Government action, in concert with individual action, can increase healthy life expectancy by 5-10 years worldwide, concludes The World Health Report 2002: Reducing Risks, Promoting Healthy Life. The report summarizes one of the largest research projects ever undertaken by the World Health Organization (WHO), and identifies the 10 greatest risks to human health worldwide.

Twenty-five risks were initially ranked based on lost healthy life years. According to report coauthor Anthony Rodgers, codirector of the Clinical Trials Research Unit at the University of Auckland, New Zealand, this captures within a single measurement burden not just from premature death but also from life lived with disability. So although one of the foremost risks, iron deficiency, doesn't cause as many deaths as some other risks examined, its overall health impact puts it in the top 10.

"These types of reports give you a good handle on both chronic and infectious disease prevention," says George Rutherford, interim director of the Institute for Global Health, operated jointly by the University of California (UC), San Francisco, and UC Berkeley. He says the report will help health care providers to focus on primary prevention by identifying the initial causes of disease.

The report shows that surprisingly few risks cause 40% of global deaths and disease. The top 10 risks fall into two categories. Five of them--being underweight, unsafe sex, iron deficiency, indoor smoke from solid fuels, and unsafe water, sanitation, and hygiene--mainly affect populations in developing countries. The other five--high blood pressure, tobacco consumption, alcohol consumption, high cholesterol, and obesity--can be grouped as contributors to heart disease and stroke, which kill more than 12 million people worldwide each year.

Until recently, cardiovascular diseases had been considered largely the encumbrance of the developed world. However, this study reveals that with an influx into developing nations of Western lifestyle risks--for example, alcohol consumption and increased use of processed foods--have come rapidly increasing rates of cardiovascular-related risks, resulting in a double burden of infectious and noninfectious disease.
Stark contrasts between the poor and rich are underlined by conclusions in the report related to being underweight, which is prevalent in developing nations, and obesity, which is common in industrialized countries. About 170 million children in poor countries, lacking sufficient food or compromised by chronic disease, are underweight, with 3.4 million dying from this cause in the year 2000. Meanwhile, more than 300 million adults worldwide are clinically obese (defined by the WHO as having a body mass index of at least 30 kilograms per square meter), with obesity-related deaths at one-half million in 2002 in North America and Western Europe.

Besides the top 10 risks, the report discusses a number of other environmentally related risks, such as inadequate and dangerous housing, lead exposure, and hazards that will be encountered in the future as a result of global warming. These include salination of freshwater supplies by rising sea levels, changes in the incidence of food- and waterborne infections, and altered dynamics of disease vectors.

John Swartzberg, a clinical professor of medicine at the UC Berkeley School of Public Health, says he is surprised that the report did not place more emphasis on vector control and global warming. With global warming, he points out, "the range of mosquitoes [would] dramatically increase, in terms of both latitude and how high the mosquitoes can go." He explains that these disease-bearing insects will put a much larger percentage of the world's population at risk for mosquito-borne disease, especially many of the substantial human populations in developing countries that live on high plateaus, areas currently not at high risk.

Despite that criticism, he says, "The World Health Organization has done an outstanding job on this report. I would highly endorse all of the conclusions." Edward V. Ohanian, director of the Health and Ecological Criteria Division of the U.S. Environmental Protection Agency Office of Water, further says the data in the report are "consistent with other estimates of the problem on a worldwide basis."

The next step for the WHO is to focus on identifying the interventions that would work best in each region, and communicating the necessary information to member states, working toward a better balance between disease prevention/treatment and increasing healthy life expectancy worldwide. The report cites a substantial increase in Asian tobacco taxes as an example of an action that has produced significant health benefits at a very low cost.

Our task is not to create an idyllic environment peopled by the poor. Our task is to create a decent environment peopled by the proud.

Robert S. McNamara, quoted in Reader's Digest, March 1973

10 Greatest Global Health Risks

* being underweight
* unsafe sex

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