under the treaties. The shame factor of admonishment by a UN Human Rights body has lost its sway.

17.2.3 A Word about the Millennium Development Goals

In 2000, "every country agreed on a vision for the future—a world with less poverty, hunger and disease" [23]. This vision culminated in the Millennium Development Goals (MDGs). There are eight such goals with number four being the reduction of child mortality, with a specific target to "reduce by two thirds, between 1990 and 2015, the under-five mortality rate" [23]. The UN reports that as of 2004, almost halfway to the target date, sub-Saharan Africa still trails far behind the target [23]. The under-five mortality rate for sub-Saharan Africa in 1990 was 185 per 1000 live births [23]. MDG 4 requires sub-Saharan Africa to reduce child mortality to 62 per 1000 live births by 2015, but as of 1994 the statistics showed mortality at 168 per live birth, only a 9.2 percent reduction [23].

The Child Survival Countdown is an effort to monitor the progress of MDG 4 by tracking interventions in the 60 countries with the world's highest child mortality rates [14]. All of the countries reviewed above in Section 17.1, except Namibia, were included in their research. None of these countries are on track to meet MDG 4; in fact, three countries—Kenya, Swaziland, and Zambia—have had increased underfive mortality rates between 1990 and 2004 [14].

The MDG 4 is a noble proposition. Unfortunately, for sub-Saharan Africa it appears the target will be missed. Once again, a promising idea is thwarted by lack of an enforcement mechanism and a clear plan. It is easy to have the nations of the world agree that poverty should be reduced and development be promoted. In reality, there is a lack of transparency, diversion of donated funds, and lack of political will [7,9]. One only needs to recall the Declaration of Alma-Ata to realize that nonbinding agreements may aid in development improvements, but cannot be seen as a panacea. The Declaration of Alma-Ata declared that "[a] main social target

^{*} The author has experienced firsthand the committee review process. Although it can be quite political, it generally appears to work well and when presented with issues of concern the committees appear to shy away from investigating in further detail. However, the system is reliant on the ability to receive information from outside the reporting government. Not only do nongovernmental organizations (NGOs) need to have the funds to develop shadow reports, but they must also be made aware of the UN system and need for such reports.

[†] The MDGs have been discussed at length in other publications, therefore that background is not repeated here. For more details on the MDGs, see http://mdgs.un.org.

of governments, international organizations and the whole world community in the coming decades should be the attainment by all peoples of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life" (emphasis added) [5]. Had the targets of the Alma-Ata conference been achieved, we would not need to discuss MDG 4. Granted the MDGs are more precise, but the fact is they still rely on governments to (i) work together and (ii) make responsible decisions, something that has not been wholly successful in the past.

17.3 Regional

17.3.1 The African System

The single most important regional document for sub-Saharan Africa regarding the right to health is the African Charter on Human and Peoples' Rights (African Charter) [24]. Article 16 of the African Charter unequivocally requires action from state parties, stating that

- 1. Every individual shall have the right to enjoy the best attainable state of physical and mental health.
- 2. States parties to the present Charter *shall* take the necessary measures to protect the health of their people and to ensure that they receive medical attention when they are sick (emphasis added) [24].

Recognizing the special needs of the child, the African Union developed the African Charter on the Rights and Welfare of the Child (ACRWC) [25]. This document has been ratified by all of the states under review, except Swaziland and Zambia who have signed but not ratified the ACRWC. The preamble to the document acknowledges the fact that given the unique position and the various difficulties African countries face (armed conflict, natural disaster, hunger, socioeconomic hurdles), the children need "special safeguards and care" [25].

Article 14 of the ACRWC basically mirrors the sentiments of the CRC Article 24(2). However, Article 14 includes the requirement that state parties take measures "to ensure the provision of adequate nutrition and safe drinking water," "to integrate basic health service programmes in national development plans," "to include nongovernmental organization participation in planning and managing basic service programs for children," and "to mobilize local community resources in developing primary health care for children" [25]. This article truly takes into consideration the distinct situations faced by African governments. It acknowledges that the governments cannot deal with the problems on their own and must partner with community-based organizations to provide for the children of Africa. It attempts to force state parties to include the protection of children's health in their policy making.

17.3.2 Problems with the African System

The African system, including the African Charter and the ACRWC, is a most progressive system in terms of development. It takes into consideration both civil and political, and economic, social, and cultural rights [24,25]. It looks to the rights of the peoples, in addition to the individual, and respects the cultural diversity of Africa [24,25]. Uniquely, it requires, per Article 18(3) of the African Charter, that the state "ensure the protection of the rights of the woman and the child as stipulated in international declarations and conventions," thus incorporating any recognized rights for these vulnerable groups not otherwise included in the African Charter [24].

Despite the positive attributes of the African system, it too fails to protect the children in sub-Saharan Africa.* The African system is generally designed to deal with large-scale denial of human rights and not with individual violations, although there is a complaint procedure to the Commission of the African Union; it is a weak and time-consuming system [24].

A fine example of the system's weakness comes in a complaint regarding Nigeria. A communication was received by the Commission alleging Nigeria violated Article 16 of the African Charter, among other provisions, for permitting foreign oil companies to operate in Ogoni communities without assessing basic health and environmental impact and causing health problems from contamination of the environment—including "skin infections, gastrointestinal and respiratory ailments, and increased risk of cancers, and neurological and reproductive problems" [26]. The complaint was received in March 1996, but a decision was not taken by the Commission until October 2001—an inordinately long period of time. The Commission found Nigeria in violation of Article 16 (among others) and appealed to the government to:

Ensure protection of the environment, health and livelihood of the people of Ogoniland by:

- Conducting an investigation into the human rights violations...and prosecuting [those] involved in human rights violations;
- Ensuring adequate compensation to victims of the human rights violations...;
- Providing information on health and environmental risks ... [26].

The Commission further urged the government to keep it informed of the outcome of the work of various environmental ministries and the "Judicial

^{*} The failure to secure a better future for African children was confirmed in the Declaration on the Decade of a Culture of the Rights of the Child in West Africa (2001–2010) by the Economic Community of West African States (ECOWAS) noting "on the whole, the results achieved have fallen below national targets and the commitments made to the international community" [3].

Commission of Inquiry inaugurated to investigate the issues of human rights violations" [26]. There is no requirement to keep the Commission informed or any basic follow-up measures to ensure Nigeria takes the actions recommended, or rather appealed.

The Commission's statements are meaningless rhetoric. They basically request the state party to comply with the African Charter, to which they are already obligated to comply. It appeals and urges Nigeria; it does not require the state to do anything. The Commission, with this decision, did nothing to preserve the right to health, guaranteed under Article 16 of the African Charter to the people of Ogoniland.

There are reporting processes, akin to those of the ICESCR and CRC, under both the African Charter and the ACRWC [24,25]. Information is not readily available for reporting under the ACRWC* and reporting under the African Charter is as pitiful as to the UN Committees, as outlined in Table 17.4 [27]. The reporting mechanism faces the same deficiencies as seen under the UN system and will not be revisiting here.

Table 17.4 State Parties Reporting under the African System

Country	Ratification Date	Date Last Report Submitted (For Period)	Reports Due
Ghana	1/24/89	3/00 (1995–1999)	2003–2005
Kenya	1/23/92	None	1994–2004
Malawi	11/17/89	None	1991–2003
Mozambique	2/22/89	5/00 (2000)	2003
Namibia	7/30/92	5/00 (2000)	2003
Nigeria	6/22/83	8/90 (1988–1990)	1990–2003
Sierra Leone	9/21/83	None	1988–2004
Swaziland	9/15/95	3/00 (1997–1999)	2002–2004
Uganda	8/10/86	5/00 (1990–2000)	2002–2004
Tanzania	2/18/84	7/91 (1988–1990)	1992–2004
Zambia	1/10/84	None	1988–2004

Source: From African Commission website, available at http:// www.achpr.org/english/_info/status_submission_en.html (Last updated May 2003).

An e-mail request for information to the director of that Committee has gone unanswered.

17.4 State

17.4.1 The State Constitutions

Constitutions represent the primary source of law for a country. As outlined below, not one of the countries reviewed, aside from Mozambique, provided for the right to health as a fundamental right in its constitution, although several regarded the right as a guiding social principle. The Constitution of the Republic of Kenya, the Constitution of the United Republic of Tanzania, and the Constitution of Zambia have no provision for the right to health, aspirational or otherwise [28–30]. Of the remaining eight countries, the following represents the constitutional provisions related to the right to health and any provisions for the health of children. Note the varying language regarding this issue in each constitution.

The Constitution of Mozambique comes closest to truly providing for a right to health [31]. Article 54 contains the following provisions:

- 1. Medical and healthcare for citizens shall be organized through a national health service which shall benefit all Mozambicans.
- 2. To achieve the goals of the national health system, the law shall regulate the delivery of medical care and healthcare.
- 3. The state shall promote the participation of citizens and institutions in the raising of the level of public healthcare [31].

Furthermore, Article 94 provides, "[a]ll citizens shall have the right to medical and health care, within the terms of the law, and shall have the duty to promote and preserve health" [31]. The caveat "within the terms of the law" could dilute the right to health, but overall the provision is quite encouraging.

The Constitution of the Republic of Ghana does not have a provision for the right to health [32]. It does provide, in Article 34(2) that the "President shall report to Parliament at least once a year all the steps taken to ensure the realization of the policy objectives contained in this Chapter and, in particular, the realization of basic human rights, a healthy economy, the right to work, the right to good health care and the right to education" [32]. However, there is no indication of what the right to good healthcare entails.

Article XIV of the Constitution of the Republic of Uganda states that the "State shall endeavour to fulfill the fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that...(ii) all Ugandans enjoy rights and opportunities and access to education, health services..." [33]. This article falls under the National Objectives and Directives Principle of State Policy, which is the preamble to the constitution and not legally enforceable.

Article 8(3) of the National Constitution of Sierra Leone provides that "[t]he State shall direct its policy towards ensuring that...d. there are adequate medical and health facilities for all persons, having due regard to the resources of the State...f. the care and welfare of the aged, young and disabled shall be actively

promoted and safeguarded" [34]. However, Article 14 states that the "provisions contained in this Chapter [Articles 4–13] shall not confer legal rights and shall not be enforceable in any court of law…" [34].

The Constitution of the Kingdom of Swaziland in Article 61(8) states, "without compromising quality the State shall... take all practical measures to ensure the provision of basic health care services to the population" [35]. It seems basic healthcare could only enhance the quality of the citizenship. This provision falls under the heading "Social Objectives" in the constitution and does not detail what quality the state is concerned will be compromised. Regardless, per article 57 (3) "[t]he provisions of sections 58 to 64 inclusive are not enforceable in any court or tribunal" [35].

Article 17(3)(c) of the Constitution of the Federal Republic of Nigeria requires the state to "direct its policy towards ensuring that... there are adequate medical and health facilities for all persons" [36]. Article 6(6)(c) makes the provisions related to Fundamental Objectives, including Article 17(3)(c), nonjusticiable [36].

The Constitution of the Republic of Malawi in Article 13 asserts,

The State shall actively promote the welfare and development of the people of Malawi by progressively adopting and implementing policies and legislation aimed at achieving the following goals...(b) Nutrition To achieve adequate nutrition for all in order to promote good health and self-sufficiency. (c) Health To provide adequate health care, commensurate with the health needs of Malawian society and international standards of health care.... (h) Children To encourage and promote conditions conducive to the full development of healthy, productive and responsible members of society [37].

In Article 30(2), the constitution provides, "[t]he State shall take all necessary measures for the realization of the right to development. Such measures shall include, . . . equal opportunity for all in their access to . . . health services . . . " [37]. This is a truly important provision. Although it does not legally bind the government to provide healthcare, it does require that healthcare be provided equally so that all Malawians have (legally) the same opportunities for good health and distribution of funds related to healthcare. In the author's experience, often facilities, supplies, and personnel are concentrated only in large urban areas. Malawians theoretically can use this provision to sue the state for equal access to any healthcare-related monies or service provisions.

In Article 95 of the Constitution of the Republic of Namibia, the state is obliged to "actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the following:...(j) consistent planning to raise and maintain an acceptable level of nutrition and standard of living of the Namibian people and to improve public health" [38]. Article 101 makes this provision not legally enforceable [38].

17.4.2 Deficiencies in the State Constitutions

As shown above, all of the constitutions reviewed, except Mozambique, provide no enforceable protections for the right to health or for the health of the child. Many do include the consideration of health as a guiding principle or social objective. This, of course, is only meaningful if the government actually heeds the policy directive. As in the case of Nigeria in the African Commission, discussed previously, economic development and foreign investment were far more important than the health of the local population. Ironically, each of these constitutions was drafted or amended after the African Charter entered into force. The governments had the opportunity to include the right to health as a binding constitutional principle, but did not—further emphasizing the lack of political will to develop meaningful healthcare systems.

It should be noted that, although lacking constitutional provisions, some countries may have state law that influences the right to health. In fact, several sub-Saharan African countries have implemented Children's Rights Acts. However, the majority of these laws are not readily available, much less to the average citizen, making them ineffective for advocacy and enforcement purposes.

17.4.3 The Paris Principles

Under the "principles relating to the status of national institutions,"* UN member states are encouraged to "establish or, where they already exist, to strengthen national institutions for the promotion and protection of human rights and to incorporate those elements in national development plans" [39]. Such human rights institutes could play a crucial role in the protection of children's right to health and can take the form of "national human rights commissions through Ombudsman offices, public interest or other human rights 'advocates', to 'defensores del pueblo'" [40]. Unfortunately, many countries have not yet established such bodies. Even when national human rights institutes are established, they are often either not independent or underfunded (see generally, [41]). It has been difficult to measure the effect that such institutions have had on the overall human rights situation within a country [42]. However, if properly structured these institutions could provide future outlets for adjudicating children's health rights.

17.5 Local

Sub-Saharan Africa has a very unique political structure. Although each nation has a head of state, be it a president, prime minister, or king, there are significant local

^{*} The so-called Paris Principles established by UN General Assembly resolution 48/134.

political influences. For example, in Ghana, the King of the Ashanti region wields a considerable amount of authority over the Ashanti people.* Outside of urban areas, where custom is practiced over law, the tribal leader determines how the majority of local revenue is allocated and what type of protections to afford their subjects [32, art 267]. This means that healthcare is not always a priority, regardless of national policy. Additionally, in countries such as Tanzania and Nigeria, state law, customary law, or Islamic (Shari'a) law might also be operable depending on the situation.

Once again, this leaves children particularly vulnerable. Many customary practices are hazardous to the health of children, yet continue in some sub-Saharan African countries under the guise of customary rights. These include, among others, female genital mutilation, child marriage, and trokosi. Children must be protected from these antiquated harmful rites (see generally, [43]). International human rights law demands it, despite local custom. Although there should always be respect for culture, "[c]ultural rights, however, are not unlimited. The right to culture is limited at the point at which it infringes on another human right. No right can be used at the expense or destruction of another, in accordance with international law" [44].

17.6 Conclusion

Although each of the human rights provisions outlined above offers some protection for the achievement of the highest attainable standard of healthcare, they do not go far enough. African countries will not be able to fully develop, and sustain any development achieved, if the children of Africa are left to die from preventable diseases.

Governments must be held accountable, by their citizens and the international community, for developing policies to provide adequate healthcare systems for all. This means that not only must healthcare be affordable, but also it must be available. For example, if fiscal limitations prohibit setting up hospitals in every city, then small clinics should be established in some areas with a hospital within a reasonable traveling time. This must take into account the conditions of transit in the country. Just because a hospital is within 100 miles of a village does not mean it is accessible. Traveling nurses/house doctors could be an option for outlying areas when traditional facilities are not feasible.

Governments must also see that all healthcare issues be addressed. The numbers show that, although stemming the HIV/AIDS pandemic is crucial, children under five are dying of preventable neonatal causes. Children represent the promise of a stronger Africa in the future. Actions must be taken to make the vision of the MDGs a reality. Unenforceable international and regional agreements have not furthered health rights for the children of sub-Saharan Africa. Concrete standards

^{*} Based on various conversations and informational documents obtained by the author on a visit to the National House of Chiefs in Kumasi, Ghana, on June 25, 2003.

and interventions must be established and governments must be strictly held accountable for noncompliance.

If healthcare, primarily children's healthcare, does not become the number one priority, the annihilation of sub-Saharan African children is destined to become a reality. Although many countries reviewed have some type of official policy or action plan regarding preserving healthcare rights, there is not sufficient support to make these plans a reality. Viable plans must be developed and implemented. The Gordian Knot must be untied and only revolutionary ideas which can be realized at the local level—tailored to the country—will be its undoing.

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Chapter 18

Catastrophic Opportunity: Public Health Emergencies, Healthcare Infrastructure, and Human Rights

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18.1 Introduction

Every year more than ten million children under the age of five die unnecessarily [1]. Atleast two million die from diarrhea and lower respiratory tract infections alone—mostly in developing countries [2]. These deaths could easily be prevented by environmental interventions and treatments that are both simple and inexpensive. Even in the developed world, readily preventable deaths are commonplace. Every year more than 18,000 people under the age of 65 die prematurely for lack of health insurance in the United States. Many are felled by disease, some by accidents. (The mortality rate among uninsured car crash victims is 37 percent higher than it is for the insured and, among uninsured women with breast cancer, it is 30–50 percent higher [3].) Most of us are either unaware of or impervious to these deaths, perhaps because they are not all triggered by any single, dramatic event. These fatalities are quotidian losses, rarely addressed—or even mentioned—by mainstream Western media. The dead are nameless because there are too many names.

Economists and policymakers do not usually think about the sick and the dying as individuals with relatives who must first care and then grieve for them. But even viewed through the less emotive lens of health economics, readily preventable morbidity on a massive scale represents a prodigal waste of health capital, or the "stock of health [that] determines the total amount of time [one] can spend producing money earnings and commodities" (as Michael Grossman defined it three decades ago) [4]. In the United States alone, the uninsured cost the nation more than \$130 billion a year in lost revenue and other benefits, according to the Institute of Medicine [5]. Given the political potency of fiscal concerns, it is remarkable that such profligacy is so readily tolerated.

This is not to say that no one cares. There are some highly dedicated people—many in the World Health Organization (WHO), the United Nations (UN), and numerous domestic and international non-governmental organizations (NGOs)—who devote their professional lives to efforts aimed at eradicating poverty and disease. And, of course, there are also some inordinately wealthy philanthropists who have taken it upon themselves to alleviate the condition of the poor and the sick in the developing world [6]. But the depressing statistics raise serious doubts about the level of political will and financial commitment of the developed world to address these issues. For example, the collective advertising budget of Coca Cola

and PepsiCo for 2004 exceeded the entire budget of the WHO for the preceding two-year period [7]. A recent study in the *Lancet* also noted that total global funding for health in 2000–2004 fell "far short of global need" as estimated by the WHO, and that global funding for basic health infrastructure actually declined during this period [8]. At the G8 Summit in St. Petersburg in July 2006, participants agreed on global health goals in principle and on the necessity for further funds, but they failed to agree on how those funds should be secured! [9]

The prospect of a catastrophe affecting an entire population—whether because of a bioterrorist attack or natural pandemic—has led to the re-characterization of public health as a national security issue rather than a question of social justice. Some have argued that, given the potential for a public health emergency on a massive scale, the absence of universal access to healthcare in the United States itself poses a threat to national security [10]. The renewed focus on public health viewed through a national security lens could, in theory, create greater political will to invest in public health infrastructure—both nationally and globally—in a manner that would also help redress chronic public health issues. As a matter of realpolitik, it has always been easier to appropriate funds toward defense and national security than to healthcare. One reason for this is the substantial lobbying power of the defense and national security sector, the so-called military-industrial complex about which Dwight Eisenhower cautioned at the end of his presidential tenure [11]. However, it is by no means inevitable that the national security reframing of health emergency preparedness will result in the redress of chronic public health issues, and there is little evidence this has occurred so far. Some have argued that constitutional constraints imposed by federalism make catastrophe preparedness and responsiveness more difficult [12]. In the United States, for example, defense and national security are principally matters for the federal government. But much of the responsibility for detecting and responding to disease outbreaks is spread across 50 state and territorial health departments and 3000 local, county, city, and tribal departments [13]. In addition, the private sector is responsible for delivering the majority of healthcare services in the United States. Undoubtedly, federalism and the fragmentation of service providers present serious coordination problems for emergency planning. However, in my view, the failure to improve public health infrastructure more generally is due in large part to unduly narrow approaches to preparedness. (In the interests of space, I confine my observations to the approaches of the U.S. government and the international community, but similar criticisms might also be directed at other national and regional governments.)

I argue here that there are three basic models of preparedness for public health emergencies: (1) the single-hazard approach that focuses on one particular threat, (2) an all-hazards or multi-hazard approach that focuses on a menu of potential public health emergencies, and (3) improving healthcare infrastructure generally and enhancing access to healthcare services. As I now hope to demonstrate, much turns on the model that policymakers adopt—not only for public health in the

face of a catastrophe, but also for the millions of individuals whose daily healthcare needs continue to go unmet.

18.2 Models of Preparedness for Public Health Emergencies

18.2.1 Single-Hazard Approaches

The single-hazard approach seeks to address one particular threat, whether natural or man-made, and design preparedness and response measures that are directed at that threat alone. One of the best examples of this approach is the current planning for a potential avian flu pandemic. The thrust of the effort in the United States (reflected in more than 90 percent of the expenditure) [13] has been to focus on stocking Tamiflu—which may not prove effective against avian flu—and on developing a vaccine which may not be ready in time. (Even if it is available in time and in sufficient quantities, for most of the country the mechanisms for its effective distribution have not yet been put in place [14].) Single-hazard approaches have also been adopted at the international level. The terrorist attack in 2001 that used the U.S. mail to deliver anthrax spores exacerbated global concerns about the possibility of a more substantial biological attack deploying the highly contagious smallpox virus. As a result, steps have been taken by the WHO to stockpile doses of smallpox vaccine in Geneva [15]. Sometimes clusters of single-hazard approaches may be adopted. Pursuant to the Project Bioshield legislation, the U.S. government's avowed objective is to procure and stockpile sufficient quantities of safer secondgeneration vaccines for both anthrax and smallpox [16].

The advantage of the single-hazard approach is that it allows for measures that can be closely tailored to a specific threat. However, unlike measures to address an infectious disease or other threat that has already materialized, the single-hazard approach to potential threats may incur considerable expense without guaranteed payoff. In the happy event that the anticipated catastrophe does not occur, there will usually not be any incidental benefits and some may view the emergency expenditure as wasted. On a more pessimistic note, terrorists may deploy a biological agent that has not been the subject of special efforts to develop a vaccine or therapy. The Centers for Disease Control and prevention in the United States lists more than 30 potential bioterrorism agents and, for all but two of them, there is currently no effective commercially available vaccine [17].

Several commentators have criticized the so-called "one bug, one drug" approach to biological emergencies [13]. Although it is not inherent in single-hazard approaches that only one solution is pursued—the response to avian flu, for example, has been two-pronged (stocking Tamiflu and developing a vaccine)—in practice, it is likely that only one or two remedies will be pursued as part of a single-hazard approach because of competing budgetary claims both within and outside the

realm of public health. As I will explain below, because multi-hazard approaches have the potential to address multiple threats, their claim on funds may be more powerful than the claims made by single-hazard measures.

18.2.2 All-Hazards and Multi-Hazard Approaches

All-hazards or multi-hazard approaches have become increasingly appealing to policymakers since 9/11. They focus on a range of potential public health emergencies—both natural and man-made—and try to put in place measures to address as many of them as possible. These measures usually fall into one of two categories: coercion and capacity-building [18]. The former are designed to ensure that there are legal mechanisms in place providing additional powers to public health and law enforcement officials in the event of a public health emergency. One of the best known examples of this is the Model State Health Emergency Powers Act (MSHEPA). It was drafted by the Center for Law and the Public's Health (at Georgetown and Johns Hopkins Universities) for the Centers for Disease Control and Prevention in the United States, and it is intended to provide model provisions for adoption by state legislatures. Although the first draft of the Act was released within just six weeks of 9/11 [19], a revised version was published in December 2001 in response to criticisms expressed by civil liberties lawyers and advocates [20]. (However, the revisions did not silence all of the Act's critics [21,22].) Under the Model Act, once the governor of a state has declared a "state of public health emergency," the public health authority may require submission to examination, testing, and vaccination. Those refusing to comply may be subjected to compulsory isolation and quarantine, and disobeying an order for isolation or quarantine is deemed a misdemeanor under state law. (According to the Center for Law and the Public's Health, 37 states in the United States have "passed bills or resolutions that include provisions from or closely related to the Act" [23].) Such legal measures are usually not costly per se and, while they raise concerns among human rights and civil liberties groups, they help governments and policymakers reassure the general public that something is being done.

Such measures do not, however, provide for the appropriation of sums to increase emergency healthcare capacities or even to develop, manufacture, and put in place distribution networks for the vaccines they empower officials to administer with the force of law. As I have argued elsewhere, such measures (if they come at all) tend to be implemented only once these coercive mechanisms have been put in place [18]. Multi-hazard approaches should, of course, go beyond the removal of legal obstacles to the exercise of coercive powers. Ideally, they would include systems to monitor and track the spread of biological agents and infectious diseases, enhanced laboratory response capabilities, incentives for healthcare professionals to report to work in the event of an emergency, backup facilities, and supplies of medical equipment to meet demands for surge capacity in the event of a public health emergency. Yet, these are precisely the areas in which the United States has not

invested sufficiently (according to a number of recent reports) despite the rhetorical prioritization of the war on terror and the expenditure of \$30 billion since 9/11 to address the threats posed by biological weapons and natural pandemics [13]. One report by a nonprofit, nonpartisan group, Trust for America's Health, noted that only seven states and two cities had been recognized by the Centers for Disease Control and Prevention as being adequately prepared to administer and distribute vaccines and antidotes in the event of an emergency [14]. The report also found that over one-quarter of states do not have sufficient bioterrorism laboratory response capabilities, and that nearly half of states do not use national standards to track disease outbreak information. Worse still, hospitals in over 40 percent of states do not have sufficient backup supplies of medical equipment to meet surging capacity needs during a pandemic flu or other major infectious disease outbreak, and nearly one-third of states are not sufficiently prepared to care for a surge of extra patients by using non-health facilities, such as community centers, sports arenas, or hotels. The Department of Homeland Security's National Response Plan, which was not issued until December 2004, is intended to establish a "comprehensive, national, all-hazards approach to domestic incident management across a spectrum of activities including prevention, preparedness, response, and recovery" [24]. However, the disastrous aftermath of Hurricane Katrina only served to raise serious concerns about the adequacy of the Plan—concerns recently reiterated by the Government Accountability Office, the nonpartisan investigative arm of the U.S. Congress [25]. The Plan has also been criticized for assuming that local and state governments have the resources to address a major public health emergency and all its sequelae [13]—an assumption profoundly undermined in the aftermath of Katrina.

The need for real investment in capacity-building (above and beyond the drafting of plans and policy documents) is also important at an international level because biological agents and natural pandemics obviously do not respect national boundaries. The WHO's recent revisions of the International Health Regulations 1969 recognize (in principle, at least) that coercive measures are not sufficient and that capacity-building is also required to address the threats posed by public health emergencies. The revisions—adopted by the World Health Assembly in May 2005 and in force since in June 2007—extend the scope of the regulations from a limited number of infectious diseases (cholera, plague, and yellow fever) to all events that may constitute a public health emergency of international concern (PHEIC) [26]. Such events are, in essence, those that (1) constitute a public health risk to other nations through the international spread of disease and (2) potentially require a coordinated international response. The new regulations require each state party to develop, strengthen, and maintain—as soon as possible but no later than 2012—the capacity to detect, assess, notify, and report relevant health events to the WHO [26]. Within the same period, states must also develop, strengthen, and maintain the capacity to respond promptly and effectively to public health risks and PHEIC [26]. Pursuant to the regulations, the WHO may make nonbinding recommendations to states regarding measures to address the public health threat such as compulsory

vaccination or prophylaxis, quarantine, and isolation [26]. Although these regulations hold some promise on paper, there are a number of practical concerns. Most important of all, it is not clear how the least-developed and developing nations will find the resources to build the necessary core capacities to monitor and respond to major public health threats because the regulations do not ensure that funds will be made available by the WHO or by the wealthiest nations to support this enterprise [27]. Putting in place a legal framework for public health emergency capacity-building—both at the domestic and at the international levels—is a necessary step toward the improvement of public health emergency management. But it is not sufficient. Funding capacity-building is essential too.

18.2.3 Improving Healthcare Infrastructure and Access

The limitations of focusing on public health emergencies and on principally coercive measures to address those emergencies are implicitly recognized by the Turning Point Model State Public Health Act, published in September 2003 by a collaborative of local and state health officials in the United States [28,29]. That Act contains coercive provisions—similar to those in the MSHEPA discussed above—to be invoked in the event of a public health emergency. But these provisions are set within a broader context, and the Model Act's larger goal is to strengthen public health infrastructure more generally [28]. The Act's mission statement seeks the promotion of public health by "[a]ssuring the conditions in which people can be healthy" and "providing and assuring the provisions of essential public health services and functions...that are culturally and linguistically appropriate" [28]. However, the Act does not guarantee additional public health funding and it imposes no obligations on public health agencies to implement unfunded programs [28,29]. So it is unclear how much public health infrastructure will improve as a result of its implementation.

International instruments also locate public health emergency management within broader public health goals. Parties to the International Covenant on Economic, Social and Cultural Rights of 1966 (the ICESCR) have obligations to "prevent, treat and control epidemics and other diseases" [30]. This has been authoritatively interpreted to require "the creation of a system of urgent medical care in cases of accidents, epidemics and similar health hazards, and the provision of disaster relief and humanitarian assistance in emergency situations" [31]. These obligations are expressed as part of a broader obligation: the progressive realization of the right to the highest attainable standard of health. This right not only requires healthcare to be economically and physically accessible [31], but it has also been authoritatively interpreted as "an inclusive right extending not only to timely and appropriate health care but also to the underlying determinants of health, such as access to safe and potable water and adequate sanitation, an adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions, and access to health-related education and information" [31]. A few nations are not

parties to the Covenant. The most conspicuous of these is the United States, which signed the treaty but has not ratified it (and is unlikely to do so for the foreseeable future). However, the United States continues to be an active member of the WHO, and the preamble to the WHO's constitution declares that "[t]he enjoyment of the highest attainable standard of health"—defined broadly as a "state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity"—is "one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition" [32]. Moreover, the WHO's stated objective is "the attainment by all peoples of the highest possible level of health" [32].

Working toward these lofty goals requires substantial investment in healthcare infrastructure at both national and international levels. However, as I have already shown, global investment in public health infrastructure has been declining in recent years rather than increasing. Policymakers should keep in mind—as the ICESCR makes clear—that concerns about public health emergency management are part of a broader problem, the lack of healthcare resources more generally. More important still, they need to recognize that the state of public health infrastructure predetermines to a great extent how effectively we can address catastrophic threats to public health.

This can play out in a number of ways. First, a population that already endures a high morbidity burden will be more susceptible to and more severely incapacitated by harmful biological agents. Second, those who do not have access to healthcare whether for physical or economic reasons—are less likely to present their symptoms to physicians at an early stage, thereby depriving public health officials of early opportunities to detect and adopt countermeasures in response to either a natural or a man-made pandemic [10]. Third, weaknesses in public health infrastructure that result in nonemergency healthcare needs going unmet are likely to be exacerbated in dramatic ways in the event of a public health emergency when demands for medical equipment and trained providers will peak. Fourth, untreated communities within a developed nation—as well as less-developed and developing nations—may become reservoirs for the multiplication, mutation, and transmission of biological agents. As a result, they may pose a further threat to those who do have access to healthcare resources.

The Models We Use and Why We Use Them 18.2.4

The choice of preparedness models that I have presented above is, in truth, not really a choice at all. It should come as no surprise that we will be best equipped to respond to a public health emergency when all models are applied simultaneously and globally. The third model, a solid public health infrastructure that can address the daily health needs of local populations and that is accessible to all, is the best foundation upon which to build emergency preparedness measures. The second model, an all-hazards or multi-hazard approach, can help counter a broad spectrum

of public health emergencies (with both natural and man-made origins) by developing and enhancing surveillance and response capacities. However, these two models combined will not eliminate the need for single-hazard approaches. A solid public health infrastructure supplemented by a distribution network that can provide vaccines and therapies speedily to a wide population and an array of backup medical equipment and surge capacity treatment centers will be vital. But it will still be necessary to develop vaccines and therapies tailored to the most probable threats.

The danger, of course, is not that we will pursue the second and third models at the expense of the first. Rather, it is the opposite. Policymakers often adopt singlehazard approaches without taking seriously the second and third models. Although improving healthcare infrastructure more generally would enhance public health emergency management as well as promote the progressive realization of the right to health, there has not been greater investment in public health more generally. As I have argued elsewhere, our focus on catastrophic threats to public health tends to be driven by emotion, and our emotive concerns are often easily allayed by symbolic responses—even though our vulnerability may survive (or, in extreme cases, may be exacerbated by) those responses [18]. The stocking of Tamiflu, which could well turn out to be ineffective in the effort to stem a potential avian flu pandemic, may be an example of this, as are the steps to develop a vaccine for avian flu without coterminous efforts to build an effective network for the distribution of such a vaccine. One notable study demonstrated that people are willing to pay more for flight insurance covering losses caused by terrorism than for flight insurance covering all causes, even though the latter includes the former [33]. So our reluctance to invest in public health infrastructure more generally (even though such infrastructure would provide the most solid foundations for catastrophe preparedness) appears to have profound psychological origins. Although there is no simple panacea for this artifact of human psychology, recognizing the phenomenon is the first step in learning how to address it at the policy level.

18.3 Implications of Preparedness Models

18.3.1 The Relationship between Preparedness and Human Rights

Some may view public health emergency preparedness as simply a budgetary or resource allocation issue. But preparedness is more than that. The way in which we prepare (or fail to prepare) for public health emergencies has implications for both human rights and medical ethics—as well as health capital. More than a decade ago, Larry Gostin and the late Jonathan Mann highlighted the nexus between the protection of human rights and the promotion of public health [34]. That relationship is not always synergistic. Measures designed to protect public health—such as compulsory isolation and quarantine—interfere with human rights, although

(as I will explain below) that interference may well be justifiable as a matter of international human rights law. However, lack of preparedness—and, in particular, a failure to bolster preparedness and response capacities—can increase the need for these and other, even more coercive, measures (often administered by or with the support of law enforcement agencies). In the aftermath of Hurricane Katrina, for example, there were reports of looting and violent behavior [35]. But this behavior followed swiftly on the heels of three cumulative failures of preparation: (1) the lack of transportation for evacuation before the storm, (2) shortage of food, potable water, and healthcare resources in the immediate aftermath, and (3) poor coordination of rescue measures [36].

International human rights law recognizes the legitimate limitations that the demands of public health may impose on civil liberties. Certain rights—such as the right to privacy and the right to liberty of movement—are qualified, and interferences are permissible to protect public health provided certain criteria are met [37]. In general, the interference must be proportionate to a legitimate public health objective and must be the least restrictive means by which to achieve that objective [38]. (More fundamental derogations may be permitted "[i]n time of public emergency which threatens the life of the nation" [37], but many public health emergencies will not cross that high threshold [38].)

The new International Health Regulations mentioned above have been criticized fairly for their failure to embrace fully the norms of international human rights law [27]. But the extent of the interference with human rights will ultimately depend upon the recommendations made by the WHO in each emergency situation, and on the steps that states actually take in response. If we are not well prepared for a public health emergency, the least intrusive means for protecting public health may no longer be available to us. And if we have not developed a public health infrastructure with surge capacity to vaccinate and treat thousands or even millions of people, we may invite a collapse of public order that will inevitably be met with the use of force.

18.3.2 Preparedness and Bioethics

The aftermath of Hurricane Katrina provides an illustration of the link between preparedness and medical ethics. A doctor and two nurses were arrested on murder charges following an investigation into alleged mercy killings in New Orleans in the wake of the storm [39]. The charges were subsequently dropped. But even if the allegations had been proven, we would do well to remember the context: the temperature in the hospital concerned was above 100°F, the sanitation system was out of action, the floodwaters were rising, and there was no apparent prospect of help from outside. Euthanasia in such circumstances should be understood as the result—in part, at least—of lack of preparedness. Had the hospital been evacuated or had there been adequate rescue resources, the physician and the nurses who were arrested may not have been presented with the distressing ethical dilemma: leave

patients to suffer potentially excruciating deaths or take their lives. On this view, resource allocation issues are not simply policy questions. They are larger issues in bioethics—sometimes called "macro-bioethics"—which frame the dilemmas that arise in the dyadic relationships between physician and patient, the traditional stuff of bioethics [40]. This is not intended to suggest that improved preparedness will eliminate the ethical issues that arise in the event of a catastrophe. If there are sufficient vaccines, for example, there will still be questions of priority: who should receive the vaccine first? This is undoubtedly a difficult question, but it is less troubling than the question that will arise if we are not well prepared: who should get the vaccine and who should not? [41].

18.3.3 Preparedness and Social Justice

Catastrophe tends to expose not only lack of preparedness, but also immanent social inequalities—and the real costs that result from these. The tragedy of the Titanic is not simply the misfortune of its icy collision or the wholly insufficient number of lifeboats on board. Seventy five percent of the passengers in third class perished, while 60 percent of first class passengers survived—some of them in lifeboats that were far from full [42]. A U.S. Senate committee report in 1912 claimed somewhat unconvincingly that "no distinction" had been made on grounds of class when passengers were selected for the lifeboats [42]. But it acknowledged that the "failure to utilize all lifeboats to their recognized capacity for safety unquestionably resulted in the needless sacrifice of several hundred lives which might otherwise have been saved" [42]. Almost a hundred years later, Hurricane Katrina laid bare the racial inequalities in the Gulf Coast. Among those displaced by Katrina in New Orleans, 67 percent are African-American, 28 percent live below the poverty line (of whom 84 percent are black), and 100,000 had no car, and were unable to flee the city before the hurricane hit [43].

Although catastrophe tends to reveal social inequalities and health inequities, that is not the only reason to think about social justice at both national and global levels. As I have already said, fundamental gaps in basic healthcare infrastructure will severely impair our ability to confront a pandemic whether its origins are in nature or at the hands of a malevolent human actor. The WHO's annual report for 2006 noted a global shortfall of 4.3 million doctors, nurses, and other health professionals [44]. The brunt of this is felt by African nations which bear 24 percent of the global disease burden but have only 3 percent of the world's health workers with less than 1 percent of global health expenditure at their disposal. This grossly disproportionate burden is powerfully illustrated by the case of Dr. John Awoonor-Williams who, according to the report, is the only physician at Nkwanta District Hospital which serves a population of 187,000 in a vast and remote area of the Volta Region in Ghana [44]. Populations without access to healthcare are not only vulnerable to a host of well-known and treatable diseases, but they also represent a collective vulnerability in our global efforts to stem a potential pandemic.

18.4 Conclusion

The threats posed by potential bioterrorist attacks and natural pandemics, such as avian flu, offer an unprecedented opportunity to think more carefully about public health and to invest more substantially in public health infrastructure. To date, there has been considerable deliberation, but far from sufficient investing. Bolstering public health infrastructure in both developed and developing nations will not in itself guarantee that we are able to respond effectively to a public health threat of national or international dimensions. We will also need to pursue the measures that many governments are now working on—developing disease surveillance networks and working on vaccines and therapies for the most probable threats. But if we do these things without greater investment in public health infrastructure more generally, our efforts may do little more than provide unfounded reassurance before disaster strikes. To be prepared, we must train and retain more health professionals, build more medical facilities and equipment, broaden access to healthcare services, and improve surveillance and distribution networks. Without these measures, new vaccines and therapies will—like the partially filled lifeboats on the Titanic—help just a few. If we are to have any hope of exerting control over a global pandemic whatever its source—helping the few is an option that none of us can truly afford.

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Chapter 19

Which Policies Effectively Enable Smoking Cessation? The Role of Risk Perception in the European Union

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19.1 Introduction

Smoking is recognized as a preventable habit that causes a number of fatal diseases such as lung cancer, chronic bronchitis, heart attacks, and emphysema. Dramatic increases in smoking prevalence rates in the European Union (EU) have enhanced substantial policy discussion. Although tobacco consumption decreased during 1970–1994 and tobacco prices increased more than the costs of living, the incidence of smoking in the EU is still around 25–30 percent. However, some research tends to ignore that 20 percent of the EU population has succeeded in quitting smoking. Although the determinants of smoking initiation have received considerable attention in the literature, there are only a small number of comprehensive studies whereby the decision to quit smoking is examined at the cross-country level in Europe. Therefore, it may be worth examining the role of different policies in achieving the target of smoking cessation, and especially intensive information and awareness-raising measures which influence individual risk perception.

There are strong controversies regarding the most effective policies to assist individuals to quit smoking. Intuitively, we might speculate that some of these policies may be more efficient than others. As far as individuals handle the ultimate decision when deciding whether to smoke (or continue smoking) or not, it may be worth examining the reasoning process that leads to the decision to quit smoking; individual risk perception may strongly explain quitting. Smoking may be conceptualized as a volitional act that is strongly determined by risk perception. Therefore, those individuals that do not perceive smoking as hazardous might be less likely to quit smoking. Risk perceptions are subjective judgements on the occurrence of undesirable hazards. Interestingly, some studies (Viscusi, 1990, 1992; Antoňanzas et al., 2000; Viscusi et al., 2000) show that in perceiving smoking risks people are affected by systematic biases (e.g., smoking risks are voluntarily undertaken and strongly publicized), which are dependent on whether individuals smoke. This justifies examining the determinants of individual risk perceptions along with smoking cessation using specific econometric techniques.

The aim of this chapter is to examine empirically the determinants of smoking cessation and participation simultaneously with smoking risk perception in the EU. By examining the determinants of smoking risk perception, we might identify individuals respond to public information as well as identify common patterns in risk perception of different hazards across the EU. The empirical results will provide us with some insights on the effectiveness antismoking policies and smoking regulation. This chapter is organized as follows. Section 19.2 deals with smoking in the EU. Section 19.3 examines the theoretical underpinnings as well as the modeling issues. Section 19.4 describes the data and the empirical specification. Section 19.5 provides the results and the chapter ends with a section that discusses conclusions.

19.2 Empirical Evidence on Smoking Cessation

Generally speaking, the primary aim of antismoking policies is to reduce the demand for cigarettes by fostering smoking cessation and introducing barriers to smoking initiation (participation) by increasing costs of smoking. Therefore, as far as it is the result of an individual's decision making, these policies aim at altering the costs and benefits of smoking. Other collateral objectives may be encouraging substitutions for "light" smoking, and promoting instruments to assist smokers who have already decided to quit (e.g., patches, nicotine chews, and other clinical treatments). Antismoking policies can be categorized in terms of tax policies, regulation policies, and public information policies (Hsieh, 1998) along with pharmacological and clinical treatments. However, single antismoking policies might differ in their successes and aims as we report in Appendix 19.1.

Some studies in the economics literature have examined the role of regulation and taxation in reducing smoking, although results are ambiguous (Trigg and Bosanquet, 1992; Bosanquet, 1995). However, more recently, a study based on Canadian data examined whether taxation and regulation are effective in inducing smokers to quit smoking (Lanoie and Leclair, 1998). Their results revealed that even though taxes seem to reduce tobacco consumption, they do not influence the decline of smoking prevalence, whereas antismoking regulation exhibits the opposite effect. Furthermore, some studies suggest that current cigarette taxes exceed the magnitude of the estimated net externalities (Viscusi, 1994). Evidence shows that cigarette price increases have the greatest impact on smoking among lowest income groups (Chaloupka and Warner, 1999). If this is the case, arguably taxation alone may fail to attain its objectives, whereas antismoking regulations seem to be more successful, even though this depends on cultural heterogeneity.

In parallel, other policies aim at providing risk information through informational campaigns. The rationale relies on a hypothetical informational failure by which individuals do not succeed in understanding smoking risks, thus shifting individual behavior toward healthier lifestyles. Information campaigns produce risk information often using media and other public information sources. Evidence from the United States (Viscusi, 1990, 1992) and Taiwan (Liu and Hsei, 1995) shows that informational campaigns may be substantially increasing individual risk perception rather than exclusively providing information for decision making. Interestingly, evidence from survey data shows that individual risk perception tends to be overestimated. Whereas the best scientific estimates of actual lifetime risks from smoking range from 0.05 to 0.10, individual risk perceptions are much greater, typically between 0.3 and 0.5 (Viscusi, 1992). Therefore, information campaigns seem to be ineffective in encouraging smoking cessation.

Other policies might rely on the involvement of clinicians and health professionals. Because physicians tend to be influential, they are expected to exert some influence in helping individuals quit smoking. However, antismoking policies are

limited by the infrequency of physician's counsel to quit smoking. Doescher and Saver (2000) have examined professional assistance using data from a representative 1996–1997 Community Tracking Study Household Survey in the United States. They conclude that physicians' advice was not often heeded. Younger men and lower healthcare service users along with lighter smokers were less likely to heed to a physician's advice. Furthermore, Maguire et al. (2000) found for an Irish population that physicians strongly advise the young rather than the old population. The role of an incentive-based intervention was analyzed in a study examining data from Eastern Ontario (Bains et al., 2000). Results suggested that participants quitting smoking tend to be younger, more educated, employed, and were heavier smokers, with fewer friends or coworkers who smoked. After one year, 19.5 percent of them reported that they had quit smoking, whereas less than 1 percent of the random group had achieved cessation. Overall evidence reveals that physicians' advice is a complementary instrument to help people to quit smoking.

Pharmacological and medical treatments may serve as instruments to reduce the costs associated with smoking cessation. Silagy et al. (2000) and Jolicoeur et al. (2000) examined the role of pharmacological treatments that help in quitting smoking. Results showed that they seem to be effective in smoking cessation but they require some effort from individuals, such as a strong belief that they will be able to quit. Jolicoeur et al. (2000) found that nicotine patches seem to increase the attempts to quit. Silgary (2000) examined all of the commercially available forms of nicotine treatments (nicotine gums, skin patches, nicotine nasal sprays, nicotine inhalers, and nicotine sublingual tablets) and found that they appear to be effective, however, as part of a decision that promotes smoking cessation. The effectiveness of treatments was largely independent of the intensity of additional support provided to the smoker. Thus, pharmacological treatments may be as physician's advice instruments to help individuals who have already decided to quit smoking.

Within the EU, regulation also concerns reducing the tar content in cigarettes. However, light smokers may be more likely to quit smoking, and consequently this may be understood as an alternative perspective to help quit smoking. Previous evidence on reducing smoking shows that the majority of smokers are unable to reduce the number of cigarettes consumed and tend to remain smoking for long periods. As Hughes et al. (1999) show in a study applied to the United States, smoking reduction neither promotes nor undermines cessation.

19.3 Theoretical and Conceptual Background

19.3.1 Smoking Risk Perception

Health-related behavior in the presence of risk might be strongly influenced by how individuals perceive risks and form their beliefs about the risks affecting their lives. Although risks are inherent in our life, information on health risks and safety is far

from being perfect. Health risks, although heterogeneous in nature, constitute a primordial part of all risks individuals suffer. Relevance of risk perception studies suggests that people judge hazards according to the frequency of occurrence (Tversky and Kanheman, 1973). However, individuals often make mistakes when they set judgements on risky prospects (Slovic et al., 1982). This is reflected by the fact that people usually err in their perceptions of the occurrence of uncertain events, although they seem to follow systematic biases depending on the characteristics of risks as perceived by individuals (Fishoff et al., 1977).

Concerning smoking risks, there have been a large number of papers tackling the issue of smoking risk perceptions. Two demonstrated biases are the overestimation of large risks (Benjamin and Dougan, 1997) and the overestimation of largely publicized risks (Viscusi, 1990, 1992). Alongside, risk perceptions might differ when referring to the individual itself or to society. Indeed, even though individuals are aware of risks to others, they are not consequent of risks to themselves. Pavis et al. (1998) emphasize the presence of optimistic judgements and Fishhoff et al. (1977) find evidence of the individual's overconfidence regarding their own knowledge. The existence of this bias seems to explain the overestimation of motor vehicle accidents and all cancers and an underestimation of tuberculosis, diabetes, or emphysema. Ayanian and Cleary (1999) suggest that smokers are unable to understand the risks they face due to smoking. They show that even heavy smokers and those with cardiac risk factors do not perceive themselves as at increased risk of experiencing a heart attack or developing cancer. This turns out to support the arguments that smokers are optimistic and deny risk information to justify their behavior. Imperato (1999) argues that risk perception studies are often subjected to two main boundaries. The first one concerns the way they formulate risk perception questions. The other refers to the reference group that formulates risk perception questions. If the question is not framed within the part of the questionnaire that asks for the risk factor in consideration, risk perceptions may not be appropriately estimated. The reference groups that smokers take into account when eliciting risk perception questions may include more smokers, because nonsmokers usually have less friends who smoke, and therefore this may justify why smokers' risk perceptions with respect to the overall population would be so high.

Slovic (1998) distinguishes the probability and severity of risks. He suggests that teens are aware of the probability of smoking as causing cancer, but not on the severity of the experience of suffering from cancer. This may explain why young people get initiated with the smoking habit. Specific concern on the part of both health authorities and individuals is that smoking risks are noticeably different from other risks, especially aggravated due to the addictive nature of nicotine. It has been demonstrated to be a high-cost risk as it is associated with fatal hazards such as lung cancer and cardiovascular diseases. Smoking risks may be seen as highly publicized risks as they are extensively advertised. This feature may be the cause for the over-perception of risks both by smokers and nonsmokers (Viscusi, 1990).

A sticking issue refers to whether risk perceptions change if individuals are able to stop smoking. Schelling (1978) developed this idea into the "multiple selves" approach. This framework emphasizes the existent duality between risk perceptions whereby risk perceptions change if individuals are able to stop smoking. Therefore, when estimating the decision to quit smoking, studies should jointly estimate it with the determinants of risk perceptions. Thus, risk perceptions may be dependent on the condition of being an ex-smoker and the desire to quit smoking (Viscusi, 1991). A connected framework is the cognitive dissonance theory (Akerlof and Dickens, 1982). This framework states that beliefs are in some way determining individual action (Aronson, 1972). The idea can be applied to addictive behaviors also, because sometimes an addict finds easier to change the cognition rather than the behavior. Finally, Viscusi (1991) shows that individuals take into account risk perceptions when deciding whether to smoke. Therefore, we might expect risk perceptions to change with information acquisition over time, which might act as a proxy for the role of age in determining risk perceptions. Finally, smoking may be still considered as an "accepted risk," which may influence the decision to quit smoking. Some percentage of the population may accept these risks although there is strong variation within countries.

19.3.2 The Decision to Quit Smoking

Smoking cessation may be the result of a complex set of decisions and determinants not easily captured in a decision model. Literature in the past have emphasized that addiction (Becker and Murphy, 1988) and long-term risk perceptions (Viscusi, 1992) strongly influence individual behavior. Smoking is a typical case where standard consumer-risk theory may not be applicable. Standard consumer-risk theory establishes that individuals tend to undertake rational choices according to a given set of risk beliefs. However, cigarettes contain addictive substances, and after an initial period of smoking when individuals are not yet addicts, addiction symptoms refrain them from undertaking a volitional act to quit smoking or even if they do fail in the intent. Nicotine dependence produces a typical situation that economics considers as addictive preferences, i.e., current consumption depends on past consumption.

In Europe and the United States, smoking among the young is rising and among adults it is declining, and there are no compressible studies examining why this is happening. There is evidence that the younger population tends to underestimate the likelihood that they will be smokers when they become adults, and the most relevant determinant of tobacco consumption at this age appears to be the price of tobacco (Gruber and Zinman, 2000). Risk factors for initiation of smoking include tobacco use by other family members and friends, peer approval, low socioeconomic status, poor academic achievement, poor self-image, and susceptibility to the

influence of others and advertising images that project smoking as pervasive and glamorous. The adult population tends to have some previous knowledge on the effects of smoking and already has been able to perceive the effects of smoking in cancer and other diseases. Although affected by an addiction component, adults are expected to be exposed to a serious reasoning process and are strongly influenced by past experiences.

Among the addiction component, it should be acknowledged that individuals have a role in determining whether to smoke. Some authors argue that smoking may be the result of a less diligent activity on the production of safety and health promotion, that is, smoking may be the result of a particular attitude toward risk. Evidence on the role of individual perceptions and family influences on smoking cessation have been reported in Israel by Sperber et al. (2000). Belief in one's ability to quit, satisfaction with group meetings, and spouse support were significantly associated with success in quitting smoking. Expectancies have been shown to play an important role as experimentally analyzed by Copeland and Brandon (2000). Dijkstra and De Vries (2000) found that optimistic smokers are addict, and less-resistant smokers are those who will quit with increasing societal antismoking pressure.

Smoking cessation is meant to be the result of a complex set of determinants not easily captured by decision models. As long as cigarettes contain addictive substances, past consumption determines present consumption. Nicotine dependence produces a typical situation that economists refer to as "addictive preferences." The medical literature states that addictions are the result of an illness causing compulsive use of a product that is beyond an individual's control (Thombs, 1994). The economics literature argues that individuals initiating the smoking habit "rationally" choose over life addictive consumption (Becker and Murphy, 1988). Although medical and economic literatures seem unreconcilable, some recent approaches deal with both streams. Indeed, Suranovic et al. (1999) argues that individuals may follow a bounded rationality approach, that is, individuals decide to smoke for an initial period. After this period, they may become addicts and even if they try to quit they are unable to do so.

19.3.3 The Data

Since the 1990 EU directive and the Aid Against Cancer Program that covers the EU member states plus Norway and Iceland, research on smoking has progressed rapidly. However, previous studies are mostly based on national databases, which might not allow cross-country comparisons. Therefore, alternative representative databases should be explored to gain further understanding on the determinants of the decision to start smoking and specifically on the decision to quit smoking at the EU level. In this study, we use the Eurobarometer survey 43.0 conducted during March–April 1995 on cross-border purchases, smoking habits, and cancer

prevention.* This database provides evidence on the risks of smoking, smoking cessation, and attitudes toward smoking. This survey was conducted in a multistage basis, clustering 15 EU member states by a face-to-face interview with people aged 15 and above during 1995. Questions focused on the type of tobacco products used, the number of cigarettes smoked daily, and the desire of smokers to limit their consumption. Another source of questions was the attitudes of both smokers and nonsmokers toward the use of tobacco products in public, opinions regarding regulations prohibiting smoking in some public places, attitudes about smoking in the workplace, and the advertising of tobacco products. Demographic and other background information were gathered on the number of people residing in the home, size of locality, household income, and region of residence. Respondents' socioeconomic characteristics were recorded under the following categories: age, sex, marital status, age when education was completed, occupation, previous occupation, and left/right political leanings.

The target number was 1000 respondents per country, including nonnationals, expect Luxembourg (N=500), Germany (N=2000), and United Kingdom (N=1300). However, we should note that the data has some drawbacks. First, rather than being a health survey, it is a public opinion survey. Therefore, data on health status is not available although it contains other relevant information on individual perceptions, income, and cross-country differences. The Eurobarometer 43.0 was specifically designed to elicit data on smoking. Data on income and number of cigarettes smoked were not measured in quantitative scales but were measured in qualitative scales. This inconvenience has been solved by using the mean values of the coefficients that are presumed to be measured. However, the reliability of this data does not allow to compute income elasticity and to estimate the tobacco consumption equation.

Furthermore, to complement this data we have employed additional data (reported in Table 19.1) on a qualitative rating for regulation compulsion both on activity and on advertising, along with price indexes at purchasing power parities including taxes. The qualitative rating is a World Health Organization (WHO) index based on a subjective evaluation of the severity of legislation to constrain individual behavior. Ratings vary from 1 (less severe) to 3 (most severe). Those countries that impose a more severe legislation are the United Kingdom, Denmark, and Germany, whereas regulation in Portugal, Italy, and France is less severe. The only rare exception is Spain, where regulation of smoking in public places is not very strict, but advertising regulation is strongly constrained. Price indexes have been adjusted to purchasing power parities, so that if the tobacco price index (TPI) is 130, it means that tobacco

^{*} Interviewing and sampling were conducted by various research firms operating in the EEC countries. Numbers 1–31 were carried out by national institutes belonging to the European Omnibus Surveys (EOS—Gallup Europe) and, since then, by national institutes associated with INRA (Europe). For further details see documentation. Data processing for this collection was performed at the Swedish Social Science Data Service (SSD).

Advertising^a Price Index^b 1994 Regulation^a Country Austria Belgium Denmark France Germany Greece Ireland Italy Luxembourg Netherlands Portugal Spain Sweden United Kingdom

Table 19.1 Price Indexes and Information Regulation in the European Union (EU)

was relatively expensive compared with other consumption items. Looking at the price levels, we find that even though some countries show simultaneously high tobacco prices and strict regulations, a country with high prices as Ireland shows less severe regulations. If we contrast this data with data on smoking prevalence, we find that countries with slight smoking regulation as Portugal display smaller smoking prevalence. Whereas, a country like Denmark, well known for its strong smoking regulations, displays one of the highest smoking prevalence rates.

19.4 The Empirical Methods and Data

The distribution of cigarette consumption and smoking cessation requires some special estimation tools. Our database contains records on the number of cigarette

^a European Commission (1999). Tobacco consumption 1970– 1994 in the member states of the European Union and Norway and Iceland.

^b WHO Tobacco Profiles, 1994.

smokers currently smoking, records for those individuals defining themselves as former smokers, and records on risk perception as a binary answer to the question "Do you think smoking increases the risk of cancer?" We estimate a system of equations for smoking cessation, cigarette consumption, and risk perception. The empirical strategy is as follows. Because we are interested in the issue of smoking cessation, we undertake two breakdowns to the sample. First, we split our sample into those who have smoked and those who have not. We rely on a subsample excluding those individuals who have never smoked because the decision to quit smoking is not relevant to them. We estimate by Ordinary Least Square (OLS) and Maximum Likelihood (ML) cross-sectional models for smoking cessation and risk perception for a subsample of those individuals who have had some experience with smoking before the time of the interview. The reason for using this variable instead of that for smoking participation is that smoking participation is not a measure of smoking cessation. Moreover, smoking may be seen as sociably undesirable, and thus, survey respondents may have an incentive to under-report their consumption (Wasserman et al., 1991). Additionally, questions on consumption may not capture the amount of cigarettes smoked in the past, so any reduction in the number of cigarettes would be dismissed. As there were records on the time since the individual has quit smoking, we can distinguish ex-smokers according to the period they have quit. Because there is reliable evidence that people who quit for a short period may start smoking again, we classify as ex-smokers, those individuals who have succeeded in quitting for more than a year.

Furthermore, we break down the sample into northern and Scandinavian countries (NSC*) and southern countries. As far as significant differences that may appear between northern and southern EU countries, splitting the sample into two may help to understand whether differences in regulation and risk perception may have a different influence according to the set of EU countries considered.

Smoking cessation (EX = 1) is a function of current benefits of smoking mainly reflected by age, having children, and represented as "B". Future loses of smoking (L) are represented by risk perception and experience with cancer, adjustment costs mainly represented by antismoking policies (C), and finally we include a random term (e_{1i}):

$$pr(EX_i = 1/smoked > 0) = f(B, L, C, e_{1i})$$
 (19.1)

Equation 19.1 can be parameterized according to the hypothesis as follows:

$$EX_i = a_0 + a_1RISK + a_2PRICE + a_3REGUL + a_4MEDTRET + a_5X_1 + e_{1i}$$
(19.2)

^{*} Include Norway, Sweden, Denmark, Germany, the Netherlands, Finland, and the United Kingdom.

EX is a latent index that determines the decision to quit smoking for the person i, RISK measures risk perception, PRICE measures cross-country differences in tobacco prices, REGUL approximates a measure of regulation (see Table 19.1), and MEDTRET measures the effect of medical treatment in the cessation decision. X_1 is a vector of another explanatory variable, for example, advertising. Finally, a_j (j = 0, 1, ..., 6) are the associated vectors of coefficients and e_{1i} is the associated random error.

The dependent variable in the first set of equations estimated is ex-smoker (smoking cessation, EX_i). Because of the discrete nature of the dependent variables, we employ a probit model. For the ease of coefficient interpretation, results were very similar using probit and logit models.

Along with smoking cessation, we estimate the determinants of cigarette consumption because it may be an alternative way to capture smoking cessation determinants as well as that of smoking reduction. The problem we find here is that most people do not smoke, and the level of smoking may be quite skewed. As other papers have encountered a similar problem, we have chosen a two-part model where the consumption of cigarettes is censured by smoking participation. The reason for this is that we may be able to estimate the effect of different determinants simultaneously on the smoking participation and on the level of smoking. Moreover, because we may suspect some differences between the samples, we estimate two censured models for the full sample and the subsample of NSC.

The model estimated here has the same parameters as the models for smoking cessation so we do not reproduce them again. The consumption model consists of two equations including the same variables. Equation 19.3 describes the probability of smoking and Equation 19.4 describes the consumption equation censured by the fact of being a smoker. Similar models have been estimated by Garcia and Labeaga (1995).

$$Pr(SMOKE = 1) = f(B, L, C, e_{2i})$$

 $Pr(NCigg/Smoked > 0) = f(B, L, C, e_{3i})$ (19.3)

SMOKE indicates a variable measuring the probability of smoking participation and NCigg refers to the number of cigarettes. The variables e_{2i} and e_{3i} refer to the random error terms.

Finally, we model perceptions of smoking risks, that is, perceptions of the individual i with respect to smoking hazards j, which can be estimated according to Viscusi (1992) by means of the following equation:

$$Pr(RISK = 1)_i = \alpha_0 + \alpha_1 X_{1i} + \alpha_2 X_{2i} + e_{4i}$$
 (19.4)

where X refers to the vectors of variables associated with the information source. The intercept α_0 refers to the prior beliefs (Viscusi, 1990), variables determining age, education, and sex can be captured by the variable X_{1i} and X_{2i} is assumed to capture those variables concerning general sources of information. Finally, e_{4i}

refers to the random error. Because here we are interested in testing whether risk perceptions are to simultaneously influence the decision to quit smoking, we use a two-stage Heckman (1976) procedure to estimate smoking cessation and risk perception. The correlation coefficient between e_{1i} and e_{4i} will inform us on the independence of both equations.

19.5 Results

First we examine smoking cessation and initiation in the EU. Interestingly, within the EU there are sensible differences in the prevalence and consumption of cigarettes. On average, according to the Eurobarometer 43.0 survey, 31 percent of the population smokes cigarettes, 1.8 percent smokes pipes or cigars, and only 0.4 percent chews or sniffs tobacco. The 19.6 percent are former smokers and 47.1 percent have never smoked. With regard to cigarettes, we find that people in southern European countries tend to smoke more than other EU countries. This is specifically the case in Greece, Spain, and France. However, the exception is Portugal, which exhibits the lowest EU smoking prevalence after Finland. Figure 19.1 shows Scandinavian countries, the Netherlands, and the United Kingdom are the ones with relatively higher percentages of people out of the cigarette market. Only 33 percent in the Netherlands and 35 percent in Denmark have never smoked, whereas in Greece only 12 percent of the population has never smoked. There are significant differences among EU countries in the share of former smokers. In particular, the Netherlands, Sweden, and Finland rank the highest, whereas Greece and Spain rank at the back. The Finnish have carried a remarkable process encompassing new medical knowledge to comprehensive action and public policy.

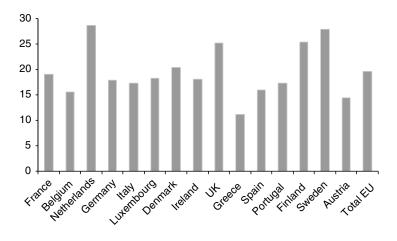


Figure 19.1 Smoking cessation in the European Union (Percentage of ex-smokers by country). (From Eurobarometer 43.0.)

Table 19.2 Percentage of Individuals Who Perceive Smoking as Causing Cancer

Country	Smoking Risk (Standard Error)
France	0.95 (0.01)
Belgium	0.96 (0.01)
Netherlands	0.97 (0.01)
Germany	0.97 (0.01)
Italy	0.96 (0.01)
Luxembourg	0.97 (0.02)
Denmark	0.98 (0.01)
Ireland	0.93 (0.01)
United Kingdom	0.96 (0.006)
Greece	0.95 (0.010)
Spain	0.97 (0.01)
Portugal	0.99 (0.01)

Source: Estimated from Eurobarometer 43.0 (1995).

Risks now are being perceived by Europeans. Table 19.2 exhibits that between 93 and 98 percent of Europeans believe that smoking is associated with cancerous diseases, with no significant differences between countries. Europeans seem to be aware of smoking risks. Table 19.3 highlights smoking risk perception as compared to alcohol- and overweight-related risks along with specific food-related risks and sun exposure risk. From this comparison, only sun exposure risk appears to produce comparable high risk with that of smoking. The reason for this discrepancy may lie in the nature of smoking risks. Smoking risks are extensively publicized risks as sun exposure risks are, both by public and private communication channels. However, there are relevant cross-country differences as well between cigarette consumption and smoking prevalence (Table 19.4).

Table 19.5 reports the summary of all the variables employed in the empirical analysis. Tables 19.6 through 19.8 report the results of the three estimations developed for smoking cessation, smoking consumption, and risk perception, respectively. Every pair of columns contains the coefficients and t-values. We report several summary diagnostic statistics to judge the general performance of the estimated models, which are reported according to the nature of the model estimated. For discrete models, we report the log-likelihood and the pseudo- R^2 , whereas for OLS models we report R^2 . In general, all estimations fit the data reasonably well. The F and χ refers to the Lagrangian multipliers test for heteroscedasticity.

		ok Widy D	•					
		k Too Alcohol	Oven	weight	Fatty	/ Food	Little	Fibre
	N	percent	N	percent	N	percent	N	percent
NA	23.0	0.1	25.0	0.2	30.0	0.2	43.0	0.3
Yes	9654.0	59.5	7215.0	44.4	9688.0	59.7	8094.0	49.8
No	4698.0	28.9	6692.0	41.2	4594.0	28.3	5415.0	33.3
DK	1863.0	11.5	2306.0	14.2	1926.0	11.9	2686.0	16.5
	Little	Exercise	Smo	oking		ittle etables	Sun Ex	posure
	N	percent	N	percent	N	percent	N	percent
NA	38.0	0.2	11.0	0.1	27.0	0.2	20.0	0.1
Yes	6725.0	41.4	15320.0	94.3	8631.0	53.2	14660.0	90.3
No	7368.0	45.4	570.0	3.5	5429.0	33.4	805.0	5.0
DK	2107.0	13.0	337.0	2.1	2151.0	13.2	753.0	4.6

Table 19.3 Smoking Risk Attitudes "Do You Think That Any of the Following Risk May Be Responsible for Cancer?"

In Table 19.6 the first and second pairs of columns show different specifications of smoking cessation for all EU countries, whereas the last pair of columns reports the same estimates only for NSC. Results suggest that as expected risk perception enhances a significantly positive effect on the probability of quitting smoking. This result is robust because coefficient estimates (0.27) remain significantly positive for the first two columns. For the subsample of NSC, risk perceptions are even more influential for the decision to quit smoking. The interpretation of these results is that risk perceptions pose a strong influence on the decision to quit smoking. Individuals seem to be very sensitive to the provision of risk information. Those individuals who perceive smoking as enhancing cancer are 20 percent more likely to quit smoking.

Experience with cancer is associated with the decision to quit smoking. This effect is stronger in NSC. However, the most striking results are that tobacco prices do not influence the decision to quit smoking, irrespective of the sample. These results are in line with other studies (Lanoie and Leclair, 1998). Furthermore, regulation is strongly associated with smoking cessation, displaying a similar effect as that of risk perception. Those people that live in countries where regulation is heavy are 27 percent more likely to quit smoking. Advertising, however, seems to exercise the opposite effect on smoking cessation as expected. Medical and pharmacological treatments though significant show an opposite effect on smoking

Table 19.4 Smoking Prevalence 1995 European Union Countries

Country Cigarettes Rolling Cigarettes Pipe

Country	Cig	arettes	Rolling	Ciggarettes	1	Pipe
	Mean	Standard Error	Mean	Standard Error	Mean	Standard Error
France	0.328	0.015	0.040	0.006	0.016	0.004
Belgium	0.311	0.021	0.116	0.018	0.055	0.017
Netherlands	0.236	0.016	0.211	0.016	0.029	0.005
Germany	0.279	0.018	0.052	0.013	0.042	0.013
Italy	0.310	0.016	0.005	0.002	0.009	0.003
Luxembourg	0.287	0.023	0.031	0.008	0.029	0.011
Denmark	0.304	0.015	0.138	0.011	0.055	0.007
Ireland	0.288	0.015	0.024	0.005	0.014	0.004
United Kingdom	0.294	0.012	0.037	0.005	0.024	0.004
Greece	0.389	0.016	0.005	0.002	0.004	0.002
Spain	0.339	0.017	0.008	0.003	0.015	0.004
Portugal	0.239	0.015	0.005	0.002	0.001	0.001
Finland	0.195	0.014	0.060	0.009	0.020	0.006
Sweden	0.306	0.029	0.115	0.027	0.098	0.027
Austria	0.298	0.014	0.016	0.004	0.009	0.003

Source: From Eurobarometer 43.0.

cessation. An explanation to this is that they may not be effective for smoking cessation. However, the negative sign may be interpreted as an evidence of the role of withdrawal effects on quitting smoking. The exception to this is the use of drugs.

Previous studies exhibited that the decision to quit smoking is associated with increasing age, a higher socioeconomic level, heavy smoking, and healthy lifestyles. Hsieh (1998) found among moderate smokers that age and being married were positively associated with quitting smoking. Socioeconomic characteristics as advanced age, household size, and sex are significant and positively associated with smoking cessation. Age may capture the role of experience. However, Hsieh (1998) argues that the positive effect of age may pick up health effects, that is, the symptoms of chronic diseases associated with smoking may increase with age. Jones (1994) finds that being married and household members are positively associated with quitting smoking. An explanation to this is that having a large

Table 19.5 Descriptive Statistics

Variable	Definition	Mean	Standard Error
HOUSESIZ	Number of household member's	2.912	0.015
AGE	Age in years	43.208	0.181
AGE2	Age square	2146.840	17.102
SINGLE	Not married = 1	0.238	0.005
SEX	Male = 1	0.581	0.005
EXPCANCE	Experience with cancer = 1	0.862	0.004
RISK	Smoking causes cancer = 1	0.754	0.005
PREU	Tobacco price Index*	1.666	0.006
REGUL	High regulation country=1	0.477	0.005
ADVER	Advertisement = 1	0.319	0.005
MEDTRET	Medical treatment = 1	0.068	0.003
NICORETE	Nicotine chew=1	0.091	0.003
PATCH	Patches = 1	0.053	0.002
HYPNOSIS	Hypnosis = 1	0.012	0.001
ACUPUNT	Acupuncture = 1	0.025	0.002
DRUG	Drug consumption = 1	0.053	0.002
EXSM	Ex-smoker > 1 year	0.430	0.005
WISHQUIT	Wishes to quit	0.097	0.003
WISHRED	Wishes to reduce smoking	0.071	0.003
FAILN	Number of times has failed quitting	0.242	0.005
SMOKWORK	People smoke at work	0.609	0.005
SMOKEFR	Friends some	0.900	0.003

Note: *Obtained from WHO, http://www.ktl.fi/enypat/data/smokeprev_eu.htm. Including taxes accessed July 2000.

family may provide extra benefits for quitting smoking because of the negative externalities to other members, typically to children. Unlike Hsieh (1998) we find that in males in the EU tend to be less likely to quit than women. This result is consistent with trends in female smoking in the EU.

Table 19.6 Smoking Cessation Models

Variable	moking Cess		Smoking Ce	essation		
		All Sa	nmple		Northern Scandina Countr	vian
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
HOUSESIZ	0.03	2.88	0.03	2.45	0.04	2.92
AGE	0.00	0.73	0.01	-0.38	0.00	0.78
AGE2	0.00	3.64	0.01	4.88	0.00	2.76
SINGLE	-0.07	-1.67	-0.08	-1.95	-0.08	-1.47
SEX	0.08	2.56	0.08	2.66	0.08	2.43
EXPCANCE	0.16	3.66	0.16	3.86	0.19	3.78
RISK	0.27	8.29	0.27	8.46	0.35	9.15
PREU	-0.03	-1.16			0.00	-0.12
REGUL	0.26	8.51			0.25	6.10
ADVER	-0.11	-3.60			-0.27	-6.39
MEDTRET	-0.24	-3.82			-0.29	-3.80
NICORETE	-0.44	-7.87			-0.48	-7.87
PATCH	-0.28	-3.81			-0.32	-4.05
HYPNOSIS	-0.25	-1.74			-0.22	-1.48
ACUPUNT	-0.20	-1.98			-0.25	-2.18
DRUG	0.30	4.46			0.27	3.48
INTERCEPT	-0.80	-5.50	-0.70	-5.08	-0.75	-4.37
Pseudo R ²	0.09		0.07		0.09	
$X_{16}^{2^*}$					816.7	
Log-likelihood	1076.9		839.2			
F	-5325		-5443			
N	14,600		8560		6069	

Note: *Likelihood ratio test.

Table 19.7 Cigarette Consumption Models

	· anamana	dinacion	cigal cae consumption models					
Variable	All Sample	əldı	Northern and Scandinavian Countries	and Countries		Two-Stag	Two-Stage Model	
	Consumption	otion	Consumption	otion	Consumption	otion	Participation	tion
	Coefficient	<i>t-Value</i>	Coefficient	t-Value	Coefficient t-Value	<i>t-Value</i>	Coefficient	t-Value
HOUSESIZ	-0.21	-1.93	-0.17	0.13	-0.25	0.15	-0.03	0.01
AGE	0.55	10.51	0.49	0.06	0.56	0.06	0.00	0.01
AGE2	-0.01	-10.55	-0.01	0.00	-0.01	0.00	0.00	0.00
SINGLE	-0.05	-0.14	-0.35	0.43	0.04	0.44	0.07	0.04
SEX	3.69	13.30	3.07	0.31	3.59	0.37	-0.08	0.03
EXPCANCE	0.88	2.33	1.07	0.42	89.0	09.0	-0.16	0.04
RISK	1.64	4.96	2.00	0.37	2.01	0.94	0.27	0.03
PREU	1.29	5.05	1.27	0.29	1.33	0.27	0.03	0.03
REGUL	-1.65	-5.56	-1.35	0.38	-1.99	0.86	-0.26	0.03

ADVER	-0.26	-0.83	-0.32	0.39	-0.10	0.48	0.11	0.03
MEDTRET	1.16	2.17	1.48	0.60	1.46	88.0	0.24	90.0
NICORETE	0.44	0.94	0.31	0.47	66'0	1.39	0.44	90:0
РАТСН	2.19	3.65	1.98	0.59	2.52	66'0	0.28	0.07
HYPNOSIS	2.03	1.76	2.45	1.11	2.32	1.35	0.25	0.14
ACUPUNT	2.16	2.65	2.33	0.84	2.39	96.0	0.20	0.10
DRUG	-0.08	-0.12	-0.13	0.70	-0.46	1.11	-0.30	0.07
INTERCEPT	1.09	4.46	1.94	1.252	-0.03	2.84	62.0	5.50
LAMBDA					2.40	2.43		
Adjusted-R ²	60.0		60:0					
Wald χ^2_{32}					1467.22			
F	56.09		21.45					
Z	8560		6909		8580			

Table 19.8 Risk Perception Models

	Two-Sta	ge Risk P	erception Mo	dels			
	Не	ckman P	robit Model		Risk Perce	eption	
	Risk Perce	eption	Smoking Ce	essation	All Sample (Maximum Likelihood Probit)		
Variable	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
COLLEGE	-0.34	-3.16	0.03	2.79	0.35	5.33	
AGE	-0.01	-1.53	0.00	0.89	0.02	3.17	
AGE2	$-0.8 \times 10-2$	2.79	0.00	3.41	-0.01	-3.73	
SINGLE	-0.03	-0.45	-0.06	-1.54	0.04	0.82	
SEX	-0.06	-1.24	0.08	2.89	0.06	2.00	
EXPCANCE	-0.01	-0.13	0.17	3.92	0.06	1.33	
EXSMOKER					0.32	9.36	
RISK							
PREU			-0.06	-2.14			
REGUL			0.29	9.87			
ADVER			-0.11	-3.70			
MEDTRET			-0.24	-3.96			
NICORETE			-0.41	-7.23			
PATCH			-0.25	-3.47			
HYPNOSIS			-0.20	-1.43			
ACUPUNT			-0.18	-1.82			
DRUG			0.29	4.40			
WISHQUIT	0.47	-2.72			0.16	3.08	
WISHRED	0.10	-0.47			0.09	1.44	
SMOKWFAILN	0.23	-4.50			0.18	5.20	
SMOKWORK	0.12	-2.65			0.10	3.02	
SMOKEFR	0.15	-2.62			0.10	1.78	

			-			
	Two-Sta _{	ge Risk P	erception Mo	dels		
	Не	ckman P	robit Model		Risk Perception	
	Risk Perception		Smoking Ce	essation	All Sam (Maxim Likelihood	um
Variable	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
INTERCEPT	0.47	1.52	-1.00	-7.06	1.49	10.10
σ	0.489	3.34				
Log-likelihood	-7503.21				-4688	
Pseudo-R ²					0.02	
Wald X_{11}^2					191	
N	14,600				14,600	
LR test ($\sigma = 0$)	10.19					

Table 19.8 (continued) Risk Perception Models

Results for cigarette consumption are reported in Table 19.7. From a two-stage consumption equation (conditioned smoking participation) (Garcia and Labeaga, 1995), we find that risk perception influences the number of cigarettes consumed but not smoking participation. The variable LAMBDA is informative on the dependence of consumption on participation (selectivity). Experience with cancer explains cigarette consumption in southern EU countries but not in NSC. Moreover, experience with cancer does not determine smoking participation. Regulation appears to strongly reduce cigarette consumption. However, tobacco prices and advertisements do not have any significant effect on smoking, even though they display the correct sign. Furthermore, most of medical and pharmacological treatments appear not to be significantly explaining cigarette consumption, except patches, hypnosis, and acupuncture. Household size is negatively associated with the number of cigarettes smoked. Because smokers tend to influence other family members, this may mean that families showing a large number of smokers tend to smoke more than others. Young males smoke a large number of cigarettes than females. However, whenever the individual gets older, one tends to reduce the number of cigarettes smoked.

Table 19.8 displays several specifications of smoking risk perception estimations by considering and not considering selectivity. Results appear as very robust as risk perception estimates (Column pairs 1 and 3) do not significantly change when different specifications were employed. The selectivity statistic (rho) was significant, highlighting that risk perceptions are not independent on individual smoking

cessation, that is, risk perceptions might change due to individuals having quit smoking as the cognitive dissonance and the two selves approaches would predict. We find that the younger the individual, higher the risk perception, which is consistent with the view that risk information has become more stringent in recent years and there has been a higher social pressure against smoking. Ex-smokers tend to have higher risk perceptions as compared to current smokers, which in turn is consistent with previous results (Viscusi 1991). Individuals who wish to quit, those who intend to quit, and those who work with smokers tend to have higher risk perceptions.

19.6 **Conclusion**

This chapter has sought to examine the determinants of smoking cessation along with smoking participation and risk perception in the EU using the Eurobarometer 43.0 database. Although cultural heterogeneity can be attributed to differences in risk perception, we find that smoking risk perceptions are stable and do not show large cross-country differences. Consistent with the theory of cognitive dissonance, that is, once individuals decide to quit smoking they tend to perceive smoking risks differently than they did before. This is consistent with the Akerlof and Dickens (1982) approach, although it should be investigated further. Long-term cessation shows a higher influence on risk beliefs than short-term cessation. In addition, smoking cessation is strongly associated with age, education, and income, as the theoretical model predicts.

Among all antismoking policies analyzed, antismoking regulation seems to be the key variable influencing smoking cessation. However, taxes and advertisement regulation do not have a strong impact on fostering cessation, which is consistent with some prior evidence (Lanoie and Leclair, 1998; Gruber and Zinman, 2000). Consistently with Viscusi (1992), because smoking risks are strongly publicized, the effect of information campaigns on smoking cessation would be marginal. Pharmacological treatments and doctor's advice do not appear to be significantly associated with smoking cessation. Results show that social interactions appear to be more helpful for adults to quit smoking. Therefore, policies that tend to contain smoking should emphasize restrictions on smoking behavior because of its effects on smoking behavior.

Another interesting finding is the significance of the household size in the decision to quit smoking. Individuals with children are more likely to quit smoking. This could be explained by the educational goals of the parents that might prevent them from the negative externalities of cigarette smoking. Moreover, informal regulations set out by the spouse or other family members may be consistent with this explanation. Therefore, even though informational campaigns may not significantly change a smoker's risk perception as Viscusi (1990) shows, they may change risk perception of other family members that indirectly influence the smoker's behavior.

Advertisements do not significantly influence the decision to quit smoking. This might be explained because smokers may already have information on the main effects of smoking. Therefore, even though countries pose restrictions on advertisements this may influence the young population rather than adults. This is the case for countries that have higher prices for tobacco. Because adult smokers have shown to be less sensitive to tobacco prices in previous studies, increasing the price of cigarettes may be an adequate barrier for young smokers to keep out of the market but not for adult smokers.

Policy implications of this study suggest that antismoking campaigns should be designed according to specific population targets. Although taxes exercise a market barrier for new entrants (typically young individuals), regulation enhances social pressure to current smokers to encourage them to leave the market. Advertising and antismoking informational campaigns are strongly dependent on the current information level of the population. Finally, physician's advice and pharmacological treatments seem to be effective as an additional instrument to increase the benefits or reduce the costs of smoking. Looking at the three main indicators of the nature of the smoking habit in the EU, we find that there is a large heterogeneity in smoking prevalence across countries. However, from a cross-country ranking, there are several countries that appear show a considerable smoking prevalence and small cigarette consumption. This may be due to two reasons: the role of antismoking policy reducing smoking participation and influencing smoking cessation, and the role of light smoking.

Above all, two different policy goals appear to be relevant: first, discouraging people to become initiated with the smoking habit and second, assisting current smokers to quit smoking and to follow healthier lifestyles. This study has focused on the decision to quit smoking. This means excluding from our study the smoking initiation decision, and implies focusing on the decision of individuals who have had already some experience with smoking. The main policies influencing smoking cessation in the EU are informational campaigns and regulation policies. However, price does not seem to influence smoking cessation as can be seen from advertising as a strategy. Therefore, providing information on individual-specific hazards of smoking may change behavior. Regulation is largely associated with smoking cessation because of the role of social interactions of smoking, and thus we might expect risk regulation policies to continue to impose constraints to the capacity of smokers to freely smoke.

Appendix

Summary of the Main Aims of Antismoking Policies

Policies	Aims
Regulation	Influence smoking acceptance Reducing negative externalities to nonsmokers Reducing addiction
Taxes	Reducing consumption Refraining newcomers from initiating into the smoking habit Collecting resources through taxation to fund health-related costs of smoking
Promoting light smoking	Reducing smoking the harm
Antismoking campaigns	Informing the population on smoking hazards Influencing individual awareness Increasing individual risk perceptions
Pharmacological treatments and personal incentives by physicians	Helping individuals that already have decided to quit smoking

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Chapter 20

Dealing with Healthcare Security: Catastrophic Health and Drug Expenditures in Nicaragua

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20.1 Introduction

Access to healthcare, including essential drugs, is not only a human right but also a central issue in health policy reform in developing countries. Although containing health expenditures is at the top of the debate in developed countries, developing countries are much more concerned with improving accessibility to healthcare (Murray et al., 1994). Yet, given the limited health insurance coverage in developing countries, for healthcare (and drugs) to be financially accessible, the total of these costs must be such that it does not become a disproportionate burden for any family. This holds because a large part of the health expenditures are borne either by individuals themselves or by the private health insurer. As Table 20.1 reveals, per capita expenditure on health varies greatly, from \$36 for sub-Saharan Africa to nearly \$1675 per capita in established market economies. Furthermore, the share of the private sector increases with the lack of development, as Table 20.1 highlights.

The Commission for Macroeconomics and Health (CMH) (WHO, 2001) estimated that out-of-pocket expenditure was a significant contribution to health expenditure in low-income countries and recommended that this should not finance the basic package but should be channeled through health insurance to access basic curative services. Drugs represent the major out-of-pocket expenditure on health. A survey from Mali found that 80 percent of household expenditure on health was for modern drugs, 13 percent was for traditional medicine, 5 percent was for provider fees, and 2 percent was for transportation costs (Diarra and Coulibaly, 1990). Among 14 countries in Latin America and the Caribbean, drugs represented 35 percent of direct private expenditures on health. Figures ranged from slightly under 15 percent in Uruguay to 47 percent in El Salvador (PAHO, 1994).

When healthcare needs arise, because of highly prevalent illnesses in developing countries, some families might find themselves having a hard time to cope with the economic barriers to healthcare. This means illness might reduce family income and wealth, significantly lowering their standard of living. World Health Organization (WHO) data indicate that by 2020 cardiovascular diseases and stroke will be the leading causes of death in Africa; treatment for many noncommunicable diseases entails a lifelong commitment, and the cost of medicines can drive households into poverty. Untreated hypertension can lead to heart failure, chronic renal failure,

Table 20.1 Health Expenditures by Region (1990)

			Health Expenditures	nditures		Drug Expenditures	litures
Region (N)	Z	Private (Percent)	Total per Capita (\$)	As percentage of GDP	Private (Percent)	Total per Capita (\$)	As percentage of GDP
Established market economies	25	23.0	1675.2	7.73	39.6	137.5	9.0
Middle eastern crescent	32	42.9	189.1	4.27	74.0	26.8	0.7
Economies in transition	19	27.3	150.3	4.27	I	19.5	I
Latin America and Caribbean	33	37.4	118.1	5.30	71.5	26.4	6.0
Asia and Pacific islands	33	48.1	60.2	4.01	81.4	11.8	9.0
Sub-Saharan Africa	47	37.6	35.7	4.86	8.99	7.8	6.0

Source: Bennet, S, Quick, JD, and Velazquez, G, Public-private roles in the pharmaceutical sector: Implications for equitable access and rational drug use. World Health Organization, 1997.

stroke, and coronary heart disease. However, the distribution of health expenditure is highly skewed toward the top* and it is precisely at this high end that expenditures may become catastrophic from an individual's perspective albeit the definition of catastrophic expenditure that is debatable both at the individual and at the collective level.†

Regardless of a country's economic development, the design of healthcare packages is one of the main objectives of healthcare reform. Although in developed countries, covering catastrophic risks stands as a design issue of certain insurance funds, in developing countries, catastrophic risks are mainly covered in public-funded healthcare packages. Despite questions regarding the adequacy of coverage of catastrophic risks, the fact that these are funded exclusively unveils an implicit prioritization of financial security over other healthcare objectives, such as cost-effectiveness and, in general, efficiency (Soderlund, 1998). On the other hand, health system reforms could potentially benefit from prioritizing coverage for those expenditures when designing their healthcare packages. However, little evidence has been encountered on the suitability of these policy options.

In developed countries, focus is on health insurance coverage of long-term care in systems where insurance is not universal. This is the case of health financing reforms in the Netherlands mainly to cover long-term care (van Barneveld et al., 1997), and insuring certain catastrophic risks for poor families in the United States (Philipp and Biordi, 1990) or certain specific illnesses (Songer et al., 1997). However, the economic policy debate in developing countries focuses on providing basis coverage to the population rather than extending the existing one to certain contingencies. Pradhan and Prescott (2002) explore a database from Indonesia of the magnitude of catastrophic risks, and using simulation analysis, test the extent to which subsidizing prices for healthcare reduces family exposure to health-related catastrophic risks. Other studies such as Ranson (2002) aim at evaluating a female self-employed health insurance system in Gujarat (India), and a more recent study explores extensively the estimation methods and undertakes an emprical application in Vietnam (Wagstaff and van Doorslaer, 2003). Empirical evidence using data from household surveys in 59 countries (Xu, 2003) has demonstrated that a combination of factors, such as health services requiring payment, low capacity to pay, and a lack of prepayment or health insurance often lead to individual health spending which exceeds 30-40 percent of household income. However, further research is still required to clarify the impact of the design of specific catastrophic healthcare insurance in Latin American countries. Furthermore, in dealing with catastrophic

The factors that explain the skewness of the health expenditure distribution refer mainly to differences in the average risks and in the dispersion of risks to health (e.g., AIDS). Thus, one might expect large individual and group heterogeneity in health expenditures in any country.

As noted by Bovbjerg (2001) for an individual, 10 percent of income may be considered a catastrophic loss although for an insurer a similar share of capital or of total premiums for one line of business may be a benchmark.

risks no study has previously examined the issue of catastrophic drug expenditures. Finally, measurement of catastrophic expenditures is shown to be problematic and often is not clear-cut on how to transfer the results of these studies into policy making.

This chapter aims at examining the meaning and limitations of measuring catastrophic health and drug expenditures in developing countries. In particular, we explore the distinct nature of catastrophic expenditures in developed countries and we undertake empirical analysis using data from Nicaragua. Our main contributions are the following. First, we provide a critical examination of the methods of examining catastrophic expenditures. Second, we separately examine drug expenditure and total out-of-pocket expenditure. And finally, we employ a direct revelation mechanism to estimate catastrophic health expenditures.

The chapter begins by characterizing catastrophic risks in Section 20.2, Section 20.3 deals with measurement issues, Section 20.4 provides an empirical illustration, and the chapter concludes with a section on discussion.

20.2 Characterizing Catastrophic Healthcare Expenditures

20.2.1 Defining Catastrophic Risks

A definition of catastrophic risks is necessarily somewhat arbitrary. One possibility is to classify whether each intervention is catastrophic. However, because of technological innovations, certain treatments might become cheaper. On the other hand, the extensive heterogeneity in healthcare for any given health need would make it difficult to specify when a certain healthcare expenditure is catastrophic or, alternatively, could have been avoided by consuming a cheaper alternative. Thus, for an expenditure not to be catastrophic one might argue that it should be the cheapest healthcare option, although on the other hand, it might well be that people fail to choose the cheapest healthcare option (e.g., people getting CT scans for head-aches—remarkably common in developing countries with unscrupulous healthcare practitioners). Catatrophic risks are very expensive and have a very small probability of ocurrence (Soderlund, 1998). As Table 20.2 exhibits, catastrophic risks are less predictable and private health insurance schemes are less suitable schemes.*

Catastrophic risks might lead some families to poverty, which might not be limited to an occasional reduction of wealth in a certain period but would have a permanent character. Alternatively, catastrophic risks might be defined according to

^{*} They are normally uninsured risks as long-term care risks in the United States and normally have to do with certain well-known illness with expensive technologies such as AIDS, cancer, and so on.

Catastrophic Risks	Non-Catastrophic Risks
Chronic illness	Acute illness
Low probability and high-cost events	High probability and low-cost events
Non-self-insurable	Insurable
Small predictability	High predictability

Table 20.2 Characterization of Catastrophic Risks

the individual's paying capacity; accordingly, specific healthcare risks might be catastrophic for some individuals and might not be for others. Wyszewianski (1987) establishes a catastrophic risk expenditure threshold as \$10,000 annually (\$14,550 in 1999). Chollet and Betley (1987) distinguish catastrophic risks as those that overcome a certain frontier of non-insurable risks, or those that overcome a certain share of an individual's income, for example, 10 percent. However, the numerical share is unavoidably arbitrary and might vary from country to country, and rather a fixed characteristic of a certain expenditure might be taken as a continuous one. According to Stiglith (1988), a catatrophic illness implies a reduction in families' wealth that reduces the current and the near-future standard of living. Alternatively, Kawabata et al. (2002) defines a catastrophic risk as being one that reduces "basic expenditures" to face the costs of a healthcare need. Nevertheless, the WHO arbitrarily defines a medical expenditure to be catastrophic if it is greater or equal to 40 percent of the capacity of the household member to pay. The capacity to pay varies among countries based on the shared risk of the household member and the nature of the expenditure. Given the uncertain distribution of the illness prevalence and the always uncertain social response to the existence of a disease as well as frequent lack of knowledge of the existing healthcare coverage, certain healthcare expenditures might drive individuals to poverty and social exclusion. Ranson (2002) defines catastrophic risks as those that lead to a reduction of individuals' quality of life to that of subsistence or lower, subsistence being defined as \$1 a day.

One way of defining catastrophic events is to detail with precision and clarity, based on a list of specific high-cost, illnesses that occur rarely and which are, in general, not covered sufficiently by insurance plans. As Table 20.1 reveals, although catastrophic risks mainly refer to chronic illnesses, non-catastrophic risks would primarily refer to acute illnesses. Although catastrophic risks would tend to be low-probability and costly events, non-insurable at the individual level and difficult to predict, non-catastrophic risks normally would be highly predictable so that people could insure easily, find insurance, and even self-insure. Furthermore, the probability of occurrence would be relatively high—as far as they normally refer to common risks—and the loss would be manageable at the individual level.

20.2.2 Drug-Related Catastrophic Risks

Drug expenditure is an important share of health expenditure (10–20 percent), and given the existing conditions normally prices tend to be higher than that of other healthcare components. Although given its global nature to do public good and individuals' heterogeneous capacity to face such costs, some policy proposals might lead to the design of co-payments for drugs whereby the catastrophic nature of such costs might be captured by the co-payment rate. Rogowsky et al. (1997) examine the U.S. context for the extent to which drug expenditure is potentially catastrophic and finds that 7 percent of the elderly expends about 10 percent of their household income on drugs uncovered by Medicare and 1 percent expends one quarter of their household income or more.

Increasing the access of African populations to essential drugs is one of the challenges facing the global community. It is estimated that about one-third of the global population lacks reliable access to essential drugs according to the WHO (WHO, 2003). In developing countries, 50 percent of the population has no access to essential drugs.* Drugs are the second highest public health expenditures, after personnel, and can represent from 25 to 65 percent of total public and private spending on health in developing countries (WHO, 2000). At the time of illness, households in Africa do not have sufficient mechanisms that will protect their financial resources for basic needs such as food, education, and transport. Indeed, up to 90 percent of the population in developing countries has to buy drugs through out-of-pocket expenditures as opposed to 20 percent in developed countries (WHO, 2000). The unpredictable healthcare costs during an illness and the low income make it almost impossible for households to save money for illness-related expenditures. Vogel (1990) and others argue that even the most functional health insurance schemes effectively cover only members of the relatively small upper and middle classes and that less than 10 percent of the population of Africa is protected by social insurance.

20.2.3 Country Experience with Catastrophic Payments

The needs for catastrophic health insurance are prevalent in those countries where the coverage for healthcare is significantly limited. The definition of what catastrophic risks are varies from country to country, typically in accordance with the extent of healthcare coverage existing in that country. Although in developed

^{*} That is "... those that satisfy the priority health needs of the population. They are selected with due regard to disease prevalence, evidence on efficacy and safety, comparative cost-effectiveness. Essential drugs are intended to be available within the context of functioning health systems, at all times, in adequate amounts, in the appropriate dosage forms, with assured quality, and at a price the individual can afford..." (WHO, 2003).

countries, catastrophic risk coverage refers to long-term care (e.g., the Netherlands and the United States), in developing countries they refer to basic healthcare and drugs. In China, the definition is part of the system based on medical savings accounts. Indeed, a risk is catastrophic if an individual expends all the medical savings and 5 percent of the annual salary, and therefore social insurance intervenes as a substitute. Interestingly, in 1995, 17 percent of the Zhenjiang population was exposed to catastrophic risks. In Singapore, the MediShield plan is a catastrophic risk insurance scheme in place since 1990. Other countries that have catastrophic risk insurance for healthcare are Israel and South Africa.

20.3 Measuring Catastrophic Healthcare Expenditures

One of the health-equity conceptions might rely on comparing in different families the share of income that they devote to healthcare (including drugs). Yet, if such an expenditure share surpasses a certain threshold, following Wagstaff and van Doorslaer (2003), those expenditures are catastrophic. Therefore, the catastrophic nature of a healthcare cost will be determined not only by the fact that certain expenditures are high, but on whether the expenditure magnitude compares to the payment capacity, which might decline as well as a result of productivity declines accruing from certain illnesses. The importance of the context is such that depending on the existence of liquidity restrictions in certain households to obtain funds for healthcare, one might argue whether certain expenditures are catastrophic (Gertler and Gruber, 2002). In developing countries, one might expect difficulties in measuring an individual's capacity to pay because of the reliance on the informal sector, which in turn might affect the magnitude of catastrophic risks. Finally, a further restriction is that of quantifying wealth, and the value of housing, which might be sold to pay for certain healthcare expenses.

Let us assume that utility is described as $U_t = U(c_t, h_t)$, where c_t denotes consumption and h_t denotes health status measured from 0 to 1. The existence of illness results in an equivalent consumption loss of L_t and the individual maximizes the inter-temporal utility of one's consumption. Insurance, if voluntary, would result in a comparison of two future states of nature—with and without insurance (and thus facing the expected utility of, say, financial loss). If the utility function is concave and increasing in their arguments, then there is a certain financial loss, which acts as a threshold in determining whether certain expenditures would be catastrophic (L^*) . Thus, the objective of empirical studies is to determine—notwithstanding the non-observability of L^* —the share of the population exposed to catastrophic payments, and this experiences a utility loss resulting from the nonexistence of a catastrophic insurance, or in other words, that would rationally purchase insurance or would be publicly subsidized.

From an empirical perspective, the objective of the study will consist of estimating the distribution of health and drug expenditures according to income

distribution. The magnitude of healthcare expenditure is T and individual income is Y, which, given the magnitude to informal economy, is normally measured as the addition of individual expenditures as follows: $y = \Sigma E(x)$ (where E(x) refers to each expenditure component). Other studies use household income once on total household expenditures. Accordingly, if the expenditure threshold is Z, the share of the population exposed to catastrophic risks is the share whereby T/Y surpasses Z, where Z is an arbitrary cut-off between 10 and 20 percent of individual income. The only problem from a purely empirical perspective is that of the individual's non-response to the use of healthcare. Following Wagstaff and van Doorslaer (2003), if we define a variable G_i as taking the value of 1 when an individual exceeds the threshold, the share of the population facing catastrophic healthcare costs is as follows:

$$H = \frac{1}{N} \sum_{i=1}^{N} G_i$$

where N is the sample size. However, given that this information does not allow comparison, we define an intensity of measure of exposure to catastrophic needs, the so-called catastrophic risks gap, which is defined as follows:

$$V = \frac{1}{N} \sum_{i=1}^{N} G_i [(T_i/Y_i) - z]$$

20.4 Empirical Illustration

20.4.1 Catastrophic Risks in Developing Countries: Nicaragua

Insurance-based systems and those that have implemented the alternative of medical savings accounts (Singapore and China) tend to specify specific coverage for catastrophic risks explicitly under certain circumstances. However, health insurance systems in Latin American countries remain poorly developed. In Nicaragua, only a small share of the (most affluent population) population has voluntary health insurance and the poorest population cohort has no insurance coverage. The latter receives public hospital care, which is often of low quality. As far as the classification of catastrophic illnesses is concerned, it should be noted that certain transport costs or drugs might become catastrophic, although the costs of some chronic illnesses could be borne by the household. In Nicaragua, 64 percent of the country income is in the hands of the richest 20 percent.

Nicaragua is a relatively small country with a population of 4,357,099 (1995 Census). The per capita gross national product (GNP) was estimated at \$430 in 1999 (World Bank Development Report). Of the total population, 15.1 percent

lives in extreme poverty (27.4 percent in rural areas). Another 54.4 percent lives in urban areas, mostly in the Pacific region (2001 Nicaragua Living Standards Measurement Survey). As in other health systems in developing countries, public coverage is limited and the public funding accounts for only 25 percent of healthcare expenditure and private funding for more than 60 percent—from which 50 percent referred to out-of-pocket payments, and the remaining is funded by international not-for-profit organizations. The Ministry of Health attends to 60 percent of the population and the per capita public expenditure accounts to about \$27.3 in 1999. Healthcare is about 8 percent of public expenditure, which is distributed: 31 percent to primary care, 61 percent to inpatient care, and the remaining to the rest (Cuentas Nacionales de Salud MINSA, Dirección General de Planificación y Desarrollo MINSA, 2003).

The system is tax funded and organized into 17 local systems of integrated care, 28 acute care hospitals, and 4 hospitals for chronic patients joined with 176 primary care centers. Social insurance (Instituto Nicaragüense de Seguro Social) provided healthcare to 5 percent of the population and the rest is provided by private insurance and not-for-profit organizations. Reforms that have been taking place include the set up of public—private partnerships and administrative decentralization. Insurance coverage is subject to co-payments and geographic access to healthcare, which is limited in some areas. However, according to the ENDESA (Encuesta Nicaragüense de Demografía y Salud) 2001 (INEC-MINSA, 2002),* only 29 percent of patients paid for healthcare, mainly to private providers.

In Nicaragua, the 2001 National Household Survey on Measuring the Standard of Living (Encuesta Nacional de Hogares sobre Medición de Nivel de Vida del 2001) was carried out as part of the MECOVI project of the National Institute of Statistics and Census (INEC). It had coverage on a national level and compiled data regarding the characteristics of the house and the household, educational achievements, economic activities, children and women's health and mortality, household consumption measured through spending, and sources of income or reception of benefits in cash or kind (Figure 20.1). The sampling methodology was a two-step cluster process, where the primary sampling units were the census enumeration units, selected with a probability proportional to their population. Within the urban segments, 12 dwellings were selected, while two clusters of five houses were selected in each rural segment, for a total of 4676 houses.

20.4.2 Indirect Estimation of Catastrophic Risks

From the data collected by the Encuesta Nacional de Hogares sobre Medición de Niveles de Vida de 2001 and applying the methods described before, we have

 ^{*} INEC, MINSA (2002) "Encuesta Nicaragüense de Demografía y Salud 2001" Nicaragua, Octubre 2002.

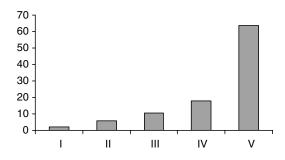


Figure 20.1 Income distribution in Nicaragua. (From Encuesta Nacional de Hogares, 1998.)

estimated the ratio of the population exposed to catastrophic risks using two different income thresholds: 10 and 20 percent of the population income. Catastrophic risks were measured as the ratio between net income and expenditure on healthcare for those who suffered from some health condition (Table 20.3). Our results suggest that 70 percent of the population needing healthcare is subjected to catastrophic risks if the threshold is established at 10 percent of income and 64 percent of the threshold is set at 20 percent. If we take into account only drug expenditure, this share declines to 64 and 62 percent indicating that drug-related expenditure is a significant share of the catastrophic risks the population are exposed to.

However, if we examine the gap, that is, the difference between the threshold income and the share of the individual income devoted to healthcare, we find that this gap is about 0.6 and 0.53 for total healthcare, and 0.42 and 0.43 for drug-related healthcare, indicating that there is significantly less variability in these expenditures.

Table 20.3 Population Share of Those	
Needing Healthcare and Catastrophic Ris	ks
Gap in Nicaragua on 1998	

Total Healthcare	10 Percent	20 Percent
Percentage of population	70 percent	64 percent
Gap	0.6	0.53
Drug-related healthcare		
Percentage of population	64 percent	62 percent
Gap	0.43	0.42

	N	Percent	Percent Cumulated
Savings	344	47.91	47.91
Instructional lending	26	3.62	51.53
Family lending	112	15.6	67.13
Credit	35	4.87	72
Assets selling	63	8.77	80.77
Other	135	18.8	99.57

Table 20.4 Savings, Lendings, and Credit Used to Pay for Healthcare

20.4.3 Direct Imputation of Catastrophic Risk Prevalence

An alternative way to estimate the magnitude of catastrophic risks is to ask the population about them indirectly. In particular, the survey contained a question on "whether the household has to ask for a credit, use savings or sell their asset" to pay for healthcare. As Table 20.4 reveals, 28.5 percent of those that ever utilized healthcare did so. Among them, 47 percent used their own savings, although frequently they had to ask for funds from other family members. Yet, the estimates that we obtained might underestimate the magnitude of catastrophic risks as far as some share of the population might not have either family or savings to bear their healthcare costs. However, it provides an inferior limit to estimate the extent to which a population is subject to catastrophic risks.

20.5 Conclusion

Prioritizing coverage for catastrophic illness implies dealing with specific trade-offs emerging in health policy decision making, namely security versus efficiency. In the light of our findings, about 29–70 percent of the population are subject to catastrophic health-related risks. We find that different methodologies provide significant differences when dealing with catastrophic risks, and possibly the use of direct and indirect methods are likely to improve the precision of this feature. This study indicates that the measurement of catastrophic risks is subject to significant arbitrariness in setting the income threshold that might limit the economic policy interpretation of the results. On the other hand, the definition of catastrophic risks based on delimiting what illnesses lead to them does not seem acceptable, given that for certain households even the transport costs (e.g., in an ambulance) might be

catastrophic. Thus, the catastrophic nature of a specific healthcare need should be adequate to the specific content and time of the implementation of a health insurance system. Potentially, a public health insurance system could be defined and is likely to improve the welfare of certain population currently exposed to significant healthcare catastrophic events. Finally, the coverage of catastrophic risks only departs from a conception that it is not possible to obtain a reasonable health insurance coverage general to the entire population.

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Chapter 21

Disparities in Health, Disparities in Law: The Global Potential of Individual Advocacy

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21.1 Introduction

Physicians are in a unique position to mobilize their colleagues in defense of human rights. As a core part of their work and ethic, physicians aim to fulfill human rights at the individual level by providing medical care; at the community level by advocating for innovative, effective methods of service-provision; and at the governmental level, where their medical credentials and expertise can reinforce the strength of their work in defense of fundamental human rights. In their interactions with patients, physicians bear witness to a horrific range of human rights abuses, whether they are treating injuries sustained through torture, providing post-rape services, or providing medical care to refugees who have been forcibly displaced by armed conflict. On a more routine basis, physicians are the first to see the health consequences of arbitrary eviction, denial of immigration status without due process, environmental hazards, and other chronic human rights abuses. Their patients present not only symptoms of illness, but also stories of injustice: illegal working conditions leading to occupational injuries, police brutality leading to broken limbs, sexual violence leading to psychological trauma or HIV infection. For many physicians, protesting these human rights abuses is not only a moral and ethical imperative, but also part of preventive medicine.

Physicians have long been involved in human rights work, both in the United States and internationally. This work often but not always relates directly to healthcare. Organizations such as Médecins Sans Frontières (MSF) have been providing direct medical and humanitarian relief in over 70 countries since 1971. Partners in Health, started in 1987 by physicians working in rural Haiti, is one of the foremost health and advocacy organizations in the United States. It seeks, in its words, "to put into practice those human values that support the belief that health care should be viewed as a human right" [1]. The mission statement of another U.S.-based organization, Physicians for Human Rights (PHR), asserts that the organization "mobilizes health professionals to advance health, dignity, and justice and promotes the right to health for all.... Harnessing the specialized skills, rigor, and passion of doctors, nurses, public health specialists, and scientists, PHR investigates human rights abuses and works to stop them" [2]. These are just a few of the non-governmental organizations (NGOs) founded by doctors that use the platform of medical care to advance human rights protocols.

Physicians are natural advocates for social and economic rights in addition to civil and political rights—that is, for access to essentials such as food, water, healthcare, and education, in addition to negative liberties such as freedom from

arbitrary detention, torture, and discrimination. Although economic and social rights have been referred to as the "neglected stepchildren" of the human rights movement, they are in fact indivisible from civil and political rights. As physicians can readily attest, people who enjoy good health are more capable of participating in political life, less vulnerable to multiple forms of discrimination, and often less likely to be in conflict with the law. Conversely, the enjoyment of civil and political rights is widely acknowledged as a determinant of good health. The interdependence of civil, political, economic, social, and cultural rights is recognized in the Universal Declaration of Human Rights (1948), which states that "All human beings are born free and equal in dignity and rights" [3]. Advocates for health and for human rights share the ultimate goal of human dignity and freedom; as the late Jonathan Mann puts it, they are "equal partners in the belief that the world can change."

Starting from the premise that doctors are uniquely positioned to engage in human rights advocacy, this chapter describes an innovative way in which doctors can work collaboratively with other professionals to further the promotion of human rights. The chapter describes the medical-legal partnership model developed at Boston Medical Center/Boston University School of Medicine in Boston, Massachusetts. First, we review how the concept of the social determinants of health fits within the larger human rights context. Then we discuss how nonmedical determinants such as political, economic, and environmental influences can impact children's health and wellness. We will focus specifically on how deprivation of basic needs like food and housing and safety impact child health outcomes, highlighting how medical indicators can point to larger human rights issues that may require the legal or human rights expertise of an attorney to resolve. Finally, we describe the medical-legal partnership in detail, and offer strategies for local, regional, and global replication. Our thesis is that medical-legal partnership is an innovative, synergistic strategy that leverages expertise and patient access to effectively address human rights violations that occur daily in the lives of vulnerable children and families all over the world—with tangible benefits for both health and human rights.

21.2 The Social Determinants of Health

In the last half century, leading health authorities including the World Health Organization (WHO) have emphasized the importance of developing sustainable global strategies to address nonmedical roots of disease. It has become well accepted that the social, economic, and political conditions in which people live have a fundamental impact on their health and well-being [4]. Currently, health is a top priority on the international development agenda, and stakeholders increasingly acknowledge the inadequacy of health strategies that ignore the social roots of illness and well-being [5]. Momentum for action on the social dimensions of health is building. The Millennium Development Goals (MDGs), adopted by 189 countries at the United Nations (UN) Millennium Summit in 2000, set ambitious targets in the

following areas: poverty and hunger reduction, education, women's empowerment, child health, maternal health, control of epidemic diseases, environmental protection, and the development of a fair global trading system. The aim is that these goals will be reached by 2015 [6]. The WHO's recently established Commission on the Social Determinants of Health (CSDH) supports countries in addressing social determinants, identifying unemployment, unsafe workplaces, urban slums, globalization, and lack of access to health systems as nonmedical determinants of disease [7]. At the same time, progress has been slow on identifying many of the human rights violations that fuel disease vulnerability. In 2007, 22 NGOs endorsed a declaration noting that the widely sought goal of universal access to prevention, treatment, and care services for HIV and AIDS would never be achieved without greater attention to the legal, ethical, and human rights dimensions of the epidemic [8].

In the context of child health, it has been shown that every child has his or her own biologic predisposition to illness (see Figure 21.1). However, the provision of medical care and health services can limit the development of illness or diminish its severity [9]. Thus, particularly for children living in poverty, access to healthcare is a key determinant of their health outcomes. But healthcare access and services are not the sole answer; research has documented how children living in poverty experience relatively poor health and development outcomes regardless of the quality of healthcare they receive because of inadequate housing, nutrition, income, safety, health coverage, or educational services [10]. Even when they receive high-quality healthcare, poor children experience disproportionately poor health outcomes.

Thus, it has been well established that potentially remediable social conditions can adversely affect child health [4]. Social or nonmedical factors influence both the

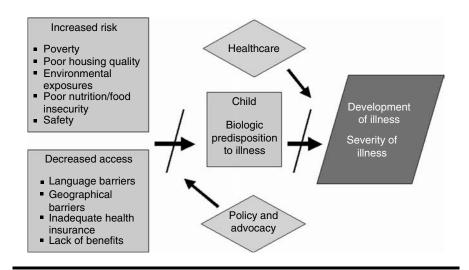


Figure 21.1 Social risks and child health.

development of childhood disease and the severity of disease once it develops [11–14]. Poor children are disadvantaged in at least three ways when it comes to their health. First, poor children are exposed more frequently to health risks such as illnesses, injuries, community violence, malnutrition, substandard housing, and family stress compared to their more affluent peers. Second, they experience more serious consequences from these risks than children with higher socioeconomic status. For example, newborns from poor families are more likely to be born prematurely and more likely to suffer greater health and developmental consequences because of premature birth. Third, children in poor communities lacking essential infrastructure have much less access to necessary medical services. This can take the form of a large, impoverished urban community having no nearby hospital or medical clinic, or poor rural families having to travel great distances to get to the nearest doctor or nurse [15].

Several bodies of literature across numerous scientific disciplines converge upon the same conclusion: there are severe impacts on children's health when basic human needs are not met. The work of psychologist Abraham Maslow offers a unique and useful vision of the role of basic human needs. Maslow's "Hierarchy of Needs" posits that human beings have certain basic needs, frequently depicted in a pyramid, with the primitive needs on the bottom, and the more sophisticated needs higher up (see Figure 21.2). Maslow's hierarchy of needs is often depicted as a pyramid

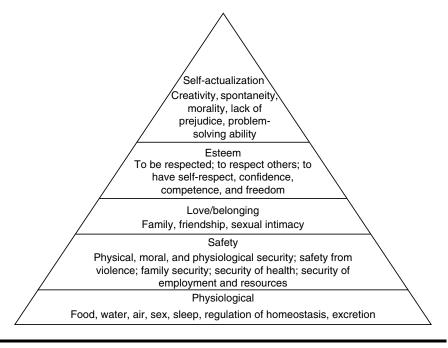


Figure 21.2 Maslow's Hierarchy of Needs.

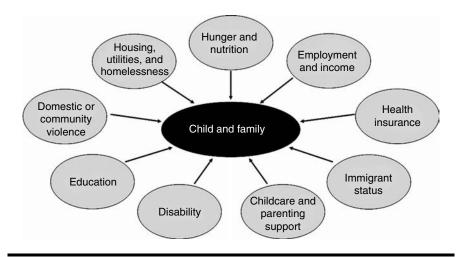


Figure 21.3 Core basic needs for low-income families in the U.S.

consisting of five levels: the four lower levels are grouped together as deficiency needs associated with physiological needs, while the top level is termed growth needs associated with psychological needs. Under Maslow's theory, humans can only achieve educationally, emotionally, and relationally if their basic primitive needs have been met [16]. The literature of global and regional health policy, and public health in general, is rife with examples of this theory.

In this section, we highlight the medical impacts of deprivation of two basic human needs: food and housing. Our analysis is focused on the U.S. context. Although there exist substantial material and social resources in the United States, the disparity between low income and wealthy families' access to these resources is correlatively significant [17]. The literature of social determinants is helpful in its exploration of the underpinnings of social determinants of health in a well-resourced country; moreover, it is evident that although the fundamentals may expand in the context of a developing nation, the analysis remains essentially the same (see Figure 21.3).

21.2.1 Lack of Access to Food—The Child Health Impacts

The health impact of insufficient nutritious food is clear and amply documented [18]. In the United States, food insecurity is defined by the government as "limited or uncertain availability of nutritionally adequate safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" [19]. Poor children are five times more likely to experience food insecurity and hunger and have significantly lower intake of calories, iron, folate, and other nutrients, compared

with nonpoor children [20,21]. Among food-insecure families with children, half reported that they were sometimes not able to feed their children balanced meals, and 25 percent reported that their children did not have enough to eat because the family could not afford adequate food [22]. Data from the Children's Sentinel Nutrition Assessment Program (C-SNAP), a long-standing, ongoing national study that has examined the effects of public policies (e.g., welfare reform) and other economic conditions on the health and nutritional status of children under three years old, has shown that children in food-insecure households fare much worse than those in food-secure households. Children in food-insecure households are almost twice as likely to be in fair or poor health as children in food-secure households, and they have a 30 percent higher rate of hospitalization before age three [19].

Food insecurity is especially harmful for young children because they are in a period of rapid growth and brain development and are sensitive to even brief periods of nutritional deprivation [23]. A nutritionally inadequate diet can make children susceptible to an infection-malnutrition cycle by impairing children's immune function, rendering them more prone to infection and illness [24]. Moreover, an inadequate food supply prevents children from fully recovering from weight loss or interrupted growth during illness episodes, putting them at even greater risk for subsequent illness, creating a cycle of poor growth, and increased risk of illness. In the United States, this can lead to an increase in truly preventable illnesses [19].

21.2.2 Unsafe, Unaffordable Housing, and Homelessness—The Child Health Impacts

Inadequate housing is also often correlated with poor health outcomes [25]. Under Maslow's theory, physical security is a basic, primitive human need; fulfillment of this need is predicated upon having safe, adequate housing. In the United States, homelessness is a multifactorial problem impacted by economic issues such as high housing costs and low household income; individual issues such as mental illness, substance abuse, or domestic violence; and social policies such as the availability and accessibility of housing assistance programs.

Housing is a problem of epidemic proportions both in the United States and globally. A study by the National Low-Income Housing Coalition found that one-third of the U.S. population has housing problems (defined as high-cost burden, overcrowding, poor quality, or homelessness) [26]. With the U.S. Housing and Urban Development Agency's fair market rent measures, households with one full-time minimum wage earner cannot afford to rent a one-bedroom apartment anywhere in the country [27]. Over one million children in the United States are currently homeless [28]. Homeless children are defined as those who "lack a fixed, regular, and adequate nighttime residence..." [29]. Within the United States, the homelessness that results from the combination of domestic violence and poverty

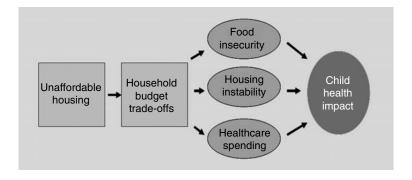


Figure 21.4 Household budget trade-offs affect child health and well-being.

can be averted by access to housing subsidies for eligible families; however, the need for these subsidies far outstrips the resource [30–32].

When housing is expensive, people are forced to decide between paying for housing and paying for other necessities such as food, medical care, and utilities (see Figure 21.4) [33]. When families must make a choice of whether to pay rent or buy groceries, adverse effects on child health result. For example, children who are eligible for but not receiving rent subsidies are eight times more likely to present with malnutrition and stunted growth and have an increased risk of infection as compared to their peers who are receiving subsidies [34,35]. Additionally, homeless children suffer from preventable medical conditions such as tuberculosis, lead poisoning, and anemia as they do not have access to regular medical care [36].

When a family is homeless, the adverse child health effects are magnified. Homeless children have an increased risk of infections. One study found that homeless children have diarrhea five times as often as low-income children who live in homes [37]. Homeless children are twice as likely to suffer from respiratory infections, and seven times as likely to have iron deficiency and malnutrition [38]. They are also at risk for interrupted primary care, inadequate immunizations, other preventative care and health screening, developmental delays, and poor school performance [25].

21.3 The Link between Healthcare and Legal Advocacy

Legal action related to public health and social policy is a key vehicle through which to address nonmedical antecedents of child health problems. We can trace many health conditions to social factors that are potentially remediable by fair enforcement

of existing laws and regulations. In the United States, for example, there are many government programs and laws designed to provide for important basic needs for low-income families: nutrition supplementation through the Women, Infants, and Children Program (WIC) or food stamps, housing subsidies, utility assistance, income supports for disabled and low-income families, regular and special education services, and Medicaid. However, despite this wide safety net of government services and benefits, inconsistent program implementation, coupled with excessively bureaucratic and often arbitrary administration, too often results in illegal denials or lack of access to benefits and services [39–41], which leads to preventable poor health outcomes. Lack of enforcement of indoor environmental codes can have similar effects. "Poor housing is recognized to contribute to health problems in communities of color and is associated with increased risk for injury, violence, exposure to toxins, molds, viruses, and pests..." [42].

Over the last several decades, the confluence of human rights advocacy, increased humanitarian infrastructure, and new democracies has, in many countries, laid a foundation of legal rights accruing to vulnerable populations, including children. Ensuring adherence to the laws delineating those rights is the next step. Because laws and policies nominally protecting children are only useful if they are respected and enforced, infrastructure must be developed to both identify and remedy legal violations.

Healthcare providers daily bear witness to the unrelenting impact of social determinants on patient health and well-being. When evaluating and treating sick children, healthcare professionals frequently identify how inadequate food, housing, and community and individual safety; poor access to basic medications such as vaccines; or other unmet basic needs contribute to preventable medical illness and poor child health [18]. Physicians are thus in a unique position to set in motion advocacy that ensures that the laws and policies protecting child health are effectively implemented. It is this central notion—that lawyers have the skills to remedy the social determinants of health, while clinicians can address the biological determinants—that led to the medical—legal partnership innovation.

The clinical setting, where healthcare providers routinely screen families for a variety of barriers to child health, provides a virtually unrivaled opportunity to identify legal violations that impair children's health, and to connect affected families with legal services to challenge those violations. Lawyers, who are trained to address the underlying social conditions of poverty, are ideal partners for pediatricians seeking to uncouple the link between the biological and the social origins of childhood illness.

Lawyers can serve as a resource to physicians to enable them to better advocate for their patients and help their patients gain access to the services to which they are entitled. Our experience in the United States suggests that a partnership between physicians and lawyers in the clinical setting can facilitate meeting families' basic needs by ensuring the provision of resources indisputably necessary for the health and development of children. We believe that partnership between doctors and

lawyers can help to hold government systems accountable to enforce laws that are intended to protect children's health.

By directly addressing the issues that lead to poor child health, family-focused legal advocacy serves to decrease exposure to poverty risks and increase access to preventive health, social and legal services that will lead to better outcomes in tandem with immunizations, and other traditional healthcare strategies. As Figure 21.5 illustrates, when doctors and lawyers work together, they leverage the combined expertise of both professions to most effectively disrupt the links between child poverty and its adverse health outcomes. For low-income families struggling to preserve their children's health, lawyers working collaboratively with healthcare professionals within a medical-legal partnership model can be a crucial resource that helps ensure that laws designed to promote children's health and safety are enforced, which in turn allows families to better meet the basic needs of their children.

Such collaboration between legal and medical professionals is of course not limited to referrals to legal advocacy to secure access to social benefits. While this

Legal interventions in the clinical setting: three examples

Basic legal information

Miguel B. was referred to the medical-legal partnership by his daughter's pediatrician, who was treating her for malnutrition. Miguel had applied for food stamps and was told at the welfare office that he needed to provide a letter from his landlord. His landlord was unwilling to provide the letter and his application was denied. The lawyer consulted with Miguel and told him how to provide alternative verification so that his family would be eligible. He followed the lawyer's advice and received the \$298/month in food stamp benefits. The child began to gain weight within a short period of time.

Legal advice and consultation

Helen G. was referred to the medical-legal partnership by the nurse practitioner in the pediatric clinic. She and her three children received an eviction notice. Helen had lost her job after multiple absences because of her child's sickle cell anemia, and had fallen behind in her rent payments. An attorney spoke with Helen's landlord on her behalf, and assisted Helen in applying for state rental assistance using clinical evidence from the hematologist to prove eligibility. Helen received rental assistance and was not evicted. Her child's health stabilized as a result of Helen's ability to focus on preventive medical strategies.

Full representation

Carolyn R. has 3 children, all of whom have asthma. Carolyn and her 3 children live in extremely substandard housing. When Carolyn took steps last year to get the landlord to remove asthma triggers that were due to deteriorated housing conditions, the landlord became abusive. Since then, Carolyn has been severely depressed, and at times suicidal. Carolyn was referred to medical-legal partnership by her mental health clinician. The lawyer accompanied her to court, and worked closely with her mental health clinician and pediatrician to develop evidence to support her case against the landlord. The lawyer succeeded in getting back rents waived and the court forced the landlord to fix the conditions. Carolyn is now seeking other housing. Her mental health has improved substantially, as has the health of her children.

Figure 21.5 Legal interventions in the clinical setting: three examples.

chapter focuses on the health benefits of legal action to secure state-subsidized food and housing, other types of legal action that can yield positive health outcomes include advocacy for immigration status to promote stability and employment access, legal aid in the criminal justice system, and legal advice related to domestic violence.

21.4 Legal Advocacy: Multiple Models, Multiple Strategies

Like physicians, lawyers have a long tradition of working to promote human rights as part of their mission. Indeed, law is the preeminent vehicle through which human rights are established and enforced. Lawyers play a central role as the architects of human rights laws and constitutions, as litigators in human rights cases, and as champions for the rule of law in democratic societies. It may be said that what distinguishes human rights from other normative enterprises such as ethics and morality is that it is a fundamentally legal enterprise, enforceable through laws, lawyers, and lawyering.

The legal community has long played a central role in assisting low-income or other vulnerable populations such as the elderly and disabled obtain government and community benefits and services for which they are eligible. Studies demonstrate that every low-income family has an average of three unmet legal needs. Unfortunately, legal aid resources for poor people is woefully underfunded in the United States; publicly funded legal aid agencies turn away three out of every five applicants for assistance [43]. The result is a legal aid system that is emergency-oriented, namely, the ethic of prevention of harm or crisis is not incorporated into the service delivery model. Only families and individuals with dire, emergency legal needs—an imminent eviction, a dangerous domestic violence situation—fall under the eligible priorities for assistance. Seen in global perspective, of course, the United States is one of a minority of countries wealthy enough to provide any free legal aid, and an even smaller minority wealthy enough to provide free legal aid in noncriminal cases.

By providing legal advice and representation to those who cannot afford to pay for private attorneys, legal aid aims to ensure fairness and efficiency in the administration of justice. As important, legal aid facilitates access to equal justice for all, regardless of income level or status. In addition, at the most fundamental level, legal aid is a critical path to ensuring that children's and families' most basic needs—such as access to safe, affordable housing, income supports, food, healthcare, and other assistance, and a safe and secure family situation—are met. Unfortunately, however, funding for legal aid has declined significantly in the United States since the early 1980s [44]. This steady erosion of legal service resources for the poor (including the working poor) does not have merely abstract results, such as the denial of justice or a shift in values. Rather, this erosion has directly affected, and will continue to directly

affect, the health and well-being of millions of Americans, including children, both in the short and long term. Simply put, those denied legal aid will not have their most basic needs met.

Against this backdrop of insufficient resources and a reactive service delivery model, the legal profession has developed an unrivalled capacity and ethic for pro bono, or volunteer, legal services. In the United States, bar associations and state licensing boards recommend or require that all lawyers perform a certain number of pro bono service hours to individuals or groups of individuals who otherwise could not afford legal help. Virtually all lawyers and law firms across the country perform some kind of pro bono-related work, either through direct service or through financial commitments to the legal-aid providers in their community. Although legal-aid services are overwhelmed and under-resourced, studies demonstrate that private pro bono capacity is drastically underutilized [45]. There is thus significant room for expansion of law firms into medical—legal partnership models of practice. Leveraging pro bono resources for medical—legal partnership could have a tremendous impact on the health and welfare of low-income families.

Professional associations can also play an important role in mobilizing lawyers to address the unmet needs of vulnerable groups, and to advance the cause of human rights more broadly. The American Bar Association (ABA), with over 400,000 members, is the world's largest professional organization. The ABA consistently seeks ways in which the legal profession can act to ensure that children's basic needs are met, both at a national and an international level. Toward this end, it established the Human Rights Committee of the ABA to (i) monitor and address the drafting and adoption of international covenants, (ii) advocate for foreign human rights lawyers who have been persecuted for their work, (iii) investigate cases of alleged human rights abuses, and (iv) educate the bar, the policymakers, and the public at large about human rights issues [46]. The ABA can speak with a powerful and effective voice in advancing the cause of human rights. Nationally, the ABA works—at federal, state, and county levels—to support programs that are working to improve the lives of low-income populations, to create pro bono opportunities for its members, and to advocate for policies that protect individuals' rights [47]. As such, bar associations are a tremendous resource that can be leveraged to expand and increase the variety of ways lawyers provide legal services to poor families.

21.5 Medical-Legal Partnership for Children

In the United States, an innovative model for conducting legal and human rights advocacy within the medical setting has emerged. The Medical–Legal Partnership for Children (MLPC), founded in 1993 at Boston Medical Center and the Boston University School of Medicine, promotes collaboration between frontline pediatric healthcare staff in hospitals and community health centers and lawyers trained to handle basic needs advocacy. This unique model was born from the recognition that

child health cannot be meaningfully improved on a large scale by relying on medical interventions alone. Moreover, because laws and policies nominally protecting children are only useful if they are respected and enforced, infrastructure must be developed to both identify and remedy violations of legal rights [48].

MLPC's work is based on a "patients-to-policy" model, and has a three-pronged strategy.

- 1. Training and Education of Healthcare Staff: This includes training for healthcare professionals in (i) understanding children's basic needs, (ii) how those needs are addressed in the local legal system, and (iii) how the local legal system can be successfully navigated to enforce rights. Training curricula and tools are designed to help healthcare staff screen, consult, and refer cases where a lack of access to basic needs is jeopardizing health and well-being.
- 2. Direct Legal Assistance to Patients: This includes providing direct legal assistance to children and families in the clinical setting, with an emphasis on identifying and triaging legal issues, as well as handling a wide range of basic needs legal issues such as housing, income access, and food access.
- 3. Systemic Advocacy: This includes working in partnership with healthcare staff to change and improve systems that administer resources crucial to child health and development, to create societal awareness about the link between social and environmental factors and child health, and to inform policies, regulations, and administrative structures that impact children's health.

Since the late 1990s, MLPC has expanded nationally and now works with over 70 clinical sites across the country (see Figure 21.6). Collectively, these programs can be a force for creating a consistent and more effective legal and policy agenda for children nationally.

Although the model varies according to the needs and capacity of the hospital or clinic and the legal-services provider, medical-legal partnerships are grounded in structures that integrate lawyers directly into the healthcare system and make attorneys part of the medical team. Medical-legal collaborations work by putting lawyers directly within pediatric clinics, so that when a doctor, nurse, or social worker sees a patient whose basic needs are not being met, that medical provider can simply send the child's family to the lawyer working next door. Anchoring legal assistance for poor families in the clinical setting can also help reframe the traditional view that medical providers have of legal profession as being overly focused on quality of care and malpractice, and instead offer a vision of the legal profession that is centered on partnering with healthcare providers to support vulnerable patients in securing their basic needs. Neighborhood pediatric primary care clinics are excellent sites for the integration of legal assistance. Medical-legal partnerships are thus grounded not only in the provision of holistic care, but also in the preventive aspects of the culture of pediatrics. Low-income families often place significant trust in their pediatric providers; consequently, when a trusted doctor prescribes

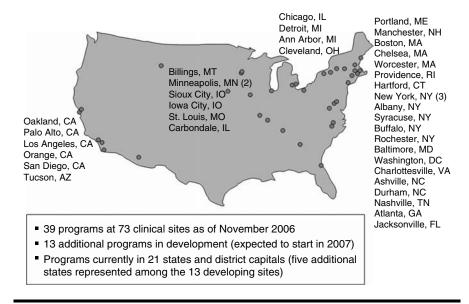


Figure 21.6 Map of Medical-Legal Partnership Sites (as of November 2006).

legal advocacy, a family may be more willing to follow through and obtain the legal help they need.

As discussed at length above, medical professionals certainly are aware of the multitude of nonbiologic factors that contribute to common childhood diseases, but on their own those clinicians may not have the capacity to effect change, especially when legal issues are involved. Lawyers, on the other hand, have the precise tools necessary for an effective intervention: knowledge of how to navigate legal procedures and decision-making systems, expertise in the assertion of different types of legal authority, and training in the art of advocacy and persuasion. Lawyers can provide specialized treatment for rights violations and can take the appropriate legal steps to hold agencies, landlords, schools, and others accountable on behalf of families. Having a lawyer available to consult with a pediatric team when nonmedical barriers to child health arise is an advantage for both the medical provider and the patient—and, we would argue, society at large [48].

As important as our work providing legal services to patient families are our efforts to train medical professionals about the legal protections, benefits, and services that can help improve families' access to basic needs. Lawyers, as advocacy experts, can train doctors, nurses, and social work staff members to be more effective advocates and can act as backup resource providers if an impasse is reached in seeking access to programs or financial supports. Advocacy has been practiced by doctors and other healthcare professionals for many years. Only recently has the term gained currency in the training of residents and doctors [49]. Increasingly, medical students, residents, and frontline healthcare staff who

work with underserved patients are eager to learn advocacy strategies that will help their patients stabilize and then integrate important health behaviors. Similarly, social workers have many of the same opportunities to intervene with families and ensure that basic needs are met, but are increasingly confronted with a complicated landscape of changing regulatory and statutory eligibility frameworks that impedes their ability to support families within their domain.

Medical professionals leave trainings with concrete information about the legal protections and community resources that can help their patients. We believe that even a small change to medical curricula to include basic trainings on patients' legal rights—education that teaches doctors how to advocate on social issues for their patients by leveraging resources and methods in which they are not traditionally trained—would make a profound difference in the provision of preventative and holistic healthcare. This is a large part of what we have been doing in various U.S. sites and would propose to include in curricula nationally and internationally.

Medical–legal collaborations represent preventive medicine in its broadest form: legal advocacy and education to remedy the underlying causes of ill health among low-income children. By training doctors to intervene proactively where poverty, lack of basic needs, and human rights violations threaten a child's health, providing legal services to patient families and advocating for systemic change, medical–legal collaborations allow legal-service providers to work preventively and promote child and family health and well-being.

21.6 Evaluation

Evaluation of medical–legal partnership represents a unique opportunity to unite two distinct and important professions, law and medicine, in a meaningful integrated delivery system. It also presents a unique challenge: to unite two distinct knowledge and data systems to tell a single story about the biological and social status and trajectory of a child or family. There are no clear roadmaps for joint medical–legal indicators or data points. But the logic model that supports medical–legal partnership goals and objectives sets out short-, medium-, and long-term goals related to systems change, child and family health improvements, and change in clinical practice as a result of having lawyers as part of the medical team (see Figure 21.7).

MLPC, working with a number of academic researchers, is engaged in a number of research studies to assess both quantitatively and qualitatively the impacts of its programs on the well-being of low-income families and on pediatric practice within our affiliated health centers. In-depth interviews are underway, probing how families cope with problems related to their housing. This study will compare the strategies for coping utilized by families with and without access to MLPC services. A quantitative study will begin recruiting subjects in late 2007 and will examine whether receiving assistance through MLPC causes a reduction in overall stress and an improvement in well-being.

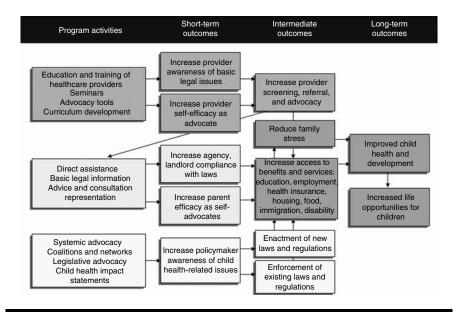


Figure 21.7 The Medical–Legal Partnership for Children Logic Model (version one).

Some of the issues we are investigating include questions such as (1) Does partnership between medical and legal-service providers increase the likelihood that (i) medical providers will ask patient-families about legal concerns, (ii) families' legal needs will be identified, (iii) families will receive appropriate help for their legal needs, and (iv) families' legal needs will be resolved? (2) Does the receipt of legal services within a healthcare setting increase family stability? and (3) Does it improve the overall health of children? (See Figure 21.7.)

To date, evaluation of the MLPC collaborative model has been primarily focused on delivery of services to children and their families. In our ongoing efforts to document the work of our program staff, MLPC routinely collects and reports on the characteristics of the families served, the types of legal needs addressed, the nature of the services provided, and the legal outcome of these services (e.g., whether or not a public benefit was granted). Our efforts to evaluate the frequent training and education of medical providers include pre- and post-test surveys to assess changes in knowledge and attitudes related to the legal rights of low-income families and in the incorporation of basic legal advocacy into their medical practice.

21.7 Medical-Legal Partnership: The Global Model

The model of integrating medical and legal services is already being broadly embraced by healthcare institutions in the United States to help patient-families

with their urgent legal needs. The expansion of community health centers into places where a family can get help with the full spectrum of basic human needs holds enormous promise. Collaboration among lawyers and healthcare providers can be a platform for important related efforts, ranging from human rights campaigns to legislative advocacy; when doctors and lawyers work together to identify and address violations of human rights guarantees, they can reinforce respect for the rule of law and "add teeth" to laws that are otherwise poorly enforced. We anticipate that this, in turn, will ultimately promote wider respect for the rule of law as a universal standard, in addition to yielding positive health benefits [48].

The medical–legal partnership model is already taking hold in resource-poor settings internationally. In 2006, the Open Society Institute's (OSI's) Law and Health Initiative (LAHI) began piloting series projects to integrate legal services into a variety of health settings [50]. LAHI builds upon OSI's experience in promoting both public health and the rule of law in developing and transitional countries. The initiative works with a variety of health providers—particularly those serving socially marginalized populations such as people living with HIV, people who use illicit drugs, sex workers, and people in need of palliative care—to train providers in human rights and to add a legal services component to their clinical practice. Examples of LAHI-supported initiatives include the following:

- 1. Integrating Legal Services into Harm Reduction Programs in the Former Soviet Union: In post-Soviet countries such as Russia, Ukraine, Georgia, and Kyrgyzstan, where HIV is spread primarily by injection drug use, LAHI is working with OSI's International Harm Reduction Development Program to add a legal services component to HIV-prevention services such as needle-exchange and peer outreach programs. Clients of these programs, often in conflict with the law, require legal advice and services to fight abuses in the criminal justice system and widespread discrimination in access to social services. Such legal advice has the potential to yield significant health impacts as drug users are spared lengthy prison sentences and provided with greater access to social benefits.
- 2. Providing HIV and AIDS-Related Legal Services in Kenya: Human rights violations such as gender-based violence, property grabbing, child sexual abuse, and disinheritance have been linked to HIV vulnerability in Kenya and many other parts of sub-Saharan Africa. In Kenya, LAHI is working with organizations such as CARE-USA and the Christian Health Association of Kenya to integrate legal and paralegal services into existing HIV-prevention, treatment, and care services. As in the MLPC model described above, lawyers and paralegals are placed on-site to train health workers in human rights issues, provide direct legal services to patients, and initiate policy advocacy based on the experience of legal service provision.
- 3. Linking Paralegals to Hospices in South Africa: Palliative care is an extremely promising area for medical–legal collaboration, as people facing terminal

illness face a range of legal needs such as disposition of property, guardianship of children, access to social benefits, and assigning power of attorney. In this context, legal services cannot only vindicate individual rights, but can also reduce stress and improve overall quality of life—which is the very mandate of palliative care. In South Africa, home to one of the worst AIDS epidemics in the world, LAHI is collaborating with OSI's International Palliative Care Initiative to integrate paralegals into hospices for the purpose of educating hospice staff and patients about their rights, providing services, and collaborating on policy advocacy.

As in the United States, the integration of medical and legal services on a global scale has the twin benefits of improving the health of vulnerable groups and fostering greater respect for the rule of law. That said, the challenges are enormous when it comes to catalyzing effective medical-legal partnerships in countries beset by extreme poverty, poor health infrastructure, and compromised legal systems. For the medical-legal model to take hold effectively in a country, both the legal and medical professions require the capacity and resources to expand and embrace a new mandate. This may require intensive training for key lawyers, physicians, institutions, and governmental entities. In addition, doctors and lawyers alike may be rightly suspicious of the benefits of legal services in countries where the justice system includes slow and corrupt courts, a complete absence of government-funded legal aid, and traditional authorities unwilling or unable to apply statutory law. Concurrent with any effort at medical-legal collaboration must be systemic work to strengthen the effectiveness of justice systems, as well as to improve access to healthcare. That said, medical-legal collaboration can, as noted above, help to propel broader legal reform by combining the strengths of two elite professions in the service of a common goal. A promising way forward might be for medical and legal professionals to identify specific areas where legal enforcement might be foreseeable—for instance, enforcement of domestic violence or child abuse laws—and to connect and ally itself with advocates in these spheres [48].

Conclusion 21.8

In places with the fewest resources, limited infrastructure, corruption, and lack of government transparency, the most vulnerable populations are the least likely to have their basic human needs met. In these places, the clinical interaction between a doctor and a patient provides a unique opportunity for advocacy to occur. Incorporating lawyers or paralegals into this setting can promote the patient's access to human rights protections by creating an opportunity for legal advocacy that will increase government accountability and adherence to protective laws and regulations.

The lessons of the medical-legal partnership are universally applicable because at its core, medical-legal partnership is about drawing together two important constituencies who consolidate significant community power, and creating a strategy—a cross-cultural strategy, across disciplines—to protect the most vulnerable members of a community. Medical—legal partnership holds tremendous promise in the struggle to enhance both the effective provision of holistic healthcare and to further local, national, and international human rights agendas. Ultimately, it represents the simple idea that everyone must work together if the promise of the Universal Declaration of Human Rights is to become a reality.

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Chapter 22

Taking a Human Rights Approach to Healthcare Commercialization

Brigit Toebes

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22.1 Introduction

Commercialization or privatization of public healthcare services is increasingly taking place in many countries across the world. In this chapter, the implications of healthcare commercialization are addressed from a human rights perspective.

In principle, human rights law is neutral on the issue of healthcare commercialization. In other words, provided that the human rights standards are guaranteed they may be satisfied through whatever mix of public and private sector services is appropriate in the national context.

Public health experts, however, warn that healthcare commercialization amounts to an increase in health disparities, in particular in poor nations. They suggest that ethical principles, including equity, should be embedded in privatization processes so as to guarantee the availability, accessibility, acceptability, and quality of healthcare services to all groups of society.

This suggests that a closer look needs to be taken at the existing human rights laws. It appears that despite their above-mentioned neutrality, they can offer an interesting framework for assessing the consequences of healthcare commercialization.

In this contribution, a human rights impact assessment is designed which enables governments and civil society organizations to assess the implications of governmental plans to introduce healthcare commercialization. At the core of this analysis lies the right to the highest attainable standard of health (right to health), but other important human rights are the right to participation, the right to information, the right to an effective remedy, and the right to privacy.

This contribution contains two parts: first, an overview of commercialization of healthcare, which draws heavily on the work of public health experts (Sections 22.2–22.5) [1], and secondly, an analysis of the possible human rights consequences of healthcare commercialization resulting in an outline of the human rights impact assessment (Sections 22.6–22.9).

22.2 Commercialization of Healthcare Services: Definition

First, the distinction between commercialization and the narrower term "privatization" needs to be addressed. According to Graham, privatization can be defined as the sale or transfer of state-owned goods into private hands. As such, it does not necessarily embrace commercial behavior by publicly owned bodies, nor liberalization, the shift to market-led provision from state-led or state-constrained systems, nor deregulation, i.e., relaxing the rules under which a certain sector conducts its activities [2]. As a result, the use of the term "privatization" can result in an unnecessary confusion of the debate and to situations where certain trends remain unidentified. An example concerns the United Kingdom, where the British government is currently in the process of contracting out public healthcare services to private healthcare providers. As part of its plans it has invited multinational companies to manage certain NHS (National Health Service). The question arises, does this contracting out to private healthcare providers constitute privatization? In June 2006, the British health secretary, Patricia Hewitt, insisted that there was "'no question whatsoever' of privatising a whole tier of the NHS." An opponent, on the other hand, claimed that "it is hard to see it as anything other than privatisation by stealth" [3].

The aim of the current analysis is to cover all developments that imply a move away from direct government responsibility over the provision of healthcare services. To avoid uncertainty over whether there is actually privatization, this article will follow the lead of Mackintosh and Koivusalo and use the wider term "commercialization," instead [4].

22.3 Causes of Healthcare Commercialization

Healthcare commercialization is a global trend that affects both poor and rich nations. The main rationale for healthcare commercialization is to curb public spending. Because of the rising cost of healthcare services, public health systems are increasingly coming under pressure [5].

In developed nations, the underlying causes of the rising costs are the general inefficiency of the publicly ran services, improvements of medical techniques, an ageing population, and rising expectations of the quality of care [6]. To promote their approach, Western governments often stress that with their commercialization policies they seek to enhance the consumer's range of choice [7].

In the developing world, the lack of financial resources seem to be caused by general poverty on the part of the government and inefficiency of the publicly ran health system. In addition, there is an increasing pressure from international financial institutions to reduce the cost of public health expenditure, resulting in a gap that is filled up by private healthcare providers, including non-governmental organizations (NGOs) and foreign multinationals [8]. A side effect of these developments is an increase of out-of-pocket expenditure for healthcare services, which Mackintosh and Koivusalo call the "most regressive form of health finance" [9].

22.4 **Trends in Healthcare Commercialization**

Healthcare commercialization may take various shapes, including privatization of the health insurance branch, the contracting out of healthcare services to private healthcare providers, and the penetration of national health markets by multinationals [10]. An example of each is given below.

An example of the privatization of the health insurance branch concerns the reorganization of the Dutch healthcare system, where a private health insurance with social conditions has come into existence [11]. By way of a first step, all health insurance companies were gradually turned into private entities. Secondly, a new insurance system for curative healthcare came into force in 2006, implying that all residents of the Netherlands are now obliged to take out a health insurance from one of the private health insurance companies. In turn, these companies are under an obligation to accept every resident in their area of activity and to provide a basic health insurance package that has been designed by the government [12]. This new and innovative approach has created a certain tension with European competition law, which seeks to create a European insurance market by lifting trade barriers and as such does not allow governments to impose too many restrictions on health insurance companies [13].

Commercialization of healthcare services can also affect healthcare provision. In the United Kingdom, for example, health services previously provided by the NHS are gradually being contracted out to private healthcare providers. As explained by Pollock, the NHS has abandoned to the private sector almost all long-stay inpatient care, all routine optical care, and most dental care. In addition, multinational corporations are being invited to take over the running of failing NHS hospitals and to provide routine surgery in private treatment centers [14].

Similar but more dramatic are the developments in Lebanon. Here the civil war has weakened the institutional and financial capacity of the government, which has created a vacuum that was filled up by nongovernmental groups and the private sector. As such, governmental healthcare provision became reduced to secondary and tertiary care for civil servants, and care for the most disadvantaged. Primary care largely fell into the hands of a large amount of national and international NGOs, which are often poorly coordinated and often function on a reactive rather than on a proactive basis. The private sector became the most important secondary and tertiary care provider, which emphasizes curative over primary and preventive care with a focus on hospitals and centers for high technology services [15]. A side effect of these developments in Lebanon has been a huge increase in out-of-pocket spending of healthcare services. Statistics demonstrate that in 1999 more than half the population in Lebanon remained uninsured [16].

Another trend that occurs mostly in developing nations concerns the continuing multinational expansion of cross-border investment in the provision of health services. This development has been triggered by changes in the government health sector, sometimes under pressure of the World Bank, the International Monetary

Fund (IMF), and the World Trade Organization (WTO), which may trigger privatization of public health services [17]. As explained by Jasso-Aguilar et al., U.S.-based multinationals corporations have expanded worldwide, especially in Latin America. A declining rate of profits in U.S. markets triggered these corporations to seek access to public social security funds in countries like Mexico and Brazil [18].

22.5 The Vision of Health Professionals and of Public Health Experts

The British Medical Association (BMA) has expressed its concern about the British health reform, which foresees an increasing role of the private sector. It has stated that

The British Medical Association is dismayed by the incoherence of current government policies and the damage they have caused to the NHS and the delivery of patient care. (...) There should be no further involvement of the commercial private sector in providing NHS care. The BMA will campaign to restore an integrated publicly provided health service in England. [19]

Mackintosh and Koivusalo have done extensive primary research examining the impact of healthcare commercialization. Their conclusion is that it can have a negative impact on health outcomes and on the accessibility of healthcare services for poor and disadvantaged people, in particular in poorer countries. For example, their research demonstrates that better care at birth is associated with more of gross domestic product (GDP) spent by government or social insurance funds on healthcare, but not with more private spending. Furthermore, they indicate that higher primary care commercialization is associated with greater exclusion of children from treatment when ill [20]. Their overall conclusion is that health systems are part of the public policy sphere and that policies toward commercialization within health systems should and can be within national and local democratic control [21].

This assumption poses an interesting challenge to the human rights dimension. As already mentioned, human rights law is neither for nor against privatization, indeed, it provides an interesting framework for assessing whether healthcare commercialization will negatively affect people's access to health services and health information and their privacy.

22.6 Human Rights Law

Human rights, as defined in international law, are claims or entitlements of individuals versus their governments. They represent fundamental values of

humanity and seek to protect the human dignity of individuals. As such they are closely connected to equity, the ethical principle that is used in a public health framework.

Human rights are set forth in international treaties that are subsequently ratified by governments, the so-called state parties. The entitlements that fall upon the state may imply a duty to refrain from acting on the part of the state (e.g., not to torture), but they may also oblige the state to take a certain action (e.g., to enact legislation or to provide a certain service) [22].

Because it is states that have ratified the human rights treaties, they are the primary duty holders under international human rights law. However, increasingly the argument is being made that other actors may have responsibilities under human rights law, such as international organizations, multinationals, and individuals like war criminals. In this contribution, however, the emphasis will be on the responsibilities of governments [23].

Human rights are generally thought of as standards that victims of violations can use to seek remedy for past harms. In addition, however, international human rights can function as a guide for governments and other national and international public bodies to assess in advance the consequences of draft legislation and planned policies. It is this second function of human rights law that we will examine in this chapter.

22.7 Human Rights and Healthcare Commercialization

As mentioned, human rights law does not interfere with a government's choice of whether health and other public services are publicly or privately provided. Yet, commercialization of healthcare services can have serious human rights consequences. Commercialization of public health services implies a move away from government control over the provision of healthcare services. This is problematic, because private healthcare providers do not necessarily have an interest in improving the health of the population as a whole, nor of marginalized population groups. In terms of human rights, all this can imply as a loss of legal accountability of governments for conduct that comprises human rights [24].

Governments, as the primary duty-bearers under human rights law, have a responsibility to ensure that healthcare services, also if they are privately provided, are available, accessible, acceptable, and of good quality [25]. They have to enact legislation that ensures that private healthcare providers provide healthcare services that meet quality and accessibility standards. They have to make sure that mechanisms are in place for patients to seek legal redress if they have received inadequate or untimely care.

A doubt that may arise in the mind of the reader is that governments themselves are not necessarily dedicated to realizing human rights, so why ask them to address human rights violations of private healthcare providers? Here, it should be born in

mind that governments have primary responsibility under human rights law and so they are the first actors that should be addressed. Whether healthcare providers, pharmaceutical companies, and other actors involved in the health sector have human rights responsibilities is a separate matter that should never undermine the primary responsibility of governments [26].

22.8 A Human Rights Impact Assessment of Healthcare Commercialization

A human rights impact assessment is a tool which enables states and international and national organizations to assess the possible human rights implications of a certain policy, program, project, trend, or development. There is an increasing call on governments to do human rights impact assessments before the introduction of, for example, privatization of public services, new business plans, and trade agreements [27]. For example, the special rapporteur on the right to health, Paul Hunt, has suggested that human rights impact assessments of trade-related policies be undertaken. According to Hunt, such impact assessments should be taken both at an international and a national level [28]. In addition, with regard to healthcare privatization, he remarked that "[health care privatization] should be preceded by an independent, objective and publicly available assessment of the impact on the respective right" [29].

In an extensive study on human rights impact assessments, Hunt and MacNaughton address the possibility of integrating human rights in more general impact assessments. For this purpose, they suggest seven general principles which reflect a rights-based approach to performing impact assessments and they mention six steps for integrating a right to health more specifically into existing impact assessments [30].

At the core of our human rights impact analysis for healthcare commercialization lies the right to the highest attainable standard of health and its conceptual framework. The right to the highest attainable standard of health, often abbreviated as the right to health, is an economic and social right, which is set forth in several rights treaties at the United Nations (UN), as well as at the regional level [31]. Although many states have embedded a right to health in their constitution, the most widely recognized international provision is Article 12 of the UN International Covenant on Economic, Social and Cultural Rights (ICESCR). The content and implications of Article 12 ICESCR are explained in an explanatory document, a so-called General Comment, which was adopted by the UN Committee on Economic, Social and Cultural Rights, the treaty-monitoring body of the ICESCR [32]. As the General Comment explains, the right to health is not a right to be healthy, but rather a right to a number of freedoms and entitlements, extending not only to timely and appropriate healthcare, but also to the underlying determinants of health, such as safe and potable water and healthy occupational and environmental conditions [33].

In addition, several other human rights are of particular importance when assessing the impact of healthcare commercialization: the rights to participation, to information, to an effective remedy, and to privacy.

The assessment presented below is by no means meant to be exhaustive and it is recognized that other human rights can also be of crucial importance when assessing the implications of healthcare commercialization. It is also to be noted that human rights may reflect overlapping values. For example, while there is a separate right to information, a right to health embraces a right to health-related information. In addition, where a denial of access to healthcare services results in the death of a patient, a right to life may be at stake in addition to the right to health [34].

22.8.1 Participation in the Decision-Making Process

As demonstrated above, healthcare commercialization is a process that can have serious consequences for the way the public can access healthcare services. It is therefore important that the public has a say in the process of adopting the policies and the rules that lead to commercialization.

This notion is reflected by the international human rights framework. The General Comment on the right to health, which will be discussed more elaborately below, stipulates as an important element of the right to health the participation of the population in all health-related decision making at the community, national and international levels [35]. The right to participation is further set forth as a separate human right in Article 25 of the UN International Covenant on Civil and Political Rights (ICCPR) and attached General Comment. Paragraph (a) of Article 25 ICCPR relates to the conduct of public affairs. According to the General Comment, this covers all aspects of public administration, and the formulation and implementation of policy at international, regional, and local levels. Governments should establish laws that foresee in the allocation of powers and the means by which individuals can exercise their right to participation in the conduct of public affairs [36].

In the Netherlands, for example, the public was not directly consulted before the introduction of healthcare privatization. However, a great number of public bodies were consulted, including patients' associations and trade unions [37]. As such, the public had at least an indirect say in the reorganization of the Dutch healthcare system.

22.8.2 AAAQ: Availability, Accessibility, Acceptability, and Quality

According to the Right to Health General Comment, governments are to guarantee the availability, accessibility, acceptability, and quality of health services, the so-called AAAQ. Availability means that sufficient health services must be provided. Accessibility implies nondiscrimination, physical accessibility, economic accessibility

(affordability), and access to information. Acceptability means that health facilities must respect medical ethics and be culturally appropriate. Quality, finally, requires that health services are scientifically and medically appropriate and sound [38]. If we apply these principles in the context of healthcare privatization, the following comes to the fore.

First, in terms of "availability," it is important to assess how healthcare commercialization will affect the sufficient availability of healthcare services. It is in fact possible that healthcare commercialization exerts pressure on healthcare providers to work more efficiently. As such, healthcare commercialization may enhance the availability of healthcare services.

In terms of "accessibility," the following overlapping principles need to be addressed:

- 1. Nondiscrimination. According to the General Comment, nondiscrimination implies that health facilities, goods, and services must be accessible to all, especially the most vulnerable or marginalized sections of the population [39]. Commercialization trends in healthcare can result in discrimination of customers or patients because private health insurance companies and private healthcare providers do not necessarily have an interest in providing equal access to healthcare services. For example, they may be inclined to refuse patients with chronic diseases, because these patients require more expensive treatment and care.
- 2. Physical Accessibility. Physical accessibility requires that health facilities be within safe reach for all sections of the population, especially vulnerable or marginalized groups [40]. Here, it should be noted that private insurance companies and private healthcare providers do not necessarily have an interest in ensuring that healthcare services are within safe physical reach of the population. People living in remote, rural areas are particularly vulnerable in this respect [41].
- 3. Affordability. Affordability implies that health facilities, goods, and services are affordable for all, including socially disadvantaged groups [42]. In many countries, healthcare commercialization trends have led to an increase in out-of-pocket expenditure, which in turn can have dramatic consequences for the affordability of healthcare services. For example, Volkmann reports that in Vietnam, the introduction of a private/public healthcare mix has led to a huge increase in out-of-pocket expenditure. He points out that as a result, many Vietnamese are turning to cheaper healthcare providers, such as traditional healers and drug vendors [43]. Furthermore, under the new Dutch system, insurance companies can ban persons who refuse or are unable to pay their insurance premiums. Several critics have expressed the concern that as a result, many people will remain uninsured [44].
- 4. *Information Accessibility*. Information accessibility implies the right to seek, to receive, and to impart information and ideas concerning health issues [45].

As mentioned above, healthcare commercialization is sometimes defended by the claim that it will enhance consumer's range of choice [46]. However, the question arises to what extent the consumer is actually able to make an adequate choice between the various health insurance companies and the healthcare providers. With insurance policies being often quite complex, it is not always easy to make a well-informed choice [47]. Furthermore, patients may lack information about the quality of the range of available healthcare services and about the best available option to them.

In terms of "acceptability," as mentioned, it implies that health facilities, goods, and services are respectful of medical ethics and culturally appropriate (respectful of the culture of individuals, minorities, peoples, and communities). They should also be sensitive to gender and life-cycle requirements, as well as being designed to respect confidentiality and improve the health status of those concerned [48]. The role of private health insurance companies is of particular concern. Private health insurance companies may not necessarily contract those healthcare services that are most suitable for their customers. This may hamper the acceptability of the healthcare services [49].

In terms of "quality," it is important to assess that healthcare commercialization does not undermine the quality of the healthcare services. An example concerns systems where public health services are contracted out to private healthcare providers. Once privatized, it is more difficult for governments to supervise the quality of these privately provided healthcare services. An element of this concerns safeguarding the quality of medical personnel. In the United Kingdom, for example, there is concern whether profit-making companies running treatment centers will provide training that is up to the same standards as the NHS [50].

Minimum Core Obligations *22.8.3*

Furthermore, the General Comment on the right to health stipulates that states parties have a so-called core obligation or minimum obligation to ensure the satisfaction of minimum essential levels of healthcare. In this respect, the General Comment makes reference to the Programme of Action of the International Conference on Population and Development and to the Primary Health Care Strategy of the World Health Organization (WHO) [51]. Mention should also be made of the Millennium Development Goals (MDGs), a set of eight time-bound targets by which progress can be measured, agreed upon by countries around the world in 2000 [52]. According to Alston, the MDGs can to some extent "be taken as reflecting the minimum content of certain economic and social rights." He argues that states which fail to achieve their MDGs "cannot easily seek to excuse themselves by relying upon a lack of available resources or arguments based on progressive realisation" [53].

Altogether, although there is no obligation for governments to provide essential health services publicly, the core content doctrine underlines that there is an extra strong obligation to ensure that these services are available under all circumstances, whether publicly or privately provided.

22.8.4 Obligation to Protect

Furthermore, the General Comment on the right to health explains that human rights impose three levels of obligations on states parties: the obligations to respect, to protect, and to fulfill. The obligation to respect requires states to refrain from interfering directly or indirectly with the enjoyment of the right to health, the obligation to protect requires states to take measures that prevent third parties from interfering with Article 12 guarantees. The obligation to fulfill, finally, requires states to adopt appropriate measures toward the full realization of the right to health [54]. As de Feyter and Gómez Isa point out, when a state privatizes a certain service, there is in fact a shift from the state's obligation to fulfill to the state's obligation to protect [55]. The state is no longer the provider of the service, but now needs to supervise that third parties provide the services adequately. According to the present author, this can imply three things:

- 1. The adoption of legislation to regulate the private health sector. An example concerns the Dutch Health Insurance Act which regulates the behavior of private insurance companies by prohibiting them from refusing customers and from differentiating based on health status, age, or other factors related to the insured [56]. It also obliges the insurance companies to provide one basic health insurance package to everyone [57]. With regard to China, where private healthcare providers play an increasing role, Sun points out that regulations identifying the respective roles and responsibilities of social and commercial health insurers would support the commercial health insurance market. Sun explains that according to informants, the Chinese government should play an active role in regulating the health insurance market [58].
- 2. The adoption of monitoring mechanisms aimed at regulating the behavior of private insurance companies and private healthcare providers. Adequate regulation of the health sector implies that there is supervision not only over the financial behavior of the actors in the health sector, but also over the quality, the geographic accessibility, and the affordability of health services provision [59].
- 3. The creation of possibilities for individuals to complain about failure or malpractice by the (private) actors in the healthcare sector (see Section 22.8.5).

22.8.5 Accountability

As mentioned above, an important aspect of the obligation to protect the right to health is the obligation to ensure that individuals have means of redress when the private healthcare provider/insurer has not treated them adequately.

The right to an effective remedy is also set forth in several human rights treaties that contain civil and political human rights. The right to a remedy is also contained in the UN ICCPR, but this particular provision relates to the rights in the ICCPR and not necessarily to the right to health. In addition, the right to a remedy is contained in the Universal Declaration on Human Rights (UDHR) [60]. Article 8 UDHR stipulates that everyone has the "right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law." As such, when people are denied access to adequate health services, they should have access to legal recourse. The term "competent" refers to courts that serve a certain area of the law, for example a court specialized in medical law.

22.8.6 Protection of Privacy

Healthcare commercialization may put the protection of medical data under threat. Private health insurers do not necessarily have an interest in safeguarding the privacy of their customers. For example, private health insurers may seek to use medical data to address or to select the more "profitable" patients or to reject those patients who are likely to consume more medical services.

The General Comment on the right to health stresses that accessibility of health information should not impair the right to have personal health data treated with confidentiality [61]. More generally, the right to privacy, family, home, and correspondence is protected by Article 17 of the UN ICCPR and it has been elaborated further by the Human Rights Committee's General Comment and also by its case law under the Optional Protocol [62]. Under this General Comment, governments have a responsibility to regulate by law the gathering and holding of personal information on computers, data banks, and other devices, whether public authorities or private individuals or bodies [63]. As a result, if a private health insurer or healthcare provider acquires access or responsibility over medical data, legislation has to be in place to regulate the gathering and holding of this information. Among other things, individuals have the right to know whether and if so what personal data is stored, and they should be able to ascertain which entities have control over their files [64].

22.9 Conclusions

As demonstrated above, commercialization of healthcare services can have serious human rights consequences. Governments or civil society organizations are recommended to undertake a human rights impact assessment to identify the possible human rights consequences of healthcare commercialization bills and planned policies. As explained more elaborately above, this has the following elements:

- Assessing whether the public has been consulted about the proposed change, for example by means of a public enquiry.
- Assessing the effects of the proposed commercialization on the availability, accessibility, acceptability, and quality of the healthcare services. Legislation has to be in place to ensure that private healthcare providers meet national quality standards, as well as legislation that prohibits public and private insurance companies and healthcare providers to discriminate between patients on the basis of their health status. Another requirement may be legislation that prohibits insurance companies and healthcare providers to discriminate between patients on the basis of their financial capacity.
- Identifying whether adequate regulatory mechanisms are in place that will oversee the (partly) independent health sector. Such mechanisms should not only oversee issues like the financial performance of the actors in the healthcare sector, but also the adequacy of the healthcare services.
- Identifying whether patients will have adequate means of redress when their rights have been ignored by both the public and the private healthcare sector. To this end impartial complaint mechanisms have to be in place that can take binding decisions.
- Identifying whether legislation is in place that ensures that medical data from patients are treated confidentially by both public and private healthcare providers.

In some instances, it will boil down to identifying existing mechanisms that offer the above-mentioned protection, like the Dutch legislation that prohibits insurance companies from discriminating between persons. In other situations, it may be a matter of identifying which elements need to be added to existing mechanisms, for example when supervisory mechanisms are in place that however do not yet oversee the availability, accessibility, acceptability, and quality of the services.

At an international level, several measures can be taken to assess and to monitor the negative effects of healthcare commercialization. International institutions including the WHO have an important role to play by collecting and disseminating information on national experiences and expertise on how best to deal with this development. Furthermore, given the increasing trend to provide healthcare services, transnationally, it is important to think of ways to better oversee compliance with human rights and other standards by transnational healthcare providers, for example by means of an International Health Authority. Finally, the UN Committee on Economic, Social and Cultural Rights can urge governments to undertake a human rights impact assessment when introducing healthcare commercialization into their system. It can then monitor these assessments within the framework of its state reporting procedure. To assist governments in this task, it can adopt a General Comment that discusses how to tackle the possible negative human rights consequences of commercialization of public services including health, water, and social security.

Notes

- 1. Inter alia, Mackintosh, M. and Koivusalo, M., Commercialization of Health Care: Global and Local Dynamics and Policy Responses, Palgrave Macmillan, Hampshire/New York, 2005; Pollock, A.M., NHS plc, The Privatisation of Our Health Care, Verso, London/ New York, 2005.
- 2. Graham, C., Human rights and the privatisation of public utilities and essential services, in Privatisation and Human Rights, De Feyter, K. and Gomez Isa, F. (Eds), Intersentia, Antwerp/Oxford, 2005, pp. 33-56, at p. 35.
- 3. The Guardian, June 30, 2006, at http://www.guardian.co.uk.
- 4. See Mackintosh, M. and Koivusalo, M., Health systems and commercialization: In search of good sense, in Commercialization of Health Care, see note 1, pp. 3-21, at pp. 3-4.
- 5. For an interesting illustration of this tension see the decision of the Canadian Supreme Court, Chaoulli v. Quebec (2005) 1 S.C.R. 791, in which it ruled that the prohibition to obtain private health insurance is not constitutional where the public system seems to fail to deliver reasonable services (available at http://www.lexum.unmontreal.ca). See also Kraus, C., In blow to Canada's health system, Quebec law is voided, New York Times, June 10, 2005.
- 6. Weale, A., Ethical issues in social insurance for health, in Health Care: Ethics and Insurance, Sorell, T. (Ed.), Routledge, London/New York, 1998, p. 138.
- 7. See Toebes, B., The right to health and the privatization of National Health Systems: A case study of the Netherlands, Health and Human Rights, 9: 110, 2006. For the United Kingdom, see Pollock, The Privatisation of Our Health Care, see note 1, p. 234.
- 8. For analysis see Mackintosh and Koivusalo, Commercialization of Health Care, see note
- 9. Mackintosh and Koivusalo, Commercialization of Health Care, see note 1, p. 8.
- For a definition see Mackintosh and Koivusalo, Health systems and commercialization, see note 4.
- 11. See the Web site of the Dutch Ministry of Health, Welfare and Sport, at http://www. minvws.nl/en/themes/health-insurance-system. Dutch Health Insurance Act (Zorgverzekeringswe), Tweede Kamer, 2004-2005, A 30 124. Available at the Web site of the Dutch Ministry of Health, Welfare and Sport at http://www.minvws.nl. For a more elaborate evaluation of this Act see Toebes, Health and Human Rights, see note 7. For an evaluation of a number of developed nations see European Observatory on Health Care Systems, Health Care Systems in Eight Countries: Trends and Challenges, London School of Economics, London, United Kingdom, April 2002.
- 12. Before 2006, two thirds of the population fell under the Social Health Insurance Act (Ziekenfondswet).
- 13. See Toebes, Health and Human Rights, see note 7, 112-113.
- 14. See Pollock, *The Privatisation of Our Health Care*, see note 1, pp. 36–41.
- 15. Sen, K. and Mehio-Sibai, A., The dynamics of commercial health care in Lebanon, in Commercialization of Health Care, see note 1, pp. 66-83, at p. 68.
- 16. Sen, K. and Mehio-Sibai, see note 15, pp. 66-83, at p. 78. See also Sen, K. and Mehio-Sibai, A., Transnational capital and confessional politics: The paradox of the health care system in Lebanon, International Journal of Health Services, 34: 540, 2004.

- 17. See Lethbridge, J., Strategies of mutinational health care companies in Europe and Asia, in *Commercialization of Health Care*, see note 1, Chapter 2; Jasso-Aguilar, R. et al., Mutlinational corporations and health care in the United States and Latin America: Strategies, actions and effects, in *Commercialization of Health Care*, see note 1, Chapter 2.
- 18. Jasso-Aguilar et al., Strategies, Actions and Effects, see note 17, p. 38.
- 19. British Medical Association, *NHS Reforms in England*, available at http://www.bma.org.uk/ap.nsf/Content/NHSreformsinEngland.
- 20. Mackintosh and Koivusalo, Commercialization of Health Care, see note 2, pp. 15-16.
- 21. Mackintosh and Koivusalo, Commercialization of Health Care, see note 2, p. 20.
- 22. The current human rights doctrine makes a distinction between (negative) state obligations to respect and (positive) state obligations to protect and to fulfill. See Section 22.8.4.
- 23. As to the human rights responsibilities of multinationals in the health industry see *inter alia* Toebes, *Health and Human Rights*, 2006, see note 7, 108. More generally see for example, Jägers, N., *Corporate Human Rights Obligations: In Search of Accountability*, Intersentia, Antwerp/Oxford/New York, 2002.
- 24. Bloche, M.G., Is privatisation of health care a human rights problem? in *Privatisation and Human Rights*, see note 2, p. 221.
- 25. For a definition of these principles see Section 22.8.2.
- 26. As to the human rights responsibilities of multinationals in the health industry, see note 23.
- 27. For an elaborate analysis of a human rights impact assessment for the right to health see Hunt, P. and MacNaughton, G., *Impact Assessments, Poverty and Human Rights: A Case Study Using The Right to the Highest Attainable Standard of Health*, Paris: UNESCO, 2006, available at http://www.humanrightsimpact.org/fileadmin/hria_resources/unesco_hria_paper.pdf.
- 28. Commission on Human Rights, Report of the Special Rapporteur, Paul Hunt, *Mission to the World Trade Organization*, UN Doc. E/CN.4/2004/49/Add.1, 1 March 2004, paragraphs 54–56.
- 29. Hunt, P., The International Human Rights Treaty Obligations of States Parties in the Context of Service Provision, in *Day of General Discussion: The Private Sector as Service Provider and Its Role in Implementing Child Rights*, UN Doc. CRC/C/121, 31st session, September 20, 2002, 4–5.
- 30. Hunt and MacNaughton, *Impact Assessments, Poverty and Human Rights*, see note 27, pp. 32–35.
- 31. The first instrument to lay down a right to health was the Constitution of the World Health Organization (adopted 1946). Furthermore, the right to health can be found in Article 25 of the Universal Declaration of Human Rights (UDHR, 1948), Article 12 of the International Covenant on Civil and Political Rights (ICESCR, 1966), Article 12 of the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW, 1979) and Article 24 of the Convention of the Rights of the Child (CRC, 1989), and in several other UN conventions. With the regional level, reference is made to regional intergovernmental organizations that address human rights, including the Council of Europe (CoE), the Organization of American States (OAS), and the Organization of African Unity (OAU). For example, Article 11 of the European Social Charter (ESC, 1965) stipulates a right to protection of health.

- 32. UN Committee on Economic, Social and Cultural Rights (CESCR), General Comment 14 on the Highest Attainable Standard of Health, UN Doc. E/C.12/2000/4, August 11, 2000. See also Potts, H., A Right to Public Participation in Public Health Strategy Management, available at http://www.engagingcommunities2005.org/abstracts.
- 33. CESCR, General Comment 14, see note 32, paragraphs 8 and 11.
- 34. For example, Council of Europe's European Court of Human Rights (ECHR) has addressed the question whether the right to life in Article 2 ECHR implies a right to treatment. In Cyprus v. Turkey (May 10, 2001, at http://cmiskp.echr.coe.int) it argued that "an issue may arise under Article 2 of the Convention where it is shown that States parties put an individual's life at risk through the denial of health care which they have undertaken to make available to the population generally." For more cases see Samanta, A. and Samanta, J., The Human Rights Act 1998—why should it matter for medical practice? Journal of the Royal Society of Medicine, 98: 404-410, 2005. For a striking example from medical practice see Jonathan Watts in Beijing Boy's death sparks riots over China health costs, The Guardian, November 13, 2006, available at http://www.guardian.co.uk, the case concerned a hospital in southwest China where a young boy had died, reportedly because his guardians could not afford to pay treatment fees of more than £40.
- 35. CESCR, General Comment 14, see note 32, paragraph 11.
- 36. UN Human Rights Committee (HRC), General Comment 25: The Right to Participate in Public Affairs, Voting Rights and the Right of Equal Access to Public Service (Article 25), UN Doc. CCPR/C/21/Rev.1/Add.7, July 12, 1996, paragraph 5, available at http:// www.unhchr.ch.
- 37. See the explanatory document to the Draft Health Insurance Act, Tweede Kamer, 2003– 2004, 29763, No. 3, available at http://www,overheid.nl.
- 38. CESCR, General Comment 14, see note 32, paragraph 12.
- 39. CESCR, General Comment 14, see note 32, paragraph 12.
- 40. CESCR, General Comment 14, see note 32, paragraph 12.
- 41. See also Pollock, The Privatisation of Our Health Care, see note 1, p. 230, who observes that in the United Kingdom "Physical access is already being curtailed by the closure of local hospitals and the movement of services to out-of-town locations, involving higher transport costs."
- 42. CESCR, General Comment 14, see note 32, paragraph 12.
- 43. Volkmann, S.C., Children's rights and the MDGs: The right to health within Vietnam's transition towards a market economy, Health and Human Rights, 9: 56-79, 2006, at
- 44. See Toebes, Health and Human Rights, see note 7, 114.
- 45. CESCR, General Comment 14, see note 32, paragraph 12.
- 46. Regarding the UK system see Pollock, The Privatisation of Our Health Care, see note 1, p. 234. With regard to the Netherlands, see Toebes, Health and Human Rights, see note 7, 110.
- 47. See Toebes, Health and Human Rights, see note 7, 115.
- 48. CESCR, General Comment 14, see note 32, paragraph 12.
- 49. See Toebes, Health and Human Rights, see note 7, 116.
- 50. See for example Toebes, Health and Human Rights, see note 7, 116. See also John Carvel, Some private hospitals are falling short of minimum standards, *The Guardian*, December 20, 2006, at http://www.guardian.co.uk.

- 51. CESCR, General Comment 14, see note 32, paragraph 43-44.
- 52. Millennium Development Goals, see http://www.un.org/millenniumgoals/.
- See Alston, P., A Human Rights Perspective on the Millennium Development Goals, paragraph 164, available at http://www.ohchr.org/english/issues/millenium-development/docs/alston. doc.
- 54. CESCR, General Comment 14, see note 32, paragraphs 33–36.
- 55. de Feyter, K. and Gómez Isa, F., Privatisation and Human Rights, see note 2, p. 3.
- Dutch Health Insurance Act, see note 11, Article 3. This is the so-called acceptatieplicht, the obligation to accept all customers.
- 57. Health Insurance Act, see note 11, Article 10.
- 58. Sun, Q., The interactions between social and commercial health insurance after China's entry into the World Trade Organization, in *Commercialization of Health Care*, see note 1, pp. 94–95.
- 59. For the United Kingdom see Pollock, *The Privatisation of Our Health Care*, see note 1, p. 227. For the Dutch system see Toebes, *Health and Human Rights*, see note 7, 119.
- 60. Although as a Declaration this document is in principle not legally binding, increasingly it is argued that this document has obtained the status of customary international law.
- 61. CESCR, General Comment 14, see note 32, paragraph 12.
- UN Human Rights Committee (HRC), General Comment 16: The Right to Respect of Privacy, Family Home and Correspondence, and Protection of Honour and Reputation (Article 17), 32nd session, April 8, 1988.
- 63. HRC, General Comment 16, see note 62, paragraph 10.
- 64. HRC, General Comment 16, see note 62, paragraph 10.

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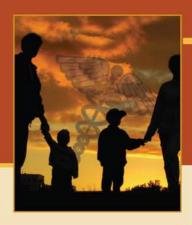
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Health Capital and Sustainable Socioeconomic Development

Edited by Patricia A. Cholewka · Mitra M. Motlagh



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Given the recent outbreaks of worldwide calamities such as famine, natural disasters, and proliferation of substance abuse, international attention has increasingly focused upon disease detection, prevention, containment, and treatment. Serving an unmet need in the marketplace, this text highlights mounting evidence of the strong relationship between human capital and socioeconomic development and poses management strategies from international and interdisciplinary sources. With a fresh perspective, scholars and practitioners in the health and sustainable development fields address such issues as healthcare and education, funding for healthcare services, and the impact of legal and political policies on healthcare needs.

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