In addition to the social and economic toll, those suffering from mental illnesses are also victims of human rights violations, stigma and discrimination.

means that people can be locked away for extensive periods of time, sometimes even for life, despite having the capacity to decide their future and lead a life within their community.

Violations also occur outside institutions: the stigma of mental illness

In both low- and high-income countries, there is a long history of people with mental disorders being stigmatized along with their families. This is manifested by stereotyping, fear, embarrassment, anger, and rejection or avoidance. The myths and misconceptions associated with mental disorders negatively affect the day-to-day lives of sufferers, leading to discrimination and the denial of even the most basic human rights. All over the world, people with mental disorders face unfair denial of employment and educational opportunities, and discrimination in health insurance and housing policies. In certain countries, mental disorders can be grounds for denying people the right to vote and to membership of professional associations. In others, a marriage can be annulled if the woman has suffered from a mental disorder. Such stigma and discrimination can, in turn, affect a person's ability to gain access to appropriate care, recover from his or her illness and integrate into society.

Human rights violations of people with mental disorders: the voice of sufferers

Caged beds

Many psychiatric institutions, general hospitals and social care homes in countries continue to use caged beds routinely to restrain patients with mental disorders and mental retardation. Caged beds are beds with netting or, in some cases, metal bars, which serve to physically restrain the patients. Patients are often kept in caged beds for extended periods, sometimes even years. This type of restraint is often used when staff levels or training are inadequate, and sometimes as a form of punishment or threat of punishment. The use of restraints such as caged beds restricts the mobility of patients, which can result in a number of physical hazards such as pressure sores, not to mention the harmful psychological effects. People have described the experience as being emotionally devastating, frightening, humiliating, degrading and disempowering. (*Caged Beds – Inhuman and Degrading Treatment in Four EU Accession Countries*, Mental Disability Advocacy Center, 2003)

Chained and burned due to accidental fire

August 2001: Twenty-five people were charred to death in Erwadi, India. A devastating fire broke out at 5 a.m. in the asylum. Of the 46 with mental disorders, 40 had been chained to their beds. Erwadi had long been considered a holy place, famous for its *dargah*. During the course of the "treatment", the persons with mental disorders were frequently caned, whipped and beaten up in the name of "driving away the evil". During the day, they were tied to trees with thick ropes. At night, they were tied to their beds with iron chains. (www.indiatogether.org)

The economic burden of mental disorders

Given the prevalence of mental health and substance-dependence problems in adults and children, the emotional, but also financial, burden on individuals, their families and society as a whole is enormous, as noted earlier. The economic impacts of mental illness include its effects on personal income, the ability of the persons with mental disorders or their caregivers to work and make productive contributions to the national economy, as well as the utilization of treatment and support services (Table 1).

Table 1. The overall economic burden of mental disorders

	Care costs	Productivity costs	Other costs
Sufferers	Treatment and service fees/payments	Work disability; lost earnings	Anguish/suffering; treatment side-effects; suicide
Family and friends	Informal care-giving	Time off work	Anguish; isolation; stigma
Employers	Contributions to treatment and care	Reduced productivity	–
Society	Provision of mental health care and general medical care (taxation/insurance)	Reduced productivity	Loss of lives; untreated illnesses (unmet needs); social exclusion

To gauge the measurable economic burden of mental illness, in table 2 the diverse economic impacts have been transformed into a single cost-based measure, and organized by types of costs based on expenditures made or resources lost.

An important characteristic of mental disorders is that mortality is relatively low, onset often occurs at a young age, and the indirect costs derived from lost or reduced productivity in the workplace are high.

Table 2. Types of measurable costs

	Core costs	Other non-health costs
Direct costs (payments made)	• Treatment and service fees/payments	• Social welfare administration • Public and private criminal justice system • Transportation
Indirect costs (resources lost)	• Morbidity costs (in terms of value of lost productivity) • Mortality costs	• Value of family caregivers' time

Mental disorders impose a range of costs on individuals, households, employers and society as a whole.

How much does mental illness cost?

Estimates of costs are not available for all the various disorders, and certainly not for all the countries in the world. Most methodologically sound studies have been conducted in the United States and the United Kingdom. At 1990 prices, mental health problems accounted for about 2.5% of GNP in the United States (Rice et al., 1990). In the Member States of the European Union the cost of mental health problems is estimated to be between 3% and 4% of GNP (ILO, 2000), of which health-care costs account for an average of 2% of GNP.

- For the **United States** Rice and colleagues calculated an aggregate cost of US$ 148 billion (at 1990 prices) for all mental disorders. One of the most important findings is that the indirect costs either match or outweigh the direct costs for all mental health areas. Spending on treatment for mental health and substance abuse in the United States alone was estimated at US$ 85.3 billion in 1997: US$ 73.4 billion for mental illness and US$ 11.9 billion for substance abuse (Mark et al., 2000).
- The estimated total burden of mental health problems in **Canada** for 1998 was at least Can$ 14.4 billion: Can$ 8.1 billion in lost productivity and Can$ 6.3 billion for treatments (Stephens & Joubert, 2001). This makes mental health problems one of the costliest conditions in Canada.
- Patel and Knapp (1997) estimated the aggregate costs of all mental disorders in the **United Kingdom** at £32 billion (1996/97 prices), 45% of which was due to lost productivity.

Photo: © WHO, A. Waak

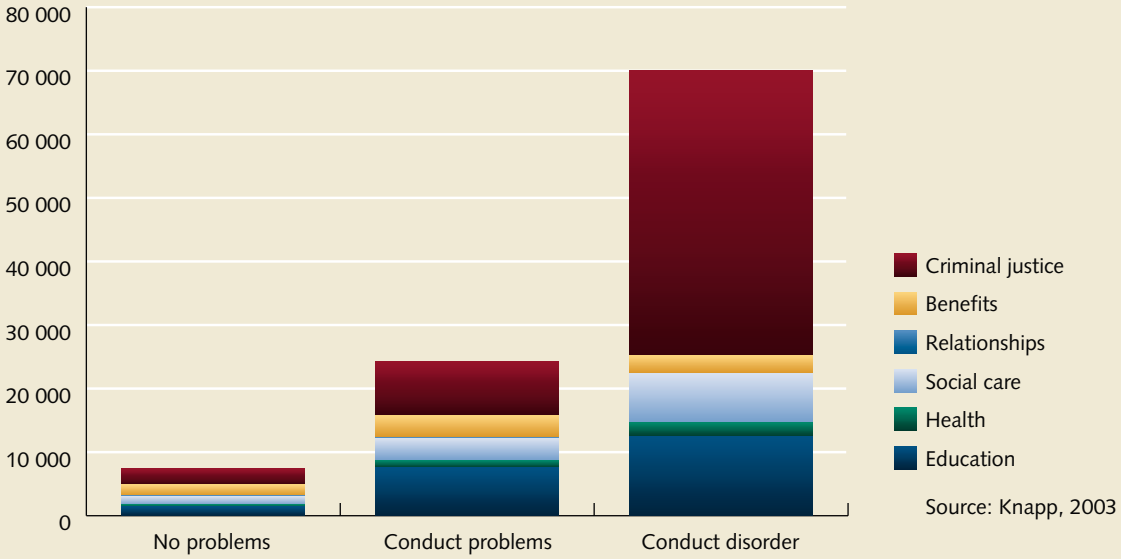
Mental health problems in childhood generate additional costs in adulthood

The costs of childhood disorders can be both large and largely hidden (Knapp et al., 1999). Early onset of mental disorders disrupts education and early careers (Kessler et al., 1995). The consequences in adulthood can be enormous if effective treatment is not provided (Maughan & Rutter, 1998). Knapp shows in figure 4 that children with conduct disorders generate substantial additional costs from ages 10 to 27 years. These are not mainly related to health, as one would expect, but to education and criminal justice, creating a serious challenge for the social capital as a whole.

4

Costs in adulthood of childhood mental health problems

Additional costs from 10-27 years (in £)



Source: Knapp, 2003

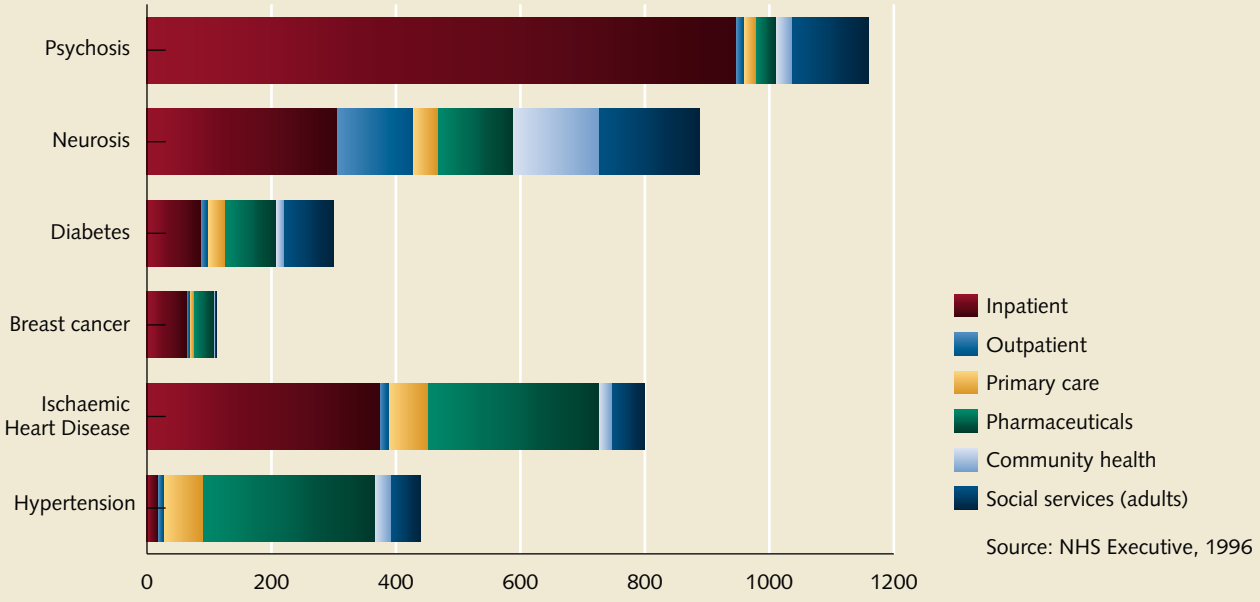
High costs of mental disorders compared to other major chronic conditions

A recent comparative study of the burdens of disease carried out within the United Kingdom's National Health Service (NHS) demonstrated the relative and absolute costs of care for a wide range of disorders, including the comparatively high annual expenditure associated with chronic disease conditions such as psychosis and neurosis (NHS Executive, 1996; Figure 5 below).

5

NHS burdens of disease, 1996

£ million, 1992/93



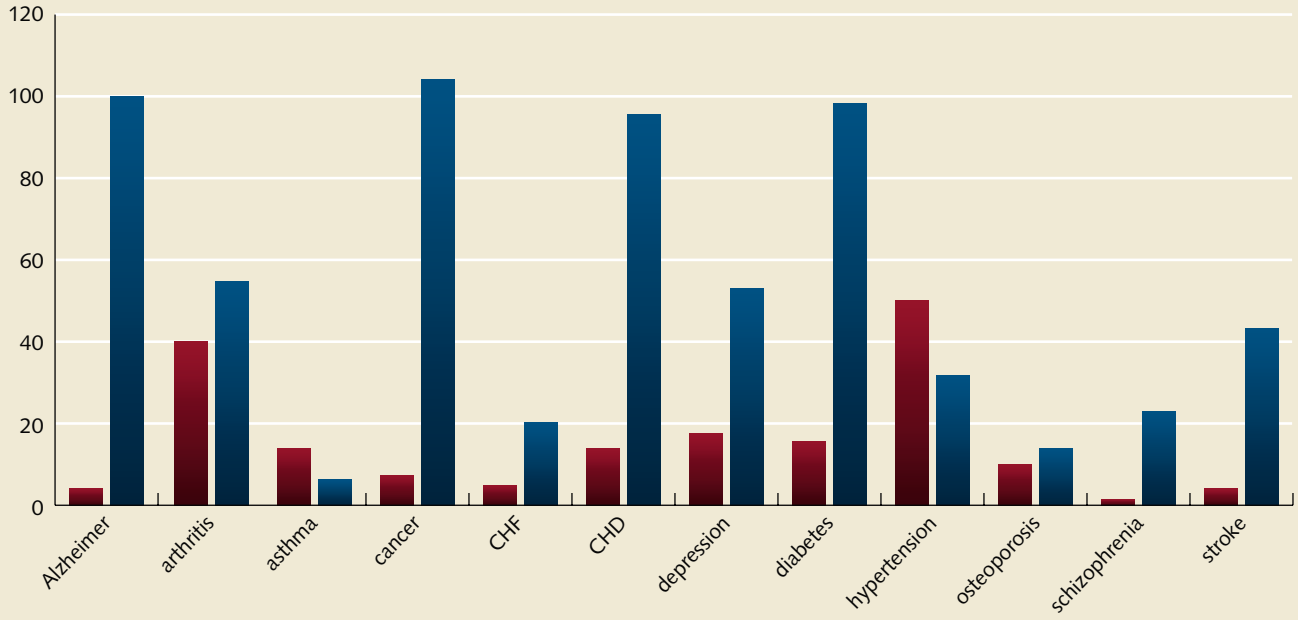
Source: NHS Executive, 1996

Another recent study (Berto et al., 2000) presents prevalence and total management costs of diseases such as Alzheimer's, asthma, cancer, depression, osteoporosis, hypertension and schizophrenia. As shown in figure 6 for the United States, three mental disorders considered by Berto et al. (Alzheimer's disease, depression and schizophrenia) present a high prevalence-cost ratio.

6

Prevalence and cost of major chronic conditions: United States

(in millions)



Source: Berto et al., 2000

CHF: congestive heart failure

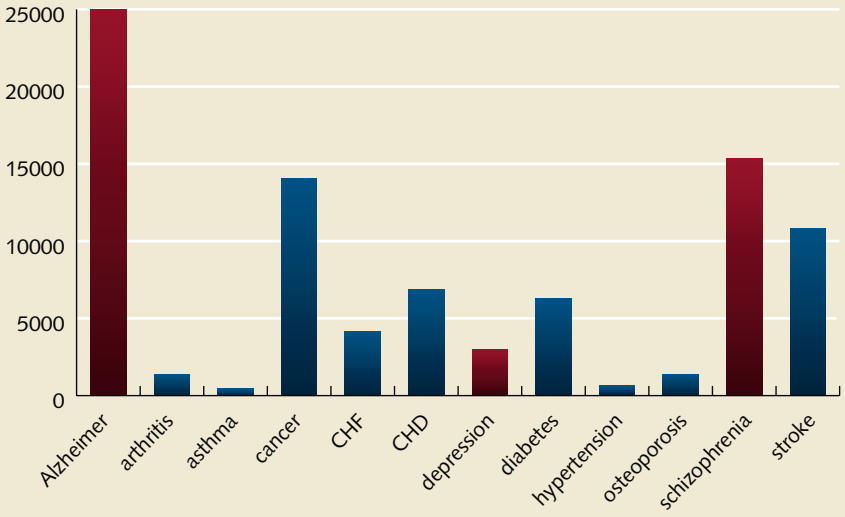
CHD: coronary heart disease

Even more interesting is to consider different diseases in terms of the average cost per patient, as shown in figure 7: Alzheimer's disease and schizophrenia are the two most costly diseases, their average cost per patient being higher than cancer and stroke.

7

Yearly cost per patient of selected major conditions: United States

US$/patient/year



CHF: congestive heart failure
CHD: coronary heart disease

Source: Berto et al., 2000

In many developed countries, 35% to 45% of absenteeism from work is due to mental health problems

In the United States, mental illness is considered responsible for an estimated 59% of the economic costs deriving from injury or illness-related loss of productivity, followed by alcohol abuse at 34% (Rouse, 1995). A report from a Canadian university (Université Laval, 2002) revealed that absences for psychological reasons had increased 400% from 1993 to 1999, and that the costs of replacement, together with those of salary insurance, amounted to Can$ 3 million for the year 2001. A survey on psychiatric morbidity in the United Kingdom showed that people with psychosis took an average of 42 days a year off work. The same survey reveals that persons with two or more neurotic disorders had an average of 28 days off per year compared to 8 days off for those with one neurotic disorder (Patel & Knapp, 1997).

Decreased productivity at work:

even if an employee does not take sick leave, mental health problems can result in a substantial reduction in the usual level of activity and performance

A recent study from Harvard Medical School examined the impact of psychiatric disorders on work loss days (absence from work) among major occupational groups in the United States (Kessler & Frank, 1997). The average number of work loss days attributable to psychiatric disorders was 6 days per month per 100 workers; and the number of work cutback days (getting less done than usual) was 31 days per month per 100 workers. Although the effects on work loss were not significantly different across occupations, the effects on work cutback were greater among professional workers. Work loss and cutback were found to be more prevalent among those with comorbid disorders than among those with single disorders. The study presents an annualized national projection of over 4 million work loss days and 20 million work cutback days in the United States.

Photo: © WHO, P. Virot

Mental illness affects access to the job market and job retention

The special case of depression

The burden of depression is rising, affecting both the working and social lives of individuals.

In the United States, it has been estimated that 1.8% to 3.6% of workers suffer from a major depression, and that employees with depression are disabled at nearly twice the rate of persons without depression (Goldberg & Steury, 2001). In 2000, 7.8 million Canadians were treated for depression, which represents an increase of 36% compared to the previous year.

In a large United States financial services company, depression resulted in an average of 44 work-days taken off for short-term disability as compared to 42 days for heart disease, 39 days for lower back pain, and 21 days for asthma (Conti & Burton, 1994). Studies suggest that the average annual costs, including medical, pharmaceutical and disability costs, for employees with depression may be 4.2 times higher than those incurred by a typical beneficiary (Birnbaum & al., 1999). However, it has also been found that the cost of treatment for depression is completely offset by a reduction in the number of days of absenteeism. Moreover, it is demonstrated that the cost of achieving a partial or full remission from major depression declined between 1991 and 1996.

If the burden of depression is rising, costs to treat it are declining, and the quality of care has been improving over time. Specific investments to prevent and cure major depression can and should be made in both developed and developing countries.

In the United States 5–6 million workers between the ages of 16 and 54 years either lose, fail to seek, or cannot find employment as a consequence of mental illness. Among those who do manage to find work, it has been estimated that mental illness decreases annual income by US$ 3500 to US$ 6000 (Marcotte & Wilcox-Gok, 2001).

In the United Kingdom, a 1995 survey revealed that over half of the people with psychosis were classed as permanently unable to work, about a fifth were in employment and one in eight was unemployed (Patel & Knapp, 1997).

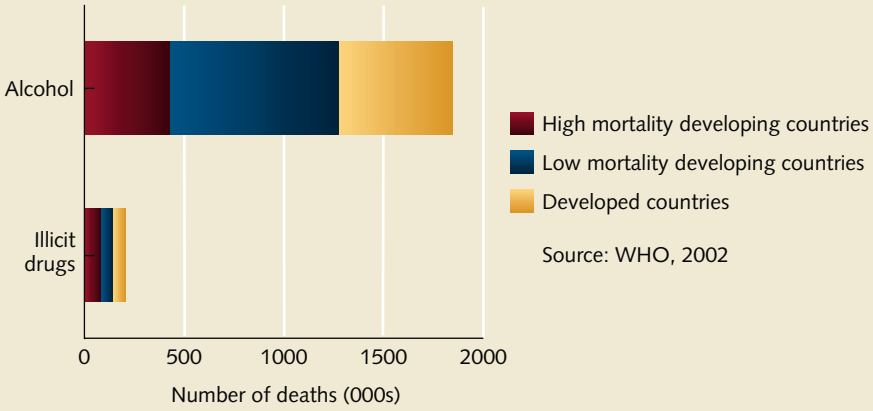
Individuals with comorbid mental and physical disorders consistently have lower rates of employment than persons with a physical disorder alone. In several surveys, approximately 20% fewer individuals with both physical and mental disorders reported being employed than individuals with only a physical disorder (McAlpine & Warner, 2002).

The burden of substance abuse

- 76.3 million persons are diagnosed with alcohol disorders;
- At least 15.3 million persons are affected by disorders related to drug use;
- Between 5 and 10 million people currently inject drugs;
- 5%–10% of all new HIV infections globally result from injecting drugs;
- More than 1.8 million deaths in 2000 were attributed to alcohol-related risks;
- 205,000 deaths in 2000 were attributed to illicit drug use (Figure 8);
- The government, drug abusers and their families shoulder the main economic burden of drug abuse; and
- For every dollar invested in drug treatment, seven dollars are saved in health and social costs.

8

Deaths in 2000 attributed to addictive substance abuse-related risks



Source: WHO, 2002

Abuse of alcohol and other substances continues to be one of the most serious public health problems in both developed and developing countries. Worldwide, alcohol accounted for 4% of the total burden of diseases in 2000.

In **Latin American** countries, alcohol was the leading risk factor for the global burden of diseases in 2000. Of an estimated 246,000 alcohol-related deaths in this region, about 61,000 were due to unintentional and intentional injuries (WHO, 2002), all of which could have been prevented. Alcohol abuse is also responsible for neuropsychiatric disorders, domestic violence, child abuse and neglect, and productivity loss.

In **South Africa,** 25%–30% of general hospital admissions are directly or indirectly related to alcohol abuse (Albertyn & McCann, 1993), and 60%–75% of admissions in specialized substance abuse treatment centres are for alcohol-related problems and dependence. Almost 80% of all assault patients (both males and females) presenting to an urban trauma unit in Cape Town were either under the influence of alcohol, or injured because of alcohol-related violence (Steyn, 1996). The majority of victims of train-related accidents, traffic accidents – both pedestrians and drivers – had blood alcohol levels exceeding the legal limits (Van Kralingen et al, 1991). Foetal alcohol syndrome is by far the most common cause of mental disability in the country (Department of Trade and Industry, 1997).

In **Asia,** substance abuse is considered the main cause in 18% of cases presenting problems in the workplace (EAP, 2002). In Thailand, the percentage of substance abusers aged 12–65 years varies from 8.6% to 25% in different regions of the country, the highest percentage being in the north-east. In New Zealand (with a population of 3.4 million) alcohol-related lost productivity among the working population was estimated to be US$ 57 million a year (Jones et al., 1995).