## Responding to The Global Burden of Disease

This white paper responds to *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk Factors in 1990 and Projected to 2020 (1996)*, by Christopher J. L. Murray of the Harvard School of Public Health, and Alan D. Lopez of the World Health Organization.

The International Society of Psychiatric-Mental Health Nursing (ISPN) identifies its role in national and international society as fostering and enhancing the knowledge and understanding the psychosocial-physical-spiritual care of people with mental illnesses, their caregivers, their families, and communities. This white paper was drafted in response to Murray/Lopez report to disseminate ISPN's support of the findings. Particularly significant are the findings relative to burden to society of mental illness.

## **BACKGROUND**

Until recently, a serious gap existed in comparative measures of national and international health status. The most frequent measure of a society's health status has been rate of death per population, or rate of death by age per population. The exclusive use of death rates to define quality of health status has long been criticized; yet, finding a way to compare diseases, disabilities, and injuries across international populations has been a formidable task. In a five-year study supported by the World Health Organization, World Bank, and the Harvard School of Public Health, researchers developed a method for establishing a single measure of health status. They combined number of deaths, impact of premature death, and disability to establish a Burden of Disease measure of health status.

One of the unique features of this effort is the researchers' inclusion of both physical and mental illness categories to establish their measure for Burden of Disease. The first volume of the final product consists of a 990-page publication entitled *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk Factors in 1990 and Projected to 2020.* Volume I, edited by Christopher J. L. Murray and Alan D. Lopez, presents examples of detailed worldwide epidemiological information on 240 conditions. The methods used to derive the formula for establishing premature death, and how they developed the disability measure comparing 220 diseases, is a new approach to measuring society's health. Disability Adjusted Life Year (DALY) is the internationally standardized term established for death and disability that establish a society's burden of disease. Projecting disease burden for the year 2020 is based on their definition of burden of disease (see publication).

The editors posit that with these methods and the assessment of global burden, the study underscores that public health policy (with its traditional emphasis on infectious diseases) has not kept pace with the actual incidence and prevalence of illness in the aggregate. One major finding has implications for mental health professionals:

The burden of mental illnesses, such as depression, alcohol dependence, and schizophrenia, has been seriously underestimated by traditional approaches that take account only of deaths and not disability. While psychiatric conditions are responsible for little more that one percent of deaths, they account for almost 11 percent of disease burden worldwide.

In order to establish the burden of disability the researchers identified the multiple disabling effects of a particular disease or injury. "The study measured the amount of time lived with each of the various disabling sequelae of diseases and injuries, in both treated and untreated states, and weighted for their severity, in each population." The authors noted that 483 disabling sequelae of diseases and injuries were analyzed for all ages and all geographic regions for both sexes. They concluded that disability is the invisible burden on health status and that causes of disability are "substantially different from the leading causes of death."

The authors note the study shows the burden of psychiatric conditions has been underestimated in that half of the leading cases of disability worldwide are psychiatric conditions and substance abuse. These are depression, alcohol use, bipolar affective disorder, schizophrenia, and obsessive compulsive disorder.

TABLE 1 LEADING CAUSES OF DISABILITY IN THE WORLD IN 1990

	All causes	Total (million)	Per cent of total
1.	Unipolar major depression	50.8	10.7
2.	Iron-deficiency anaemia	22.0	4.7
3.	Falls	22.0	4.6
4.	Alcohol use	15.8	3.3
5.	Chronic obstructive pulmonary disease	14.7	3.1
6.	Bipolar disorder	14.1	3.0
7.	Congenital anomalies	13.5	2.9
8.	Osteoarthritis	13.3	2.8
9.	Schizophrenia	12.1	2.6
10	. Obsessive-compulsive disorders	10.2	2.2

While the summary data for the world note the role of mental illness in burden of disease, when looking at data from the developing countries, only unipolar major depression appears in the top 10 causes of disease burden. In addition, when separating the causes of ill-health and premature death by sex, men, aged 15-44, the most significant cause of disease burden is road traffic accidents This finding is surpassed only by depression. Moreover, in developing as well as first-world regions, depression ranks as women's leading cause of disease burden.

When projecting the burden of disease for the year 2020, and with disability included along with death, a very different view of health is envisioned. Just as psychiatric disorders emerged as major contributors to the global disease burden in the 1990 data, mental health illnesses are projected to be significant contributors to the 2020 global burden of disease. Mental illnesses are expected to increase their proportion of total global burden of disease from 10.5 percent in 1990 to 15 percent by 2020.

The top three causes of disease burden in 1990 were pneumonia, diarrheal diseases, and perinatal conditions. In 2020 the top three conditions are projected to be ischemic heart disease, depression, and road traffic accidents. The authors note "violence, is currently 19th place of global burden, but is expected to rise as high as 12<sup>th</sup> place by 2020, and suicide could climb from seventeenth to fourteenth place."

As psychiatric nurses, it is tempting to focus on only the mental health implications of this study, given the startling implications. However, we have an obligation to recognize this study's inclusion of many physical illnesses and injuries.

## RECOMMENDATIONS

The International Society of Psychiatric-Mental Health Nursing submits the following recommendations to national and international bodies concerned with health care policy, the education of health care professionals and the provision of services to mentally ill populations.

- 1. We recommend actualization of mental health parity for patients with mental health needs by all health care insurance companies, programs, and health care service providers/entities.
- 2. We recommend that states, nations and international health care resources be dedicated to educating professionals to treat people with mental illnesses and their families, support treatment services for people with mental illness, and support research toward understanding origins and treatment for mental illness.
- 3. We recommend that educational institutions develop curricula for health care professionals on mental health illnesses, their epidemiology, treatment, and evaluation.
- 4. We recommend that legislation support policy that will have a positive impact on people with mental illness and their families.
- 5. We recommend the development of strong advocacy policy and programs by all professional groups concerned with people with mental health problems.

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