

It Is Time to Include Cancer and Other Noncommunicable Diseases in the Millennium Development Goals

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The worthy efforts in recent years to increase attention to human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), tuberculosis, malaria, and other communicable diseases have helped the world respond more effectively to the threat these diseases pose in low- and middle-income countries. Indeed, the rapid spread of H1N1 influenza (swine flu) earlier this year demonstrates the need for a sustained global response to communicable diseases in all countries, both rich and poor. These actions are critical and should in no way be diminished.

However, at the same time, an equally serious threat has emerged, with limited fanfare. A silent pandemic of cancer and other noncommunicable diseases (NCDs) has been spreading throughout low- and middle-income countries and now threatens to overwhelm health systems and undermine social structures. NCDs, which include cancer, cardiovascular disease, diabetes, and chronic obstructive lung disease, claim more than 35 million lives each year, accounting for approximately 60% of all deaths worldwide.¹ In all regions of the world save Africa, mortality rates are higher for NCDs than for communicable diseases among men and women ages 15 to 59 years, and mortality rates for many NCDs will grow in low- and middle-income countries as populations age and the impact of behavioral risk factors becomes more pronounced.² According to World Health Organization (WHO) projections, the highest increase in the percentage of deaths from NCDs between 2005 and 2015 will occur in Africa (27%),

followed by the eastern Mediterranean region (25%).³ Now, more than ever, the world must take steps to balance the global response to both communicable diseases and NCDs, especially in low- and middle-income countries, in which the burden of NCDs is already great and the level of avoidable suffering profound.

A Frightening Threshold

In 2008, cancer accounted for 7.6 million deaths globally, more than AIDS, malaria, and tuberculosis combined.⁴ We have reached the point at which cancer is set to become the leading cause of death in the world, followed by heart disease and then stroke.⁵ This threshold has been approaching for years, yet has largely gone unnoticed. Cancer and other NCDs are rarely addressed in major policy forums, such as the G8 and G7 summits, and have only recently been incorporated into discussions at the World Economic Forum. Perhaps most strikingly, NCDs are not specifically referenced in the United Nations' landmark Millennium Development Goals (MDGs), which are designed to reduce poverty, hunger, disease, lack of housing, and exclusion.⁶ Expanding the MDGs to address cancer and other NCDs specifically and setting firm targets for controlling these diseases are important steps toward more fully addressing the world's leading causes of death and disability.

The MDGs are viewed by many as *the* world's development and public health agenda. The MDGs recognize the inextricable link between poverty and

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disease and set specific targets for reducing the spread of HIV/AIDS and the incidence and mortality of malaria and tuberculosis. However, despite the heavy burden of NCDs in low- and middle-income countries, the MDGs do not include any targets for these diseases.⁷ In fact, after reviewing official materials related to the MDGs, we have yet to find a single reference to either NCDs or chronic diseases generally or to any specific NCD, such as cancer or heart disease. The implications of this omission are great.

This official failure to recognize NCDs in the MDGs and other priority-setting documents creates an incomplete and inaccurate picture of the real disease burden in low- and middle-income countries, with potentially disastrous results. The MDGs help establish funding priorities for governments and multilateral institutions. Of the \$21 billion spent by development agencies such as the United States Agency for International Development to improve public health outcomes in low- and middle-income countries in 2006, it is estimated that less than 1% was allocated to NCDs.³ The MDGs also influence the actions of health ministries, health care institutions, and nongovernmental organizations. Today, many of the world's most rapidly developing nations are designing or expanding public health and health care systems that do not appear to reflect the needs of their countries. As a result, many of these countries will eventually find themselves fighting middle-income country health issues with low-income country health systems, systems without the balanced investments required to prevent, detect, treat, and cure NCDs. Ironically, such systems are precisely what is needed for public health care delivery, as well as facilitating governmental response to emergent threats of infectious pandemics.

Noble efforts by the United Nations and other organizations to provide the foundation for the economic development of poor nations could falter under the burden of NCDs. Although the economic consequences of NCDs are not completely understood, even in high-income countries, there is no doubt that the toll they take is immense. This toll includes costs associated with maintaining certain unhealthy lifestyle behaviors, such as purchasing tobacco; costs associated with treatment and rehabilitation; and costs associated with lost productivity because of death and disability. According to the WHO, heart disease, stroke, and diabetes alone could reduce the gross domestic product between 1%

to 5% in low- and middle-income countries experiencing rapid economic growth.³ For example, it is estimated that China, India, and Russia will forgo more than \$1 trillion in national income between 2005 and 2015 as a result of these 3 diseases.¹

A large number of middle-aged adults, both those in the workforce and those managing households, are vulnerable. Approximately half of all NCDs occur among people younger than 70 years of age and 25% occur among those aged younger than 60 years.¹ When measured in disability-adjusted life-years, NCDs account for nearly half of the entire burden of disease globally.¹ According to the WHO, middle-aged adults in low- and middle-income countries are especially vulnerable to NCDs: they tend to develop disease at a younger age, suffer longer, and die earlier than those in high-income countries.¹ In low-income countries, adults ages 30 to 59 years die from NCDs at twice the rate of adults in high-income countries.⁸ A young life preserved by an intervention against malaria or tuberculosis only to be lost later to cancer or diabetes is all too often preventable and always tragic.

Recognizing Global Disparities

The impact of NCDs can be felt throughout the world and cuts across all income groups. In absolute numbers, the vast majority of NCD deaths (greater than 80%) occur in low- and middle-income countries, in which population sizes are high, access to high-quality health care is limited, and health promotion programs are rare.¹ Cancer alone claims more than 5.3 million deaths annually in low- and middle-income countries, which is greater than 70% of all cancer deaths worldwide.⁹

Cervical cancer is one example of the heavy burden individuals in less affluent nations bear due to lack of awareness and effective interventions, despite a growing number of options to prevent the disease entirely or catch it early.

Cervical cancer is the second most common cancer among women worldwide, with approximately 493,000 cases diagnosed each year. Despite the finding that most cases of cervical cancer could be prevented or effectively treated, approximately 273,000 women die from the disease each year.¹⁰ Tragically, approximately 83% of these deaths are among women in low- and middle-income countries.¹⁰ The

majority of women in these nations do not have access to care that can prevent the onset of this disease or detect it early enough for cure. As a result, they are diagnosed too late to benefit from lifesaving treatment. In contrast, a large proportion of women living in high-income countries have benefited from routine screening and treatment modalities for more than 50 years and, as a result, cervical cancer rates in these countries have dropped dramatically. In recent years, young women in developed nations have also gained access to a vaccine against the most common cancer-causing strains of human papillomavirus. This additional lifesaving tool will further strengthen their chances of leading longer, healthier lives, but to date, the price of the vaccine puts it out of reach of all but the wealthiest nations.

Overall, infection-related cancers account for approximately 26% of all cancer cases in low- and middle-income countries compared with 8% in economically developed countries.⁴ These and other disparities must be addressed.

Balancing Public Health Priorities

Efforts to control NCDs should not come at the expense of other global health initiatives. Too often, calls for disease-specific interventions force decision makers into a zero-sum approach to resource allocation. In reality, a higher overall level of funding, even in hard economic times, is needed to effectively address major disease issues globally. We must identify new resources for combating NCDs and over time build a more balanced public health portfolio that includes health promotion and policy reform along with prevention and treatment. The cost to address NCDs will not be insignificant, but it pales in comparison to the very real costs, both economic and human, of doing nothing.

Action Now, Not Later

In May 2009, leaders from the United Nations and the WHO met in Doha, Qatar. At the conclusion of their meeting, a declaration was adopted calling for the inclusion of NCDs and injuries into global discussions regarding development and, in particular, for the integration of indicators regarding NCDs and

injuries into the core monitoring and evaluation system of the United Nations' MDGs. We applaud this recommendation and urge the United Nations to adopt it at the earliest possible time. In addition to the inclusion of indicators that track NCDs and injuries, we urge the United Nations to develop and adopt specific targets for reducing and controlling NCDs and injuries.

Including cancer and other NCDs in the MDGs and encouraging the global health community to provide a higher level of attention to and funding for NCDs set the stage for a new global health agenda, an agenda that more fully addresses the overall burden of disease. Such an agenda is long overdue.

The most insoluble problem of all is the one left undefined. If we wish to improve human health and well-being, we must first give a true reckoning to its impediments. Such a reckoning will lead us to the right course and bring us closer to our goal. Millions of lives depend on it.

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