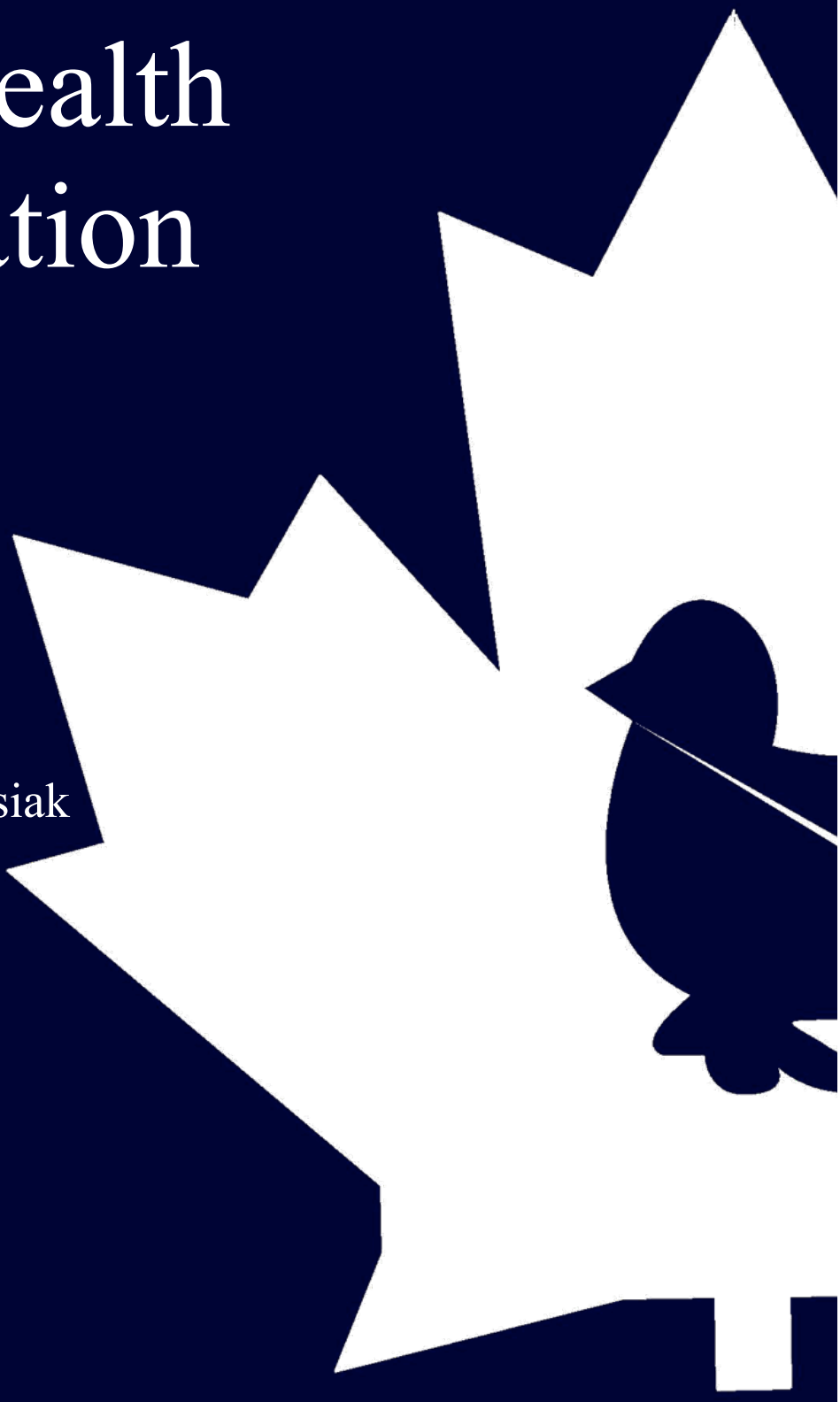
SECONDARY SCHOOLS' UNITED NATIONS SYMPOSIUM 2016

World Health Organization



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Koray Demir

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Anastasia Rewers-Kusiak

NOVEMBER 10-13, 2016 | MONTRÉAL, QUÉBEC

Dear Delegates,

I hope you are all well! My name is Koray, I am a third year medical student at McGill University, and I will be your chair for the WHO Committee this year. On behalf of your 2016 SSUNS WHO Dais, welcome! We can't wait to have you in our (admittedly cold but otherwise great) city this November.

Our team has been working very hard to put together a challenging and engaging committee. Between the topics we are presenting today, we hope to highlight the diversity of global health and offer something for everybody. Although the background guide is thorough, we would encourage you to do your own research if you have the time, to bring new subjects and ideas to discussion.

There are a few things that we hope to see in this committee. For one, we're really hoping to focus on productive, forward-moving, and respectful discussion. Some of our topics are quite broad, but we certainly aim to cover more than one over the course of the weekend.

We would also like to highlight how important cooperation is, especially in a committee like WHO. Epidemics and trends in global health do not discriminate based on political borders, and when health is at stake, it is especially important to be able to work together despite differences. We will really value bringing groups together and pushing forward as a unit to reach solutions and consensus.

The bottom line, though, is that we hope you have a great weekend at SSUNS. Please do not hesitate to contact any of us before the conference if you have any questions at all, about the committee, conference, or Montreal in general. We really want you to enjoy your time here and we cannot wait to meet you soon! Until then, good luck with school and any of your projects – see you all in November!

Best,

Koray Demir

Topic 1: Non-Communicable Diseases

Section 1: Background Information

Non-communicable disease (NCD) load is an increasing problem in low- and middle-income countries around the world. As low- and middle-income countries (LMICs) improve communicable disease management and experience lifestyle transitions, NCDs are becoming more prevalent in these countries. Mortality rates for NCDs are higher in low- and middle-income countries, as under-resourced health systems are unable to provide high quality, long-term care to patients. In low- and middle-income countries, NCDs can be financially devastating, bankrupting families and impeding development. Improving the prevention and control of NCDs is essential to improving health equity around the world and in achieving the Millennium Development Goals.

NCDs will likely be the defining health challenge of this century. As communicable diseases are less and less common in LMICs due to increased rates of vaccination and improved sanitation, NCDs will be the leading cause of death worldwide. Mitigating risk factors for NCDs will be important to reducing NCD rates, especially in younger people. However, as people age, they ultimately develop NCDs, and so providing high-quality care for these diseases will be essential.

NCDs are defined as diseases that are not passed from person to person. They account for 63% of all annual deaths, killing 38 million people per year. There are four main types of NCDs: cardiovascular diseases (e.g. heart attack, stroke), cancers, chronic respiratory diseases (e.g. chronic obstructive pulmonary disease, asthma), and diabetes. These four disease groups account for 82% of all NCD deaths. Tobacco use, alcohol abuse, physical inactivity, and unhealthy diets all increase the risk of dying from a NCD.[1]

Section 2: NCDs in LMICs

In recent years, low- and middle-income countries have experienced increasing NCD load, and NCDs now make up a larger share of causes of death (37% in low-income countries and 57% in lower-middle income countries, compared to 81% and 87% in upper-middle income and high-income countries respectively). The NCD burden is expected to continue increasing in LMICs, so that by 2030 they will be the leading cause of death in all LMICs.[2]

In 2012, 28 million of the 38 million deaths from NCDs were in low- and middle-income countries.[3] 82% of premature NCD (before age 70) deaths occur in low- and middle-

[1] "NCDs." World Health Organization. http://www.who.int/mediacentre/factsheets/fs355/en/.
[2] http://www.ncbi.nlm.nih.gov/pubmed/23240355
[3] "The Top 10 Causes of Death." World Health Organization. http://www.who.int/mediacentre/factsheets/fs310/en/index2.html.

income countries.[4] The probability of dying from a major NCD between the ages of 30 and 70 is only 10% in developed countries, and 60% in developing countries.[5]

There are difficulties associated with tackling NCDs in LMICs because their health systems are often severely underresourced. Health systems in these countries have traditionally been geared toward treating communicable diseases, since communicable diseases were, until recently, the leading cause of death. Care for communicable diseases differs dramatically from care for NCDs. The former is often much shorter in duration and does not require systematic follow-up or chronic care (as a generalization). As a result, health systems in LMICs are often unstructured and cannot provide long-term, consistent care for NCDs.

Transitioning a health system to provide high-quality NCD care is an expensive process that requires meticulous planning. Primary health care in particular is extremely important – it is the main entry point into health services for most people[6] LMICs must devise ways to strengthen their primary health care systems to provide front-line sustained care.

Socioeconomic Impacts of NCDs in Low- and Middle-Income Countries

There are high costs associated with inaction on NCDs. Loss of productivity from illness and premature death as well as individual and national costs borne from addressing NCDs are a major impediment to development[7] It is estimated that between 2011 and 2025, the economic losses from NCDs in LMICs will be US$ 7 trillion. The yearly economic cost of NCDs is around 4% of these countries' annual output[8]

Section 3: Measures to Prevent and Control NCDs

Though the World Health Organization (WHO) has endorsed a set of targets and policy options aimed collectively at reducing global NCD burden by 25% by 2025, progress in achieving these targets is highly uneven, and many countries are not on track to meet them, particularly LMICs.

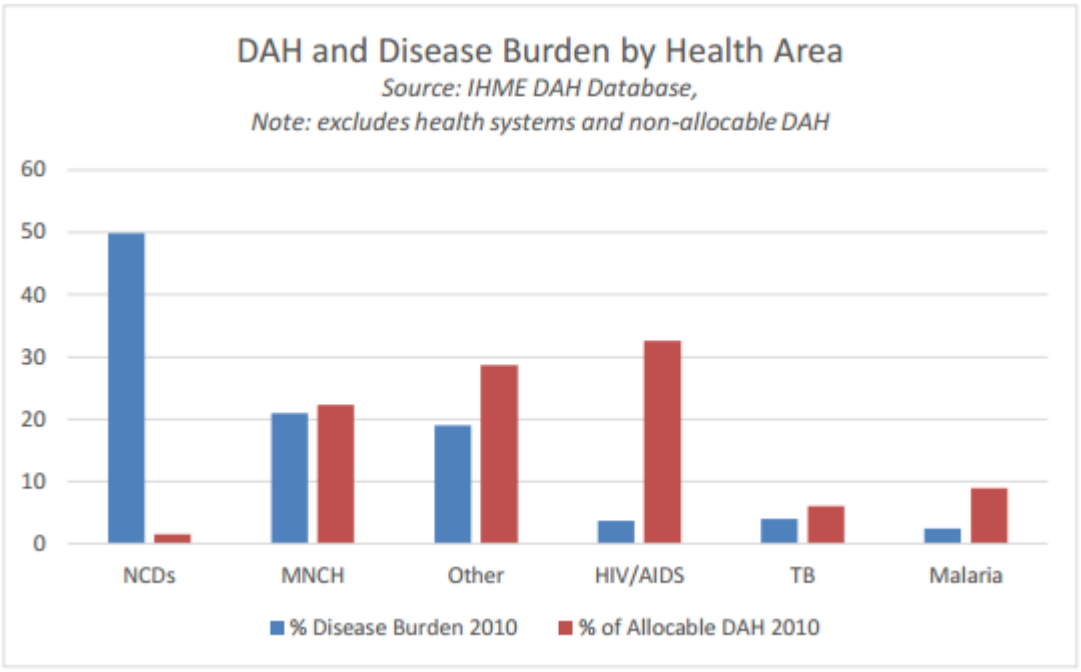
A coordinated response to NCDs requires taking action to prevent NCDs as well as improving care for them. Focusing on prevention will reduce the number of people who ultimately develop NCDs, but will neglect people currently living with them and those who will inevitably develop them in the future. A focus on care is also necessary to improve outcomes for current and future NCD patients[9] Currently, international focus leans heavily towards prevention of NCDs. Some of the most cost-effective measures to

[4] "NCDs." World Health Organization. http://www.who.int/mediacentre/factsheets/fs355/en/.
[5] 2013 progress report
[6] Maher, D., J. Sekajugo, and L. Smeeth. "Health Transition in Africa: Practical Policy Proposals for Primary Care." World Health Organization, 2010. doi:10.2471/blt.10.077891.
[7] "Global Status Report on Noncommunicable Diseases 2014." World Health Organization, 2014, xv.
[8] "From Burden to "Best Buys"." World Health Organization, 2011, 3. http://www.who.int/nmh/publications/best_buys_summary.pdf.
[9] "Action on Noncommunicable Diseases: Balancing Priorities for Prevention and Care." WHO. Accessed May 31, 2016. http://www.who.int/bulletin/volumes/89/8/11-091967/en/.

reduce NCD impact are aimed at controlling risk factors. Thus, in the absence of adequate funding to respond to the problem fully, triage efforts are mainly focused on prevention. The WHO's "best buy" recommendations for countries to implement focus almost exclusively on prevention[10]

Creating health systems in LMICs that provide high-quality care for NCDs in the long-term will require Member States to devise models for health care delivery that are feasible with the limited resources available.

Funding



[11]

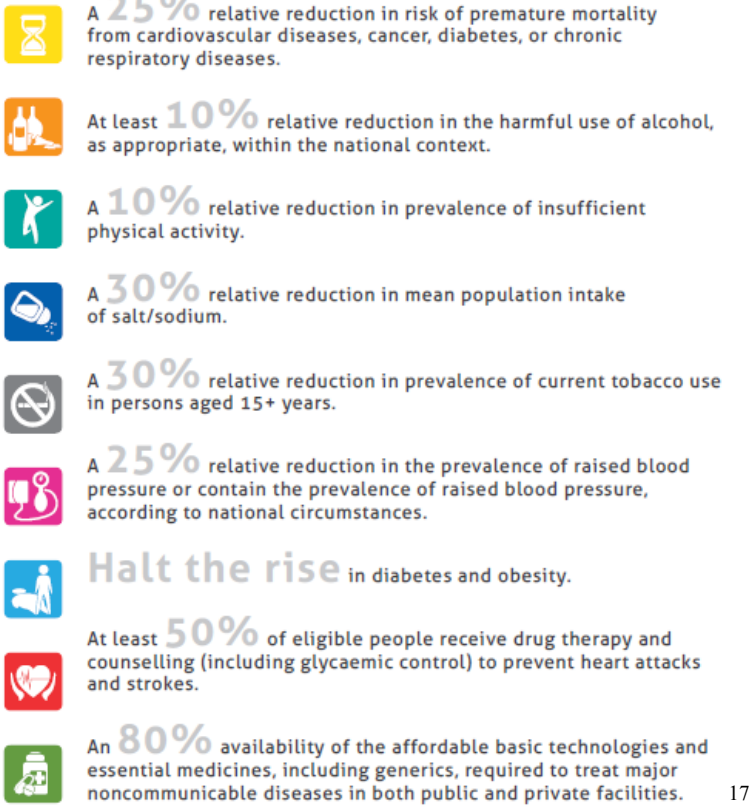
Currently, NCDs are relatively underfunded compared to other health areas, receiving only 1.23% of health donations in 2011. 63% of countries identify international donations as an important source of funding for NCD care, but do not receive adequate assistance when requested.[12] Currently, the World Bank provides 30% of funding for NCDs, NGOs provide 27%, and the WHO provides 13%.[13] Bilateral donors provide 52% of all donor assistance for health (DAH), but only 11% of NCD funding.[14]

[10] "From Burden to "Best Buys"." World Health Organization, 2011. http://www.who.int/nmh/publications/best_buys_summary.pdf.
[11] "WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." World Health Organization, February 23, 2015, 7. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.
[12] "WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." World Health Organization, February 23, 2015, 1. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.
[13] "WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." World Health Organization, February 23, 2015, 2. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.
[14] "WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." World Health Organization, February 23, 2015, 3. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.

NCD funding suffers compared to other DAH partially because of somewhat limited advocacy compared to other health challenges. Additionally, donors perceive that NCD interventions are still relatively weak – there is no "silver bullet" for treating NCDs like vaccination or antiretroviral therapy for HIV/AIDS.[15]

Section 4: Past Actions

Global Action Plan for the Prevention and Control of NCDs 2013-2020[16]



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[15] "WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." World Health Organization, February 23, 2015, 5. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.
[16] "Global Action Plan for the Prevention and Control of NCDs 2013-2020." World Health Organization, 2011. http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf.
[17] "Global Action Plan for the Prevention and Control of NCDs 2013-2020." World Health Organization, 2011, 4. http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf. 9 progress indicators for NCD prevention and control.

1. To raise the priority accorded to the prevention and control of noncommunicable diseases in global, regional and national agendas and internationally agreed development goals, through strengthened international cooperation and advocacy.

2. To strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of noncommunicable diseases.

3. To reduce modifiable risk factors for noncommunicable diseases and underlying social determinants through creation of health-promoting environments.

4. To strengthen and orient health systems to address the prevention and control of noncommunicable diseases and the underlying social determinants through people-centred primary health care and universal health coverage.

5. To promote and support national capacity for high-quality research and development for the prevention and control of noncommunicable diseases.

6. To monitor the trends and determinants of noncommunicable diseases and evaluate progress in their prevention and control.

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The World Health Organization signed the Global Action Plan for the Prevention and Control of NCDs 2013-2020 at the 66th World Health Assembly in 2011. This plan offers a variety of policy options for member states, WHO, other UN organizations and intergovernmental organizations, nongovernmental organizations, and private entities. The plan is comprised of 6 targets for 2025, 25 outcome indicators, and 9 progress indicators. If the targets laid out in the document are met, a 25% reduction in premature mortality from NCDs will be achieved.[19] In particular, Objective 4 of the document aims to strengthen health systems in order to prevent and control NCDs, as well as address the underlying social determinants of NCD burden through strengthened primary health care and universal health coverage.

A progress report from the WHO Director-General in 2013[20] provided updates on progress in NCD prevention and control ahead of the 2014 high-level meeting of the General Assembly on NCDs. The report identified some of the most cost-effective interventions to prevent and manage NCDs. These include reducing the affordability and availability of tobacco and alcohol, reducing salt intake and salt content in food, replacing trans-fats with unsaturated fats, drug therapy for people with diabetes and those at high risk of cardiovascular event, prevention of liver cancer with hepatitis B immunization, and prevention of cervical cancer through screening. The report found that demand is high among Member States for support in designing policy for NCDs. This demand spurred the creation of the UN Interagency Task Force (UNIATF) on NCDs.

The report found that between 2010 and 2013, countries improved their capacity to prevent and control NCDs, but that many countries do not have sufficient resources to implement parts of the Global Action Plan. 91% of countries reported that government revenues were the major source of funding for their NCD programs, with 63% of countries also reporting international donors as a major source of funding.[21] A majority of the countries surveyed reported that they had treatment standards in place for the treatment of hypertension and diabetes, as well as dietary counseling, two-thirds of countries reported that these guidelines were not fully implemented for any of the four major NCD groups.

UN Interagency Task Force (UNIATF) on NCDs[22]

The UNIATF on the Prevention and Control of NCDs was established by the UN Secretary-General in 2013 and operates under the leadership of the World Health

[18] "Global Action Plan for the Prevention and Control of NCDs 2013-2020." World Health Organization, 2011, 5. http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf. 6 targets for 2025.
[19] "Report of WHO Director-General to UN Secretary-General on the Prevention and Control of NCDs." World Health Organization. http://www.who.int/nmh/events/2014/UN-general-assembly/en/.
[20] "Note by the Secretary-General Transmitting the Report of the Director-General of the World Health Organization on the Prevention and Control of Non-communicable Diseases." UN News Center. December 10, 2013. http://www.un.org/ga/search/view_doc.asp?symbol=a%2F68%2F650&Submit=Search&Lang=E.
[21] "Note by the Secretary-General Transmitting the Report of the Director-General of the World Health Organization on the Prevention and Control of Non-communicable Diseases." UN News Center. December 10, 2013, 13. http://www.un.org/ga/search/view_doc.asp?symbol=a%2F68%2F650&Submit=Search&Lang=E.
[22] "UN Interagency Task Force on NCDs (UNIATF)." World Health Organization. http://www.who.int/ncds/un-task-force/en/.

Organization. It meets twice a year and is responsible for coordinating the activities of several UN organizations and other inter-governmental organizations to work towards the targets laid out in the Global Action Plan for the prevention and control of NCDs 2013-2020. The work of the task force includes joint programming missions to countries to support countries in their efforts to improve NCD prevention and control, as well as promoting sharing of solutions and joint support between countries.

The terms of reference for the Task Force include enhancing support to Member States, improving information flow between bodies, strengthening advocacy in order to raise awareness of the need for improved NCD protocol, and strengthening international cooperation in support of place for the prevention and control of NCDs.

High-level Meeting of the General Assembly on the Comprehensive Review and Assessment of the Progress Achieved in the Prevention and Control of NCDs

The General Assembly met on July 10th and 11th 2014 to review progress made on the prevention and control of NCDs. The Assembly reviewed commitments made in the political declaration adopted in 2011. The outcome document released from the meeting acknowledged several developments and areas for further improvement:

1. The development, by the WHO, of the Global Action Plan for the Prevention and Control of NCDs 2013-2020;
    a. The adoption of the plan by the World Health Assembly;
    b. Called upon Member States to mobilize political will and financial resources to enact the plan;
2. The creation of the UNIATF on the Prevention and Control of NCDs;
3. An increase from 32% of countries having a national NCD policy with a budget in 2010 to 50% of countries in 2013;
4. Uneven progress across countries and the need for increased efforts;
    a. Some goals set for 2013 were not met;
    b. A need for increased budget allocations for addressing NCDs;
5. Encouraged implementation of "best buy" policies;
6. Recognized the importance of implementing universal health coverage.[23]

The outcome document contained several recommendations moving forward that are in the suggested reading section. The UN General Assembly will convene another high-level meeting on progress on addressing NCDs in 2018.

Non-Governmental Organizations

The NCD Alliance[24] is a network of 2000 organizations from more than 170 countries. The Alliance works to bring together people and organizations from around the world to

[23] Comprehensive Review and Assessment of the Progress Achieved in the Prevention and Control of Non-communicable Diseases." World Health Organization. July 17, 2014. http://www.who.int/nmh/events/2014/a-res-68-300.pdf?ua=1.
[24] NCD Alliance. Accessed May 31, 2016. https://ncdalliance.org/.

increase collaboration between actors and improve advocacy efforts. The Alliance is a partner of UN agencies, and has successfully advocated to raise the profile of NCDs in the UN. This includes encouraging the UN High-level Meeting on NCDs in 2011 and campaigning for a NCD target in the 2030 Agenda for Sustainable Development. This organization acts as a hub to improve coordination between other organizations and advance policy and advocacy efforts.

International Organizations

The Providing for Health Initiative (P4H) is a partnership that includes Germany, France, Switzerland, Spain, ILO, WHO, the World Bank and the African Development Bank. The partnership is working to strengthen health financing systems and move towards universal health coverage in low- and middle-income countries[25]. P4H is increasing political commitment to universal health coverage and using financial support from its members to support efforts to scale up health systems[26].

Section 5: Country Policies and Possible Solutions

Tackling NCDs is one of the major health challenges of the 21st century. NCDs are already the leading cause of death around the world, and their rates will increase as LMICs continue to improve communicable disease care and experience lifestyle transitions that decrease physical activity and worsen diets. There are prominent health inequities in the delivery of NCD prevention and care. People living in LMICs experience higher mortality rates from NCDs, and dealing with NCDs can be financially devastating for households and economies.

Preventing NCDs in LMICs is one of the most effective ways to reduce mortality. This involves implementing policies that discourage tobacco and alcohol usage and unhealthy diets and encourage active lifestyles. Additionally, providing preventive care and screenings can prevent NCDs before they happen. However, as LMICs continue to improve communicable disease care, reduce infant and child mortality, and reduce poverty, people will ultimately die from NCDs. In upper-middle and high-income countries, 81% and 87% of people respectively die from NCDs.[27] As other causes of death and illness are dramatically reduced, the majority of people will experience NCDs and require long-term, high-quality care. Currently, health systems in LMICs are unable to deliver sustained, high-quality care to all of their citizens. Underresourced health systems are a major roadblock to delivering NCD care. In order to prevent NCDs and improve how they are treated in low- and middle-income countries, health systems must be scaled up.

Implementing cost-effective interventions

[25] http://p4h-network.net/
[26] "About P4H." P4H Social Health Protection Network. Accessed May 31, 2016. http://p4h-network.net/about-p4h/#addingvalue.
[27] "NCDs." World Health Organization. http://www.who.int/mediacentre/factsheets/fs355/en/.

Compared to the US$500 billion loss to countries each year from NCDs, WHO's recommended "best buys" cost just US$ 11.4 billion per year (4% of health spending in low-income countries[28]), making addressing NCDs in these countries not just a moral imperative, but economically prudent.[29] These "best buy" interventions include population-based measures to reduce tobacco and alcohol usage, improve diets and physical activity levels, as well as individual measures like cancer screening and early treatment for heart disease.[30] These interventions will prevent many premature deaths and improve economic output and development.

Universal Health Coverage

Ensuring that all people have access to promotive, preventive, curative, and rehabilitative health services and medicines is essential to improving rates of NCDs and NCD outcomes. In order for people to have adequate access to NCD care, it must not be financially prohibitive to access health services.[31] Currently, out-of-pocket healthcare payments put 100 million people in poverty every year.[32]

There are multiple ways a country can move toward universal health coverage. Some countries like Thailand are trying to mitigate the financial risks associated with out-of-pocket payment by moving to a system of prepaid funds, including a mix of taxes and insurance contributions.[33] Systems like these that mix private and public contributions are a bridge solution for countries that cannot afford to implement universal health coverage immediately, but still place financial burden on people seeking out health services. In order to establish a universal health coverage system, a country must move from charging fees to people for specific medical treatments to a taxation-based system that pools contributions from the population.[34]

Achieving universal health coverage requires a good health financing system.[35] Many countries around the world do not prioritize health spending in their budgets. In 2010, 79 countries spent less than 10% of government expenditure on healthcare.[36] Encouraging

[28] "From Burden to "Best Buys"." World Health Organization, 2011, 8. http://www.who.int/nmh/publications/best_buys_summary.pdf.
[29] "From Burden to "Best Buys"." World Health Organization, 2011, 3. http://www.who.int/nmh/publications/best_buys_summary.pdf.
[30] "From Burden to "Best Buys"." World Health Organization, 2011, 4. http://www.who.int/nmh/publications/best_buys_summary.pdf.
[31] "Note by the Secretary-General Transmitting the Report of the Director-General of the World Health Organization on the Prevention and Control of Non-communicable Diseases." UN News Center. December 10, 2013, 13. http://www.un.org/ga/search/view_doc.asp?symbol=a%2F68%2F650&Submit=Search&Lang=E.
[32] "10 Facts on Universal Health Coverage." WHO. Accessed May 31, 2016. http://www.who.int/features/factfiles/universal_health_coverage/en/.
[33] "10 Facts on Universal Health Coverage." WHO. Accessed May 31, 2016. http://www.who.int/features/factfiles/universal_health_coverage/en/.
[34] "Global Action Plan for the Prevention and Control of NCDs 2013-2020." World Health Organization, 2011, 40. http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf.
[35] "What Is Universal Coverage?" World Health Organization. Accessed May 31, 2016. http://www.who.int/health_financing/universal_coverage_definition/en/.
[36] "10 Facts on Universal Health Coverage." WHO. Accessed May 31, 2016. http://www.who.int/features/factfiles/universal_health_coverage/en/.

countries to afford healthcare a higher priority is important to strengthening health systems.

Scaling up health systems

In order to provide long-term care for NCDs in countries with underresourced health systems, these countries must scale up their health systems. This requires more healthcare workers and strengthened health infrastructure to provide long-term care. Lessons can be learned from response to the HIV/AIDS crisis in providing long-term care to patients, and health systems in LMICs can be partially modelled on the response to that crisis.[37] While implementing an effective health system is certainly logistically difficult, the major roadblock for improving underresourced health systems is funding.

Increasing funding

In order to prevent and control NCDs, more funding is essential. NCDs are perceived by funding organizations as having an air of futility – they are very complex to treat, and finding a "silver bullet" cure for any of them is extremely unlikely.[38] They were not included in the Millennium Development Goals and so did not benefit from the major funding push associated with that program.[39] They receive little attention and funding when compared with other health areas.

To improve funding for NCDs, donors must be convinced that funding NCDs will lead to progress. Increasingly, donors find the economic argument for tackling NCDs compelling.[40] Many NCD interventions are very cost-effective and are far cheaper than the economic costs associated with loss of productivity and treating NCDs. The WHO has been increasing focus on NCDs since the high-level meeting of 2011, and further raising the profile of NCDs is important to increasing donations.

Guiding Questions and Further Reading

Guiding Questions

1. How can the WHO work to improve awareness of NCDs and increase funding for them?

[37] Maher, D., J. Sekajugo, and L. Smeeth. "Health Transition in Africa: Practical Policy Proposals for Primary Care." World Health Organization, 2010. doi:10.2471/blt.10.077891.
[38] "WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." World Health Organization, February 23, 2015. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.
[39] "United Nations Millennium Development Goals." UN News Center. Accessed May 31, 2016. http://www.un.org/millenniumgoals/.
[40] "WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." World Health Organization, February 23, 2015, 5. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.

2. How should the WHO balance the need to invest in health systems to improve NCD care in the long run versus the more cost-effective preventive interventions that are more appealing in a resource-limited setting?
3. What role do high-income countries play in addressing the prevention and control of NCDs? How can they be encouraged to assist LMICs in addressing NCDs?

Further Reading

"Global Action Plan for the Prevention and Control of NCDs 2013-2020." World Health Organization, 2011. http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf.
Read the Foreword, Overview, and Voluntary Targets pages.
"Noncommunicable Diseases." World Health Organization. http://www.who.int/mediacentre/factsheets/fs355/en/.
Fact sheet on NCDs.
"Action on Noncommunicable Diseases: Balancing Priorities for Prevention and Care." WHO. Accessed May 31, 2016. http://www.who.int/bulletin/volumes/89/8/11-091967/en/.
Discusses the balance between focusing on prevention of NCDs and care for NCDs.
"From Burden to "Best Buys"." World Health Organization, 2011. http://www.who.int/nmh/publications/best_buys_summary.pdf.
Provides overview of "best buy" interventions.
"Global Strategy and Partner Agencies." World Health Organization. Accessed May 31, 2016. http://www.who.int/health_financing/strategy/partner_agencies/en/
Work by various international organizations on moving to universal health coverage.

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"Global Strategy and Partner Agencies." World Health Organization. Accessed May 31, 2016. http://www.who.int/health_financing/strategy/partner_agencies/en/.

Maher, D., J. Sekajugo, and L. Smeeth. "Health Transition in Africa: Practical Policy Proposals for Primary Care." *World Health Organization*, 2010. doi:10.2471/blt.10.077891.

"Moscow Declaration." World Health Organization. http://www.who.int/nmh/events/moscow_ncds_2011/conference_documents/moscow_declaration_en.pdf.

NCD Alliance. Accessed May 31, 2016. https://ncdalliance.org/.

"Noncommunicable Diseases." World Health Organization. Http://www.who.int/mediacentre/factsheets/fs355/en/.

"Note by the Secretary-General Transmitting the Report of the Director-General of the World Health Organization on the Prevention and Control of Non-communicable Diseases." UN News Center. December 10, 2013. http://www.un.org/ga/search/view_doc.asp?symbol=a%2F68%2F650&Submit=Search&Lang=E.

"Outcome Document of the High-level Meeting of the General Assembly on the Comprehensive Review and Assessment of the Progress Achieved in the Prevention and Control of Non-communicable Diseases." World Health Organization. July 17, 2014. http://www.who.int/nmh/events/2014/a-res-68-300.pdf?ua=1.

"Report of WHO Director-General to UN Secretary-General on the Prevention and Control of NCDs." World Health Organization. http://www.who.int/nmh/events/2014/UN-general-assembly/en/.

"The Top 10 Causes of Death." World Health Organization. http://www.who.int/mediacentre/factsheets/fs310/en/index2.html.

"UN Interagency Task Force on NCDs (UNIATF)." World Health Organization. http://www.who.int/ncds/un-task-force/en/.

"United Nations Millennium Development Goals." UN News Center. Accessed May 31, 2016. http://www.un.org/millenniumgoals/.

"What Is Universal Coverage?" World Health Organization. Accessed May 31, 2016. http://www.who.int/health_financing/universal_coverage_definition/en/.

"WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases." *World Health Organization*, February 23, 2015. http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief5.2docx.pdf.

Topic 2: Global Pharmaceutical Development and Universal Access to Medication

The human right to health is recognized by many international instruments, such as the founding documents of WHO, the Alma Ata Declaration and several treaties on human rights. Article 25.1 of the Universal Declaration of Human Rights (1948) states: "*Everyone has the right to a standard of living adequate for the health of himself and of his family, including food, clothing, housing and medical care and necessary social services".*[41] Access to essential medications is also included in the UN's Millennium Development Goals and there are currently over 100 countries that include health provisions in their constitutions.[42]

Section 1: Economic Characteristics of Pharmaceuticals

Pharmaceuticals have different traits from other consumer products and this causes the interaction between a consumer and producer in pharmaceutical markets to differ from the traditional responses seen in the demand and supply of a market.

The difference between pharmaceuticals and other products is that when a consumer purchases medicine, they do not gain an economic asset, as it is illegal in many countries to resell medication. The value of the medication therefore does not lie in the resell value of the medication, but in the research that went into developing it. In addition, a consumer of a pharmaceutical good is unlike a traditional consumer as they are often directed to a third party, either a doctor or other health care professional, before purchasing the medication. The pricing information between the consumer and those who supply the medication is then imprecise, as doctors do not pay for the medication and in some cases may not even know the market price of the medication in which they are prescribing.

Pharmaceutical markets also differ from traditional markets as they face greater issues in asymmetric information. Without the knowledge of a doctor or medical professional, consumers do not have the information required to make a rational choice between using and not using a medication or using a brand name medicine as opposed to a natural therapy. Consumers are therefore not in a position to make an informed decision. Pharmaceutical pricing may also be further distorted if doctors or health care professionals are influenced by pharmaceutical promotions and business relationships between those who prescribe medications and those who supply it.[43]

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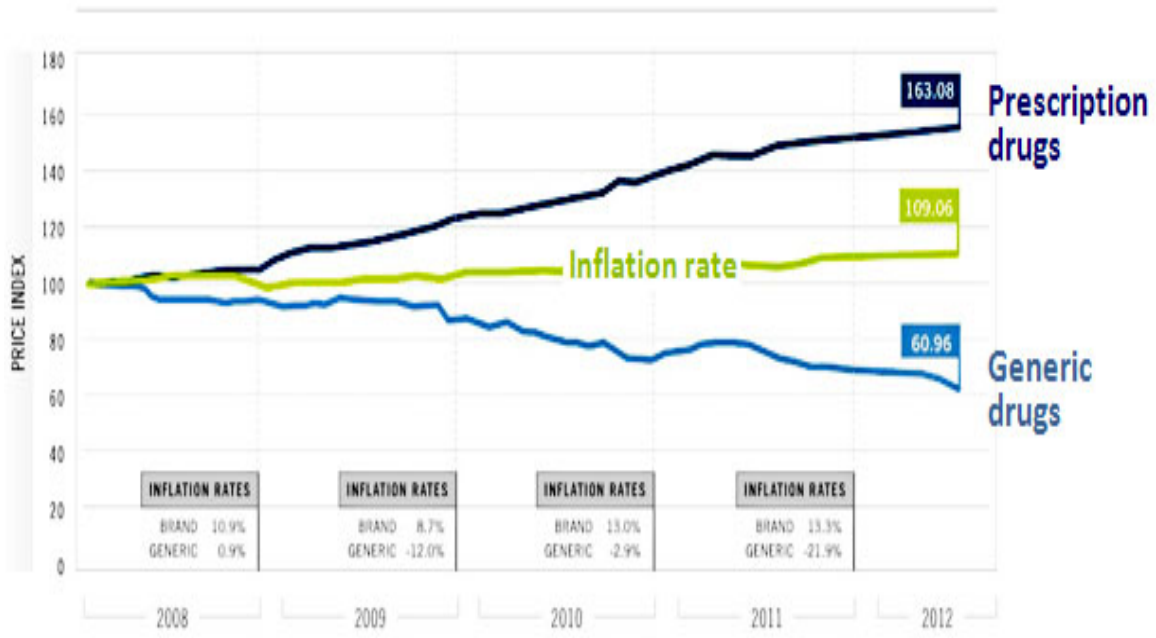
[41] United Nations. "The Universal Declaration of Human Rights | United Nations." *UN News Center*. UN, 2016. Web. 10 June 2016. <http://www.un.org/en/universal-declaration-human-rights/>.
[42] Lage, Agustin. "Global Pharmaceutical Development and Access: Critical Issues of Ethics and Equity." *Medicc Review* 13.3 (2011): n. pag. Web. 12 Apr. 2016.
[43] United Nations World Health Organization. "Pharmaceutical Pricing Policy." *15 Pharmaceutical Donations Chap Ter 9 Pharmaceutical Pricing Policy* (2012): n. pag. Management Sciences for Health, 2012. Web. 10 June 2016. <http://apps.who.int/medicinedocs/documents/s19585en/s19585en.pdf>.

The degree of market power held by the pharmaceutical industry also differs depending on the type of pharmaceutical product. The level of competition often differs significantly between the three main pharmaceutical products; patented medicines, generic medicines and branded off-medicines. The WHO defines patented medicines as medications "where no alternative medicines or intervention can provide the same therapeutic outcome" and "new medicines protected by patents for which alternative medications are available".[44] For example, the breast cancer drug Herceptin holds no alternative and producers are therefore in a position to sell at a high price because the drug is patent-protected. It is only with pricing policies that a government or international organization could limit the producer's monopoly power and high selling price, making the breast cancer drug more affordable and accessible. Generic medicines differ from patented medicines as they are pharmaceutically equivalent products that may or may not be therapeutically equivalent, are not under patent and the difference in the manufacturing process can lead to slight differences in the pharmaceutical performance. However, consumers are not always made aware of the availability of these lower priced generic medicines or they may often be persuaded by their prescriber's promotional efforts not to use the generic brand.[45] As a result, in recent years the international market has seen an increase in the cost of prescribed drugs compared to generic drugs, as displayed in the graph below.



[46]

As patents laws are country specific, it becomes more difficult for the international community to implement regulations in pricing policies, as some countries are able to produce the chemical compounds that are under patent in another country. However, the introduction of generic competition has been proven to be the most effective way of

[44] Ibid.
[45] Ibid.
[46] Digital image. *Motherjones*. N.p., n.d. Web. 10 June 2016. <http://www.motherjones.com/files/images/blog_prescription_drug_prices.jpg>.

lowering the high costs associated with certain pharmaceutical products. Médecins Sans Frontiers (MSF), demonstrated this in 2000 with statistics on the pricing trends for HIV/AIDS drugs that were introduced on the market when "the lowest originator price to treat one patient for a year was 10,439 U.S. dollars. By July 2006, the generic version of the same drug cost USD 132, while the lowest price branded version cost USD 556".[47]

Section 2: Pricing Policies

In 2001, the World Health Assembly endorsed a resolution calling for the development of standardized methods for measuring and monitoring pharmaceutical prices, resulting in the launch of the WHO's Health Action International, a non-governmental organization dedicated to strengthening medicine policies to improve public health.[48] Since then, several studies have been conducted by the WHO on the affordability and accessibility of essential medications in countries worldwide. These studies were conducted in a variety of states with different economic and cultural characteristics. However, these studies all share similar conclusions:

• In low and middle-income countries, medication prices are high, especially in the private sector, reaching in some cases 80 times the international reference price

• Availability in low- and middle-income countries can be low, particularly in the public sector. A study published by WHO found the average availability of essential medications was 35% and with low availability in the public sector many are forced to turn to the private sector, where prices are high

• Treatments are often unaffordable (e.g., requiring over 15 days' wages to purchase 30 days of treatment). This problem is more serious for chronic diseases needing long-term treatment

• Average per capita spending on pharmaceuticals in high- income countries is 100 times that in low-income countries. WHO estimates that 15% of the world's population consumes over 90% of global production of pharmaceuticals (by value)

• In low- and middle-income countries, because of high prices, medications account for 25% to 70% of total health care expenditures, compared to less than 15% in high-income countries

• Government procurement systems can be inefficient, buying expensive brand-name medications instead of more economical generics

[47] United Nations World Health Organization. "Pharmaceutical Pricing Policy." *15 Pharmaceutical Donations Chap Ter 9 Pharmaceutical Pricing Policy* (2012): n. pag. Management Sciences for Health, 2012. Web. 10 June 2016. <http://apps.who.int/medicinedocs/documents/s19585en/s19585en.pdf>.

[48] Health Action International. "About Us - Health Action International." *Health Action International*. World Heath Organization, 2016. Web. 10 June 2016. <http://haiweb.org/about-us/>

Section 3: Causes

The primary cause of the inequalities in affordability and access to medications are further rooted in politics and in socio-economic divides. As the financing of medications varies widely across borders, the primary struggle has been finding a pricing strategy that can be applicable worldwide. It was found that over 90% of the value of the world's pharmaceuticals is produced in high-income countries with more than 70% is produced in just five countries, and more than 45% by the top ten companies. The fraction of the pharmaceutical market in the hands of these top ten increased from 27.5% in the 1980s to 45.7% by the year 2000[49]. In addition, effective demand, or ability to pay, is also highly concentrated in high-income countries. It has been estimated that 15% of the world's population in these countries consumes 90% of medications, and the trend towards further market concentration continues as the US share of the pharmaceutical market increased from 18% in 1976 to 52% in the year 2000.[50]

• The pharmaceutical manufacturer sells the same product for different prices. [51] A manufacturer can price differentiate if:

- They have monopoly rights over the product

- Willingness and ability to pay are different among groups of buyers. This differs strongly between low-income and high-income countries as well as between subpopulations within a given country

- Buyers cannot trade the item among themselves. That is, buyers who negotiate a low price do not resell the item, thereby undercutting the seller in markets that are able and willing to pay a higher price[52]

- An agreement exists to achieve more equitable access to essential medicines through differential pricing for needy populations. Examples of such agreements exist for medicines for HIV/AIDS, some vaccines, insulin, oral contraceptives, and some antimalarial medicines [53]

• The margins charged in the post manufacturing supply chain by wholesalers, distributors, and pharmacists, as well as taxes, duties, and co-payments levied by the state, differ intra- and inter-country [54]

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[49] WHO Medications Strategy. Countries at the core 2004–2007. Geneva: World Health Organization; 2004. 12 p.
[50] Lage, Agustin. "Global Pharmaceutical Development and Access: Critical Issues of Ethics and Equity." *Medicc Review* 13.3 (2011): n. pag. Web. 12 Apr. 2016.
[51] United Nations World Health Organization. "Pharmaceutical Pricing Policy." *15 Pharmaceutical Donations Chap Ter 9 Pharmaceutical Pricing Policy* (2012): n. pag. Management Sciences for Health, 2012. Web. 10 June 2016. <http://apps.who.int/medicinedocs/documents/s19585en/s19585en.pdf>.
[52] Wagner, J. L., and E. McCarthy. 2004. International differences in drug Prices. *Annual Review of Public Health* 25:475–95.
[53] United Nations World Health Organization. "Pharmaceutical Pricing Policy." *15 Pharmaceutical Donations Chap Ter 9 Pharmaceutical Pricing Policy* (2012): n. pag. Management Sciences for Health, 2012. Web. 10 June 2016. <http://apps.who.int/medicinedocs/documents/s19585en/s19585en.pdf>.
[54] Ibid.

Section 4: The WHO Method of Monitoring Pricing

The primary goals of the WHO involve the ability to compare international reference prices with home prices in order to make comparisons between medications provided by different nongovernmental organizations, governments and private suppliers, and determine which sector provides the best prices for patients. In 2005, the WHO conducted surveys in areas in South East Asia, determining comparative prices in Thailand, Philippines and Malaysia, as well as in cities throughout India, Kuwait, Tajikistan and China by using ratios to identify the relative price in the given country with the international reference price. The WHO survey findings are as follows:

China

- In the private sector, patent brands were 14 times more expensive than lowest priced generics.
- In the public sector, the difference was four times more than the lowest priced generics.
- Comparing public-sector procurement prices and public-sector patient prices for core medicines revealed that patients paid an additional 75% of the procurement price for generics and 22% for innovator brands [55]

Kuwait

- Public-sector prices for patented brands were 5 times the international reference prices and generic equivalents were 1.2 times the international reference prices[56]

Philippines

- Generic products mark-ups ranged up to 355 percent at the retail level and 117 percent at the distributor level [57]

Tajikistan

- Some innovator brands were 43 times the international reference price.
- The most popular generic equivalent and the lowest priced generic equivalent were 2.3 times the international reference price

Thailand

- Public sector prices were higher than the international reference price: 32 percent for patent brands and 75 percent for generics.
- In the private sector, patients paid 3.9 times more overall for originator brands than for the lowest price generics

These results are not only a reflection of the struggle in accessing and affording pharmaceuticals in Asia, but are also common in other areas of the world. Like many issues for the international community, many states feel that this is a domestic issue and

[55] Ibid
[56] Ibid
[57] Ibid.

that market controls should not be left at the hands of the government. However, it is important to understand that like any other consumer product, pharmaceuticals can determine quality of life and if or when someone dies. Pricing policies therefore limit the vulnerability of citizens and provide acceptable outcomes in achieving worldwide public health.

Delegates are therefore asked to consider how international intervention in pharmaceutical markets could implement policies that encourage the purchase of low-priced and quality generic medications.

Section 5: Intellectual Property Rights

With the creation of the World Trade Organization (WTO) in 1995, standards of patent protection for pharmaceuticals were established under the Trade Related Intellectual Property Rights Agreement (TRIPS). The TRIPS agreement was established to provide patent rights to WTO members as well as to enforce procedures and dispute resolutions aimed at advancements in medicine and technology. The WTO applied TRIPS to all member nations, allowing developing nations extra time to implement the changes to their national policies. However, in 2005 the WHO found that many developing countries had not implemented TRIPS policies because of a lack of legal expertise.

In accordance with the Doha Declaration (2001), the WHO has also recommended that governments eliminate taxes and tariffs. The WHO estimates that high tariff structures in selected low-income countries increase the price of medicinal ingredients by 23% and the price of finished medicines by over 12%. [58] Although tariffs and taxes provide the opportunity to increase state revenues, their effect on the pharmaceutical industry reduces affordability and consequentially the access of essential medicines for citizens around the world. Sometimes the argument for tariffs by state governments is to protect emerging local industries until they become established; nonetheless, the effect on medicine affordability is the same. In terms of pricing policy, governments and the WHO must work together to minimize unnecessary add-on costs and should not impose revenue-raising charges on essential items such as medicines.[59]

The Access Problem and Intellectual Property[60]

Many new medications that are vital for one's survival are already too costly for the vast majority of people in poor countries. In addition, investment in Research and Development (R&D) towards the health needs of people in developing countries has almost come to a standstill. Developing countries, where three-quarters of the world

[58] WHO (World Health Organization) 2004. *The World Medicines Situation*. Geneva: WHO. <http://www.searo.who.int/LinkFiles/Reports_World_Medicines_ Situation.pdf>

[59] Global Health Council. 2007. The Impact of Tariff and Non-Tariff Barriers on Access to Essential drugs for the Poorest People. *Policy Brief*. Washington, d.C.: Global Health Council. <http://apps.who.int/medicinedocs/documents/s16764e/s16764e.pdf>

[60] T.Hoen, Ellen F.M. "TRIPS, Pharmaceutical Patents and Access to Essential Medicines: Seattle, Doha and Beyond." *TRIPS , Pharmaceutical Patents and Access to Essential Medicines: Seattle, Doha and Beyond* (2003): n. pag. *Who.int*. 25 June 2003. Web. <http://www.who.int/intellectualproperty/topics/ip/tHoen.pdf>.

population lives, account for less than 10% of the global pharmaceutical market. The implementation of TRIPS is expected to have a further upward effect on drug prices, while increased R&D investment that aims at addressing health needs in developing countries, despite higher levels of intellectual property protection, is not expected[61].

TRIPS set out minimum standards and requirements for the protection of intellectual property rights, including trademarks, copyrights, and patents. The implementation of TRIPS is expected to impact the possibility of obtaining new essential medicines at affordable prices. However, Médecins sans Frontières (MSF), together with other non-governmental organizations (NGOs), formulated the following concerns related to TRIPS:

- Increased patent protection leads to higher drug prices.[62] The number of new essential drugs under patent protection will increase, but the drugs will remain out of reach to people in developing countries because of high prices. As a result, the access gap between developed and developing countries will widen.
- Enforcement of WTO rules will have a negative effect on local manufacturing capacity and will remove a source of generic, innovative, quality drugs on which developing countries depend.

It is unlikely that TRIPS will encourage adequate R&D in developing countries for diseases such as malaria and tuberculosis, because poor countries often do not provide sufficient profit potential to motivate R&D investment by the pharmaceutical industry.

Influence of Globalization

In order to protect intellectual property rights, the international system has historically kept the prices of patented medicines very high. Under the WTO agreement of TRIPS, countries were given the right to reduce the cost of their medicines. This is primarily seen as state governments issue compulsory licenses in national emergencies. If in this case a necessary medication is under a patent, the patent may be broken. If the state does not hold the capacity to produce the medication in the first place, they may turn to a neighbour state for supply. However, in many cases, the company owning the patented pharmaceutical is still paid a higher price relative to other generic brands. This method of globalized pharmaceutical access is most common throughout the European Union.[63]

[61] MSF: Access to Essential Medicines Campaign and The Drugs for Neglected Diseases Working Group. Fatal Imbalance: The Crisis in Research and Develop- ment for Drugs for Neglected Diseases, Sept 2001, 10-18. Available at www.msf.org/source/access/2001/fatal/fatal.pdf.

[62] Scherer M.F.,Watal J.: Post Trips Options for Access to Patented Medicines in Developing Countries. WHO, 2001. Available at www.cmhealth.org/docs/wg4_paper1.pdf

[63] Bradsher, K., and E. L. Andrews. 2001. "u.S. Says Bayer Will Cut Cost of Its Anthrax drug." *New York Times Business,* October 24.

Questions to Consider

1. Why did these issues arise in the first place?
2. Is it possible to come up with one universal solution, and how would this differ from the international community's past attempts?
3. Should the international community have a right to intervene in the pharmaceutical markets, or should pricing strategies be left at the hands of corporations and state governments?
4. How can policies helps improve the access and affordability of essential medications?

Further Readings

Agustin Lage. "Global Pharmaceutical Development and Access: Critical Issues of Ethics and Equity."<http://www.medicc.org/mediccreview/articles/mr_204.pdf>.

Kennedy, Morgan. "Prescription Drug Affordability and Accessibility in the United States and Abroad." <http://www.commonwealthfund.org/~/media/Files/Publications/Issue%20Brief/2010/Jun/1408_ Morgan_Prescription_drug_accessibility_US_intl_ib.pdf>.

T.Hoen, Ellen F.M. "TRIPS, Pharmaceutical Patents and Access to Essential Medicines: Seattle, Doha and Beyond."<http://www.who.int/intellectualproperty/topics/ip/tHoen.pdf>.

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Lage, Agustin. "Global Pharmaceutical Development and Access: Critical Issues of Ethics and Equity." *Medicc Review* 13.3 (2011): n. pag. Web. 12 Apr. 2016.

MSF: Access to Essential Medicines Campaign and The Drugs for Neglected Diseases Working Group. Fatal Imbalance: The Crisis in Research and Develop- ment for Drugs for Neglected Diseases, Sept 2001, 10-18.
Available at www.msf.org/source/access/2001/fatal/fatal.pdf.

Scherer M.F.,Watal J.: Post Trips Options for Access to Patented Medicines in Developing Countries. WHO, 2001.
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T.Hoen, Ellen F.M. "TRIPS, Pharmaceutical Patents and Access to Essential Medicines: Seattle, Doha and Beyond." *TRIPS , Pharmaceutical Patents and Access to Essential Medicines: Seattle, Doha and Beyond* (2003): n. pag. *Who.int*. 25 June 2003. Web. <http://www.who.int/intellectualproperty/topics/ip/tHoen.pdf>.

United Nations. "The Universal Declaration of Human Rights | United Nations." *UN News Center*. UN, 2016. Web. 10 June 2016. <http://www.un.org/en/universal-declaration-human-rights/>.

United Nations World Health Organization. "Pharmaceutical Pricing Policy." *15 Pharmaceutical Donations Chap Ter 9 Pharmaceutical Pricing Policy* (2012): n. pag. Management Sciences for Health, 2012. Web. 10 June 2016. <http://apps.who.int/medicinedocs/documents/s19585en/s19585en.pdf>.

Wagner, J. L., and E. McCarthy. 2004. International differences in drug Prices. *Annual Review of Public Health* 25:475–95.

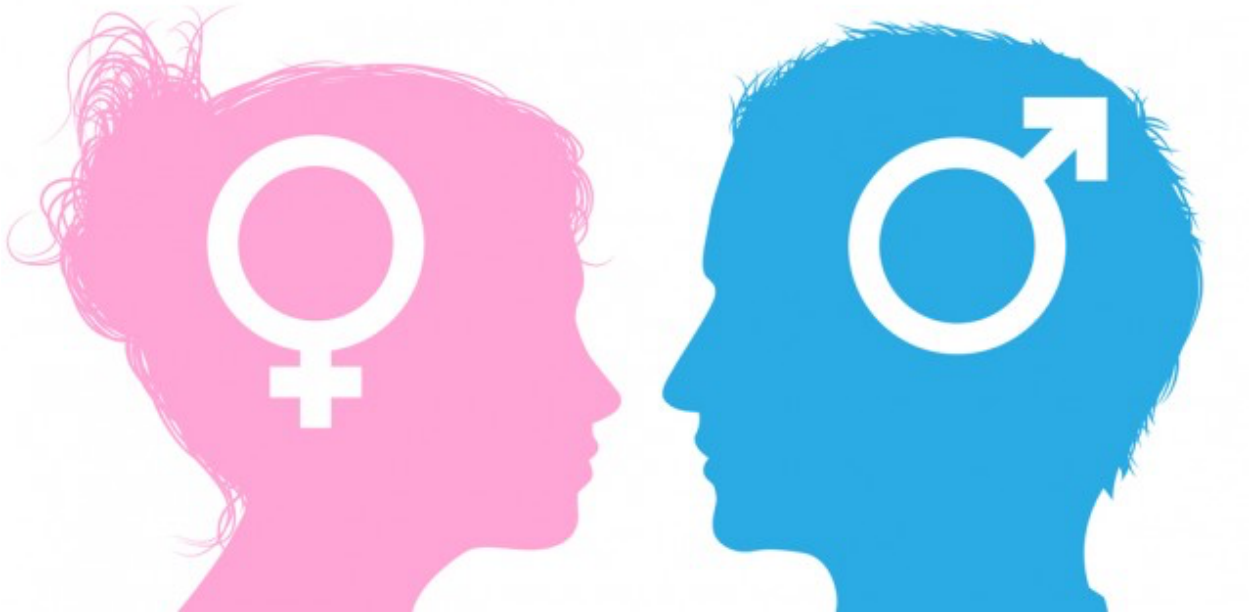
WHO Medications Strategy. Countries at the core 2004–2007. Geneva: World Health Organization; 2004. 12 p.

WHO (World Health Organization) 2004. *The World Medicines Situation*. Geneva: WHO. <http:// www.searo.who.int/LinkFiles/Reports_World_Medicines_ Situation.pdf>

Topic 3: Gender Based Inequities in Global Health

The concept of gender based health inequities refers to disparities between gender populations, traditionally male and female, which are avoidable, unjustifiable, and often unnecessary. While certain differences in health outcomes between males and females may be biologically rooted and naturally occurring, considered a health inequality, inequities are manifestations of an interaction of economic, political, and social factors.[64] Certain sociopolitical dimensions can limit an individual's ability to access and determine the direction of their health, such as policies that are discriminatory on the basis of sex or structural conditions that disproportionately target one gender over another.

Understanding how different economic, political, biological, physiological, and social factors all work together to influence various patterns of health outcomes in males and females allows organizations such as the World Health Organization (WHO) to create policies and programmes to address these health inequities. Given that the WHO Constitution enshrines the ability to achieve the "highest attainable standard of health as a fundamental right of every human being.", any limitation in access to healthcare or disproportionate prevalence of unhealthy behaviours is unacceptable and can be deemed to be a violation of basic human rights.



Section 1: Background Information

How gender inequities manifest into tangible health outcomes varies by gender, age, and location. Gender roles are defined as being "socially constructed roles, expectations a

[64] Glossary of terms used. (n.d.). World Health Organization.

given society considers appropriate for men and women".[65] Generally speaking, there are common trends in male and female behaviour and health.

Male Health Inequities

Many socially constructed gender norms influence how males behave with their partners, families, and children on various issues, such as the prevention of HIV and other sexually transmitted infections, contraception, physical violence against both other men and women, parenting, and health seeking behaviours.[66] These expectations often create inequitable conditions that lead to poorer health outcomes. In 2003, the UN Division for the Advancement of Women led the Expert Group Meeting on the Role of Men and Boys in Achieving Gender Equality to the decision that men and boys need to be better engaged in questioning these persistent norms.[67]

It has commonly been observed across many time periods and different countries that there is a discrepancy in life expectancy and mortality rates between men and women. The discrepancy has been explained by a variety of biological and behavioural causes. Biological explanations have hypothesized that sexual selection has played a large role in propagating many now traditionally masculine characteristics in the male population. In species where the female must be the one to make a greater parental investment in the offspring, they must also be more selective in choosing their male partner. This results in a heightened competition between males for mating opportunities given the selectivity of the female population. The prevalence of genes that promote male risk-taking and competitiveness contribute to a male culture of aggression, competition, and risky behaviour. Females usually live longer in most animal species in part due to this reason.[68]

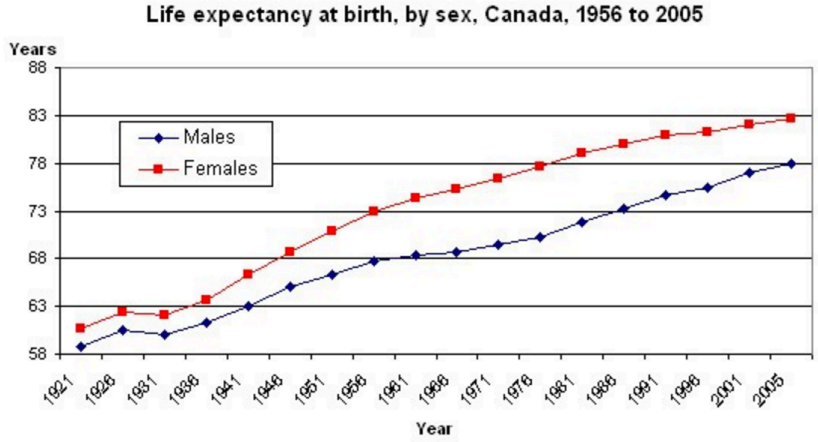


Figure 1 – Depicting the trends in life expectancies of men and women in Canada[69]

[65] Barker, G., Ricardo, C., & Nascimento, M. (2007). Engaging men and boys in changing gender-based inequity in health: Evidence from programme interventions. *World Health Organization*.
[66] Barker, G., Ricardo, C., & Nascimento, M. (2007). Engaging men and boys in changing gender-based inequity in health: Evidence from programme interventions. *World Health Organization*.
[67] Ibid.
[68] Kruger, D. J., & Nesse, R. M. (2004). Sexual Selection and the Male:Female Mortality Ratio. *Evolutionary Psychology, 2*(1).
[69] Life Expectancy. *Statistics Canada*. N.p., n.d. Web. 03 June 2016.

Physiological differences also contribute to health disparities. Males generally have greater height, weight, more upper body strength, higher metabolic rates, higher juvenile mortality and later sexual maturity than women. Males also seem to have lower resistance to infections, injury, stress, and degenerative diseases.[70] The immunosuppressive effects of testosterone and larger size of male bodies make them more susceptible to having parasites. Males are also more prone to cold weather related mortality than women.[71]

Sexual selection does explain certain differences in behavioural tendencies such as risk-taking, competitiveness, and sensitivity to hierarchy in males. For males, risk tasking has higher pay off when they are competing for resources, social status, and mates.[72] These tendencies for being riskier and less cautious are believed to contribute to the differences in rates of violence and use of alcohol or substance abuse.[73] For males, accidents are the fourth leading cause of death, compared to seventh for females, in the United States. There are also significantly higher rates of fatal and non-fatal accidents for boys, which have been correlated to poor motor and cognitive regulation that causes a miscalculation of risk. Many social expectations for young males to be tough and stoic only amplify the tendency to take risks.[74] In Western societies, suicide rates are much higher amongst men than women.

Male Psychiatric Health

Research has shown that men are far less likely than women to seek help with mental health programs, with surveys indicating that men find traditional health services to be "feminised" and unwelcoming. In the US, there are more men than women who meet the criteria for a psychiatric diagnosis, but only 1/3 of men receive care.[75] Many men end up over-represented in medium and maximum-security hospitals, and are consistently under-reporting psychological problems. Men commit 75% of the suicides in England and Wales, and although rates vary across age groups in the US, males outnumber females in all categories. Much of the disproportionate rates found in male psychiatric health has been correlated to the problem of socialization – where traditional expectations of male behaviour do not value health-seeking behaviours. Many men see certain illnesses as challenging their masculinity.[76]

Female Health Inequities

The WHO made an estimate in 2011 that every year, 358,000 women die during pregnancy and childbirth due to preventable causes. Often the lack of access to skilled

[70] Folstad I. and Karter A. J. (1992). Parasites, bright males, and the immunocompetence handicap. American Naturalist, 139: 603–622
[71] Roland R. and Doblhammer G. (2003). Seasonal mortality in Denmark: the role of sex and age. Demographic Research, 9: 197–222.
[72] Daly M. and Wilson M. (1985). Competitiveness, risk taking, and violence: The young male syndrome. Ethology and Sociobiology, 6: 59–73.
[73] Kraemer S. (2000). The fragile male. British Medical Journal, 321: 1609–1612
[74] Kruger, D. J., & Nesse, R. M. (2004). Sexual Selection and the Male:Female Mortality Ratio. *Evolutionary Psychology, 2*(1).
[75] Galasinki, D. (2013). Fathers, fatherhood and mental illness: A discourse analysis of rejection (pp. 17-20). Palgrave Macmillan.
[76] Ibid.

health care workers and emergency services during pregnancy and childbirth can prove to be fatal. Lack of contraception is another issue, withholding women from preventing unwanted pregnancies especially in the process of birth spacing. Nearly 99% of maternal deaths occur in low to middle-income countries.[77] More than half of those deaths occur in sub-Saharan Africa (SSA) and a third in South Asia – together they account for 87% of maternal deaths.[78]

In the SSA, the lifetime risk of maternal death is 1/31. The factors that contribute to maternal deaths include lack of skilled attendance during birth, maternal illiteracy, poor SES, and high fertility rates. In South Asia, 63,000 maternal deaths occur in India alone, the largest number of any country in the world. There are inequalities in accessing healthcare as a consequence of economic, social, religious, or ethnic stratification, delays in seeking and obtaining healthcare, as well as poor quality of care. It is also common practice to have to pay out of pocket for healthcare in South Asia, adding another obstacle for women in accessing proper health resources.[79]

Although data has shown women to have longer life expectancies at birth, greater longevity of life does not immediately translate into healthier lives. Many women who are pregnant or in the process of childbirth cannot access proper prenatal, antenatal, and delivery services due to systematic gender discrimination. Many inequities prevent these women from accessing the proper services, such as a lack of bodily autonomy, male dominance in relationships, and gender based violence.[80]

Women who are married at less than 19 years often are less likely to have access to institutional delivery services in Kenya and India. Patriarchal and discriminatory gender systems place women in subordinate roles that barricade access to safe, necessary healthcare treatments.[81]

Section 2: Past Actions

Safe Motherhood Initiative

Launched in 1987, the Safe Motherhood Initiative was created at a time when the scope of maternal health was extremely limited.[82] With very little known about the most effective strategies to improve maternal health, the WHO, World Bank, and UNFPA rallied together stakeholders such as government officials, NGO representatives and health providers at a conference in Nairobi, Kenya.[83] The purpose of this conference was to emphasize the neglect in prioritizing maternal mortality in developmental programs

[77] Stevens RD. Safe motherhood: an insight into maternal mortality in the developing world. Health Millions. 2000;26(3):34–37
[78] Antai, Diddy, Namasivayam A, Osuorah DC, and Syed R. The Role of Gender Inequities in Women's Access to Reproductive Health Care: A Population-level Study of Namibia, Kenya, Nepal, and India. *International Journal of Women's Health IJWH* (2012): 351.
[79] Ibid.
[80] Ibid.
[81] Ibid.
[82] Safe Motherhood: A Review. *Family Care International*. World Bank, n.d. Web. 02 June 2016.
[83] Safe Motherhood: A Review. *Family Care International*. World Bank, n.d. Web. 02 June 2016.

and policies. The conference indicated the importance of addressing maternal health in the context of women's economic, social, and political positioning.[84]

Strategies were developed to promote better maternal health, including:

- Strengthening community based health care by improving the skills of community health workers and traditional birth attendants, screen high risk pregnant women for medical referrals
- Improving referral level facilities that back up community level care and treat complicated cases
- Creating an alarm and transport system to link community and referral care

The issue of women dying during childbirth gained traction in the international community, and action was finally taken to reduce maternal mortality.[85]

Tenth Anniversary of the SMI (1997-1998)

In commemoration of the tenth anniversary of the SMI, the members of the Safe Motherhood Inter-Agency Group launched an extensive program. Objectives of this program included:

- Encouraging national and international commitment and action for safe motherhood amongst different demographics such as policymakers, donors, and healthcare providers
- Amalgamate existing knowledge and research on the most effective interventions to create a set of clear, technical messages for guiding programs and policies

To date, the Tenth Anniversary program has been the single largest effort to advance the protection of maternal health in the international community.[86]

Millennium Development Goals

There is a bi-directional relationship between health and the Millennium Development Goals (MDGs), a series of 8 time-bound goals adopted by the United Nations in 2000 to target social inequalities, reduce poverty, and improve the standard of living across the world by 2015. MDG-3 is specifically focused on promoting gender equality and empowering women.[87] One of the targets of MDG-3 is eliminating gender disparities in primary and secondary education. Education is known to be one of the strongest protective factors against poor health outcomes, and increases self-determination, which in turn gives females the power to realize the direction of their health. The MDG-5 is aimed at reducing maternal mortality rates by 75% by 2015 as well as achieving universal reproductive health services for women.[88]

The WHO has recognized that empowering women is crucial in helping reduce maternal deaths and pregnancy related conditions. Empowering women means ensuring access to health information, resources, and is a necessary component to achieving gender health

[84] Ibid.
[85] Ibid.
[86] Ibid.
[87] MDG 3: Promote Gender Equality and Empower Women. *WHO*. N.p., n.d. Web. 02 June 2016.
[88] MDG 5: Improve Maternal Health. *WHO*. N.p., n.d. Web. 02 June 2016.

equity. However, maternal mortalities have not been reduced by 75% in SSA and progress towards achieving MDG-5 has been slow in South Asia as well.[89]

HIV/AIDS Prevention in the sub-Saharan Africa

HIV prevalence is estimated to be very high amongst men who have sex with men (MSM) populations although data is limited in the sub-Saharan Africa. Up to 54% of MSM in Mauritania and 57% of MSM in Guinea are believed to be living with HIV.[90] Many countries in the SSA such as Botswana, Kenya, and Uganda, have begun national campaigns to encourage HIV testing.[91]

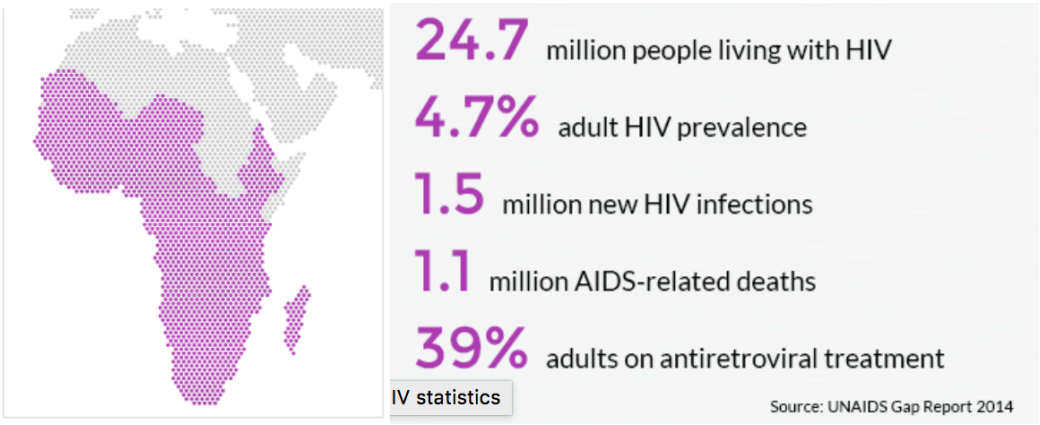


Figure 2 – Statistical data from the SSA on the prevalence of HIV/AIDS[92]

Home based testing (HBT) has shown to be very successful; a meta-analysis indicated that there is a 70% acceptance rate amongst people offered an HIV test at home. Studies from South Africa show that HBT has increased HIV testing in more rural settings where stigma against sexually transmitted infections is high.[93] In the past decade, the usage of condoms has been on the rise in SSA, although condom usage has been declining in countries such as the Ivory Coast and Niger. Antiretroviral treatment programs have also increased significantly in SSA. In 2012, 68% of those with HIV in SSA have access to antiretroviral treatment.[94] Through the Global Fund, many developed countries have also increased funding support for HIV and AIDS in SSA countries. The Global Fund finances 100% of the costs of antiretroviral treatment programmes in countries such as Ethiopia, Ghana, and Guinea.[95]

[89] Antai, Diddy, Namasivayam A, Osuorah DC, and Syed R. The Role of Gender Inequities in Women's Access to Reproductive Health Care: A Population-level Study of Namibia, Kenya, Nepal, and India. *International Journal of Women's Health IJWH* (2012): 351.
[90] UNAIDS (2014) 'Global AIDS response progress reporting 2014'
[91] HIV and AIDS in sub-Saharan Africa regional overview | AVERT. (2015, May 1).
[92] Ibid.
[93] Ibid.
[94] UNAIDS (2013) 'Access to Antiretroviral Therapy in Africa: Status Report on Progress Towards the 2015 Targets'
[95] HIV and AIDS in sub-Saharan Africa regional overview | AVERT. (2015, May 1).

Section 3: Country Policies and Possible Solutions

There is currently a profound lack of international collaboration and funding for male health inequities, especially for programming that addresses the disproportionately high rates of psychological distress and suicide in males across the globe. More research is necessary to investigate how traditional social systems have worked to create unfavourable health conditions for men, in the aspects of lack of access to healthcare as well as poor physical and mental health. Programs that work to improve women's rights, education, and healthcare access need to continue to be funded, researched, and developed.

National Male Health Policy

In 2010, the Australian government developed the National Male Health Policy as a framework to improve male health. The commitment to make the first National Male Health Policy began in 2007, with the recognition of the health challenges that are specific to male populations. The policy focuses on engaging males on the topic of their health, raising awareness on preventable health problems, reducing barriers to access of health resources for males, and targeting males with poorer health outcomes.[96]

Australian studies have found that there is room to reduce inequalities in rates between males and females. The health policy focuses on 6 priority areas to achieve equal health outcomes[97]:

- Optimal health outcomes for males
- Health equity between different male social groups
- Building a strong evidence base on male health and using it to inform policies, programs, and initiatives
- Improve access to healthcare for males through initiatives and tailored healthcare services, especially for vulnerable populations of males at risk of poor health

Those considered a high risk for poor health outcomes are groups such as the Aboriginal and Torres Strait Islander males, males of low socioeconomic status, those living in a rural or remote area, and those living with a disability or mental disorder.[98] The National Male Health Policy acknowledges that although being in historically privileged positions, there are certain social, economic, and politic forces that shape poorer health outcomes for male populations. Having a health policy specifically targeted towards male health inequities is necessary in addressing these factors that disproportionately affect males.

Right to Abortion in Mexico

Abortion is a controversial topic, widely discussed in Latin American media. It is an often criminalized act, or in certain countries such as Paraguay, can only be accessed in a woman's life is deemed to be in danger. Recently in 2015, in the state of Tlaxcala, east of

[96] Snowdon, W. (2010). National Male Health Policy. Australian Government.
[97] Ibid.
[98] Ibid.

Mexico City, an amendment was passed to expand the exceptions of cases in which abortion is considered a criminal action.[99] Women can now terminate pregnancies in the cases of sexual assault, incest, fetal deformation, or if her life or health is at risk. Mexico City permits abortion in any case as long as the pregnancy is terminated in the first trimester. Since this law was passed in 2007, over 138,000 safe and legal abortions have been performed.[100]

Guerrero and Michoacan, two other Mexican states, have also expanded upon the legal grounds in which women can seek abortion. In 2014, Guerrero now allows abortion when women face serious health risks, and Michoacan allows abortion in cases of fetal deformation and financial hardship. Throughout the rest of the country, access varies and is still largely limited. Between 2007 – 12 only 39 abortions were obtained legally, out of 120 women who filed in the case of sexual assault.[101] Having access to abortion, and the ability to terminate an unsafe or unwanted pregnancy gives women bodily autonomy, and can help preserve maternal health.

Male Suicide Prevention

There is a lack of frameworks and internationally organized efforts to address the disproportionately high rates of male suicides across the globe. Male suicide increases with age, peaking at age 40 and then falling and rising again in the 80s. Male rates of suicide greatly outnumber female rates in all age categories. There is little knowledge on the factors that contribute to these high rates of suicide, nor is there much research done on effective prevention programs.[102]

Although more women attempt suicide, men follow through with it at a greater rate. It has been speculated by experts that compared to suicide women, when men reach the point of suicidal action they are more hopeless, more resolved to die, more likely to be intoxicated, and more likely to be unconcerned with consequences due to a high risk-taking disposition. However, there is little empirical evidence to support these suggestions.[103] There are currently no special protocols or instruments recommended for screening men for suicidality in primary care. Usually the recommended approach involves screening for depression, a common precursor for suicide. The screening methodology uses a brief questionnaire that is the same for men and women.[104]

A study tracking individuals with major depression over 2 years found certain variables to be more predictive of suicidal behaviour in men than women. This includes a family history of suicidal behaviour, previous drug use, and early parental separation.[105] Given the lack of empirical evidence research on the topic of male suicide, it has been hard to

[99] Cavallo, S. (2015, June 5). Mexico's Slow Reproductive Rights Advances - International Women's Health Coalition.
[100] A 8 años del aborto legal en el DF, se han practicado 138 mil interrupciones - Animal Político. (2015, April 24).
[101] Cavallo, S. (2015, June 5). Mexico's Slow Reproductive Rights Advances - International Women's Health Coalition.
[102] Dan Bilsker, PhD, Jennifer White, EdD. The silent epidemic of male suicide. BCMJ, Vol. 53, No. 10, December, 2011, page(s) 529-534 — Articles.
[103] Ibid.
[104] Ibid.
[105] Oquendo MA, Bongiovi-Garcia ME, Galfalvy H, et al. Sex differences in clinical predictors of suicidal acts after major depression: A prospective study. Am J Psychiatry 2007;164:134-141.

develop effective screening measures, prevention programs, and educational resources. Public awareness of the epidemic of male suicide is also far lower than awareness of other health disparities for males such as HIV/AIDS.[106] There is a need to research further into the complex dimensions that influence male suicidal behaviour as well as implementing prevention programs that are tailored more specifically for males.

Questions to Consider

1. To what extent are disparities in health between men and women inequalities or inequities?
2. What other ways would health inequities lead to poorer health outcomes for men or women?
3. What are possible frameworks to address male health inequities such as increased rates of suicide and lower life expectancies?

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