Developing Symptoms: Noncommunicable Diseases Go Global

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When most people in developed countries think of the biggest health challenges confronting the developing world, they envision a small boy in a rural, dusty village beset by an exotic parasite or bacterial blight. But increasingly, that image is wrong. Instead, it is the working-age woman living in an urban slum, suffering from diabetes, cervical cancer, or stroke-noncommunicable diseases (NCDs) that once confronted wealthy nations alone.

NCDs in developing countries are occurring more rapidly, arising in younger people, and leading to far worse health outcomes than ever seen in developed countries. This epidemic results from persistent poverty, unprecedented urbanization, and freer trade in emerging-market nations, which have not yet established the health and regulatory systems needed to treat and prevent NCDs. According to the World Economic Forum's 2010 Global Risks report, these diseases pose a greater threat to global economic development than fiscal crises, natural disasters, corruption, or infectious disease.

The international community has done little to help. Most donors remain focused on the battle against infectious diseases, reluctant to divert their funds. A recent UN General Assembly meeting devoted to NCDs produced few concrete measures. With the global economy still in decline and funding scarce, the chances of new effective cooperation seem smaller than ever.

Collective action on NCDs need not wait for un endorsement, economic recovery, or a reallocation of money away from campaigns against infectious diseases. The international community can make progress now by addressing those NCDs that are especially prevalent among poor people in developing countries and by helping their governments combat those diseases. For this effort to succeed, the United States must lead the way. In doing so, it can help curtail avoidable sickness and death and set the precedent for action on other emerging global health challenges that share the same origins and devastating consequences for the world's poor as the NCD crisis.

The Disease Divide

The NCD problem in developing countries is far worse than it has ever been in the developed world. NCDs in emerging-market nations are arising in young working-age populations at higher rates and with more detrimental outcomes than in wealthy states. According to the World Health Organization (who), 80 percent of deaths from NCDs now occur in low- and middle-income countries, up from 40 percent in 1990. People with NCDs in middle-income countries are more than twice as likely to die before age 60 as those in high-income nations, and people in low-income countries are four times as likely to do so.

NCDs that are preventable or treatable in developed countries are often death sentences in the developing world. Whereas cervical cancer can largely be prevented in developed countries thanks to the human papillomavirus vaccine, in sub-Saharan Africa and South Asia, it is the leading cause of death from cancer among women. The mortality rate in China from stroke is four to six times as high as in France, Japan, or the United States. Ninety percent of children with

leukemia in high-income countries can be cured, but 90 percent of those with that disease in the world's 25 poorest countries die from it. By 2030, NCDs will be the leading cause of death and disability in every region of the world.

The rise of NCDs has devastating social and economic consequences for developing countries. The frequent onset of these diseases among younger populations consumes scarce health-care resources, saps labor from the work force and hinders economic development, and makes it harder for governments to address other threats, such as infectious diseases. On the household level, NCDs consume budgets and rob families of their primary wage earners. A recent report by Harvard University and the World Economic Forum projects that over the next two decades, NCDs will inflict $14 trillion in economic losses on the developing world.

Living Dangerously

The reasons for the exploding NCD crisis in developing countries begin, paradoxically, with increased life expectancy. The greater availability of effective medical technologies, such as vaccines, and the improved diffusion of good public health practices, such as hand washing and breastfeeding, have sharply lowered child mortality across the globe. The vast majority of the world's newborns are now immunized against diseases such as measles, polio, and yellow fever, and the widespread use of oral rehydration salts has made cholera deaths increasingly rare. According to the World Bank, infant mortality decreased by half between 1960 and 2005 in 80 percent of the countries for which there are data, and global average life expectancy increased from 31 years in 1900 to almost 67 years by 2009.

Extending lives is, of course, a good thing. But the problem is that although life expectancies for the poor have increased in low- and middle-income countries, they have done so without the gains in personal wealth and better health systems that accompanied the rise in longevity in most developed countries. With the significant exception of China, the poor have not benefited from the recent economic growth in developing countries. Since 1981, the number of people worldwide living on less than $1.25 per day-1.1 billion-has remained roughly the same, and more than two-thirds of those people now live in middle-income countries. Meanwhile, health-care spending, although slowly expanding in Latin America, the Middle East, and parts of Asia, remains incredibly low; the state of Connecticut allocates more to it than the 38 low-income countries in sub-Saharan Africa combined. With such little public support, the poor in developing nations often cannot afford preventive or chronic care, increasing the odds of disability and death from diabetes, cancer, and other NCDs that people contract after their adolescent years.

The nearly nonexistent regulation of tobacco, alcohol, and processed food products in many developing countries compounds the challenges of rampant poverty and inadequate health care by increasing the likelihood that poor people will develop NCDs. These nations fear that increased taxes on unhealthy products will damage their economies and lead to public discontent. Regulators face strident opposition from tobacco, food, and beverage producers, which are sometimes partly or fully owned by the government in question. In many developing countries, patient-advocacy groups hardly exist. Civil litigation, which played a critical role in improving tobacco control and education in the United States, is far less common and successful in the

developing world. And inadequate labeling and regulation of ingredients hurt the poor most, since they have neither the opportunity to educate themselves about health risks nor the money to buy healthier food.

Meanwhile, freer trade and the increased global integration of tobacco, food, and beverage markets are overwhelming the little public health infrastructure that does exist in many developing countries. With stagnating sales in high-income nations, multinational companies now target low- and middle-income countries, launching sophisticated advertising campaigns to drive growth. Tobacco companies, in particular, use billboards, cartoon characters, music sponsorships, and other methods now prohibited in most of the developed world to entice women, who used to be less likely to smoke than men. These tactics have raised tobacco sales across Asia, Eastern Europe, and Latin America and are expected to do so in Africa. In more than 60 percent of the countries surveyed in a 2008 study by the who and the U.S. Centers for Disease Control and Prevention, girls now smoke just as often as boys.

Unprecedented rates of urbanization in developing countries have exacerbated these challenges. In 1950, over 70 percent of the world's population lived in towns and villages; by 2008, a majority had moved to cities. Most of this urbanization has occurred in emerging-market nations, where cities have little public health infrastructure. The result has been slums-90 percent of which are in developing countries and which house nearly one billion people. The inhabitants of these densely packed areas, faced with pollution outdoors and the burning of fuels indoors, are more susceptible to cardiovascular and respiratory diseases. Slum dwellers are more likely to buy tobacco products and cheap processed foods and less likely to have access to adequate nutrition or public health education.

The Right Prescription

Despite the enormity of the NCD epidemic devastating the poor in developing countries, it is possible to slow and reverse it. The measures necessary to prevent NCDs in healthy people are well known, and affordable medicines exist for improving care for those already living with these diseases. Treatments for NCDs, such as insulin and asthma inhalers, are no longer under patent and would do much to reduce avoidable disability and death if made more widely available. The World Bank estimates that developing countries could lower their projected rates of disability and death from NCDs by half by raising taxes on and restricting the marketing of tobacco and alcohol, reducing salt and trans fats in foods, and using beta-blockers, aspirin, and other low-cost interventions to control hypertension.

The international community can help developing countries build the capacity necessary to implement these policies. To begin with, the who and its member countries should attempt to reach a firm consensus on the prevention and treatment strategies needed to address the NCDs particularly striking the poor in developing nations. Next, based on those strategies, they should design a practical package of programs that emerging-market countries can implement even in low-infrastructure settings. This might involve, for instance, determining the minimum level of taxes and the scope of marketing restrictions needed to diminish unhealthy alcohol consumption. Experienced health and tax officials from the developed world should then work with their counterparts in the developing world to build their capacity to carry out these protocols.

Modest levels of aid from philanthropic foundations, donor governments, and multilateral development banks would enable low-income countries to pilot and launch these efforts. Developed countries should establish a program to monitor these NCD control measures, publishing the results to hold governments accountable for their implementation.

Collectively Stalled

The international community has long known of the NCD crisis plaguing the developing world. The who first called attention to the problem in 1996, when it issued a landmark report that contradicted long-standing views of NCDs as diseases of affluence, reporting that they would soon dwarf the burden of infectious diseases in developing countries and pose severe challenges to their health-care systems. Over the next decade, the WHO concluded an international treaty on tobacco control, produced numerous strategy papers on NCD prevention and treatment, and launched a department dedicated to addressing NCDs on a global level.

Yet despite these efforts, the WHO attracted little international support for action against NCDs. Global health donors and institutions remained preoccupied with containing infectious diseases and improving maternal and child health. According to a 2010 report by the Center for Global Development, between 2004 and 2008, 70 percent of total funding for NCDs came from just three sources, by far the largest of which was the who itself. That same report found that in 2007, programs devoted to NCDs received less than three percent of the nearly $22 billion spent on global health.

To place NCDs firmly on the international agenda, a group of concerned countries and nongovernmental organizations (NGOs) successfully lobbied to hold a high-level meeting on NCDs at the UN General Assembly in September 2011. Organizers agreed that the meeting would address the challenges of NCDs worldwide but focus on cancer, diabetes, cardiovascular disease, and respiratory illnesses, in part because those diseases share four major risk factors: tobacco use, alcohol use, physical inactivity, and an unhealthy diet. The who produced a set of strategies to reduce these factors, estimating that it would cost approximately $11.4 billion per year to fund them in developing countries. Expectations for the meeting were high. The only other UN General Assembly meetings on health have concerned HIV/AIDS, and they helped motivate donors to spend billions of dollars on lifesaving drugs for the developing world.

Yet optimism faded before the meeting had even begun. NGOs fought over the lack of focus on other major NCDs, such as mental illnesses. The donors that have dominated the international responses to infectious diseases, such as the Bill and Melinda Gates Foundation, argued that the meeting could distract from existing global health initiatives and divert their funding. Advance negotiations among UN member countries became bogged down in disagreements over whether to agree to NCD reduction targets and mandatory measures to contain these diseases worldwide; the tobacco, food, beverage, and pharmaceutical industries lobbied heavily against such regulations. And although 130 countries, 30 heads of state, and hundreds of NGOs came to advocate for action on a bewildering array of diseases, when the conference opened, the streets outside the UN were empty of the masses of supporters and patient s that had characterized the UN high-level meetings on HIV/AIDS.

The commitments that emerged from the meeting were largely rhetorical. The resulting political declaration recognized the "epidemic proportions" of NCDs and noted that countries can prevent them with cost-efficient public health measures, but it did not mandate specific methods nor even argue for their adoption. It endorsed private-sector partnerships and the sharing of technical assistance between developed and developing countries, but it failed to designate anyone to organize or fund such initiatives. The most concrete action mandated was to shift the responsibility for NCDs back to the WHO, charging it with generating voluntary disease- and risk-reduction targets, since nations could not agree on mandatory policies, and asking UN members to "consider" these targets in developing their national NCD plans. The WHO recently announced that it would probably not be able to get its 194 member countries to agree on these voluntary targets until at least May 2013.

In the end, the UN meeting helped mobilize the NGO community and broaden public recognition of the human and economic toll of NCDs worldwide. Several governments, of their own volition, introduced new regulations on trans fats and dietary salt. Numerous corporations, such as PepsiCo, announced that they would launch voluntary initiatives to make their products healthier and donate funds to improve the treatment of NCDs. Even so, frustrated supporters demanded a more comprehensive meeting to address the social and economic causes of NCDs worldwide. Critics cited these modest results as proof that amid the global financial troubles and corporate lobbying, collective action on NCDs is impossible.

All at Once and None at All

Yet the notion that a weak global economy and a conspiracy of industrial lobbyists prevented progress at the UN meeting is wrong. As currently pursued, international efforts on NCDs would also fail to generate support in a good economy-as they have since the WHO first reported the emerging epidemic of NCDs. The effectiveness of corporate lobbying at the UN meeting was a symptom of poorly conceived collective action on NCDs, not its cause.

Collective efforts against NCDs have failed because of the disparate nature of these diseases and the decision to try to address them on a global level. In addition to cancer, diabetes, cardiovascular disease, and respiratory illnesses, NCDs include a wide array of conditions, such as skin diseases, congenital anomalies, mental disorders, rheumatoid arthritis, and dental decay. These diseases are not all chronic, related to unhealthy habits, or even non-communicable. As a class, NCDs have little in common other than being the diseases that become more prevalent as a population reduces the plagues and parasites that kill children and adolescents. NCDs are, in short, the diseases of those with longer lives.

Trying to address these diseases as a single class and on a global level has both broadened opposition and diffused support for effective action. On one hand, addressing NCDs as a single category has united a wide array of otherwise disconnected industries, from agriculture to pharmaceutical companies and restaurants, against global targets to reduce NCDs and their risk factors. On the other hand, it has made it difficult to mobilize states and sufferers of NCDs worldwide around a specific and meaningful policy agenda. And when NCDs are presented as imposing the same challenges in developed and developing countries alike, policymakers and

potential donors are apt to conclude that they cannot be solved by international action and are simply the natural consequence of economic development.

To move forward, the international community should focus on the NCDs and risk factors especially prevalent among the developing country poor and on the particular needs of their governments to address them. This targeted approach would build stronger international support for concrete action while minimizing the number of potential opponents.

Tobacco offers a good place to start. According to the WHO, tobacco use already kills more people annually than HIV/AIDS, tuberculosis, and malaria combined. In the coming decades, it is projected to debilitate and kill hundreds of millions more, largely in low- and middle-income countries. Tobacco use is the only leading risk factor common to all the major groups of NCDs: cancer, diabetes, cardiovascular illness, and respiratory dysfunction. By increasing support for tobacco control in developing countries, the international community could help reduce one of the most significant threats to global health today.

Fortunately, a platform for combating tobacco use already exists: the who Framework Convention on Tobacco Control (FCTC), a binding treaty with 173 member states that mandates taxes, advertising, and other measures to lower demand for tobacco products. The WHO, in partnership with Bloomberg Philanthropies, developed a package of evidence-based strategies, called MPOWER, to turn the broad mandates of the FCTC into practical programs that developing-country governments can implement. Together with the Centers for Disease Control and Prevention, the WHO tracks global tobacco use and the implementation of the FCTC and publishes the results. The Campaign for Tobacco-Free Kids works with local media and civil society to hold governments accountable for enforcing the recommendations put forth by MPOWER.

These programs are making progress, but they are limited by a lack of funding and technical capacity within developing countries, as well as fierce industry opposition. Outside the handful of developing countries that receive support from Bloomberg Philanthropies and the Gates Foundation, tobacco control in developing countries remains woefully underfunded. A low-cost way to extend anti-tobacco programs to other developing countries is for the international community to integrate these programs into existing global health initiatives on tuberculosis and maternal and child health. Countries with experience in regulating and taxing tobacco, such as the United States, should help build those capacities in developing countries. Developed countries must also stop trying to reduce tobacco tariffs and protect tobacco-related investments in their trade agreements with low-income nations. With these measures, developed countries can support the world's poorest countries in their efforts to make sustainable progress against tobacco use.

Meanwhile, international initiatives to reduce the intake of alcohol, trans fats, and salt should focus for the time being on existing programs and partnerships with suppliers and retailers designed to make their beverages and food healthier. These voluntary measures may not replace the need for taxes and regulations in these areas, but they could promote progress until the capacity and popular support for such programs grows. When that time comes, the improvements made in country-level regulatory and taxation systems for tobacco control could be extended to

address alcohol, trans fats, salt, and other NCD risk factors. Integrating the monitoring of alcohol and unhealthy food consumption into the existing international tobacco-surveillance system would also offer a cost-effective means of collecting evidence on the implementation of the initiatives in these areas.

Yet prevention measures alone cannot solve the NCD problem. Expanding existing international vaccine-procurement mechanisms to include essential medicines for NCDs would help developing countries obtain the supplies necessary to meet the needs of their citizens. More donor support is required for product-development partnerships, such as the international organization path, which is working to adapt existing medical technologies for NCDs for use by low-income countries.

Finally, the international community should not forget the poorest countries, where the consumption of unhealthy products is low and tobacco-prevention programs would offer only limited benefits to those suffering from cancer, diabetes, and other NCDs. International ncd efforts should aid these countries by supporting the expansion of existing treatment programs, such as those established in Africa by the U.S. President's Emergency Plan for aids Relief and Partners in Health, to encompass the treatment of ncds.

From Village to Slum

Global health needs are changing. The NCD crisis in developing countries represents one part of a set of growing health challenges, from food safety and environmental pollution to road safety and substandard medicines, now replacing infectious diseases as the major causes of premature disability and death worldwide. These other challenges share similar origins as NCDs-freer trade, unprecedented urbanization, and limited local government capacity-and likewise have devastating consequences for the world's poor.

Whether targeting NCDs one by one or approaching them comprehensively, the international community will depend on the United States to lead. To make progress, Washington will need to demonstrate a sustained commitment to reducing the avoidable disability and deaths that result from persistent poverty and unequal access to effective prevention and treatment programs. The same commitment motivated U.S. initiatives on infectious diseases and maternal and child health, and should do so again with regard to NCDs. U.S. engagement can help catalyze international action not only against the current wave of diseases sweeping across developing countries but also against these other emerging health problems.

Washington has dedicated past global health initiatives to delivering food, drugs, and other health technologies to the world's poor. In doing so, it has been able to achieve progress even in countries with dysfunctional governments. But it cannot enforce the regulations on smoke-free public places, food and drug safety, urban sanitation, and road traffic that are now needed in such settings. Accordingly, the fundamental challenge in this new era of global health is not necessarily new medicine but better governance.

To meet this challenge, the United States will need to recalibrate its approach to global health. The Centers for Disease Control and Prevention, the U.S. Food and Drug Administration, and

other U.S. regulatory and technical agencies must have more resources and a greater mandate to support the efforts of their developing-country counterparts. The contributions of U.S. diplomatic and aid agencies, such as the State Department and the U.S. Agency for International Development, will remain important, but they will be limited to funding pilot programs and creating the international consensus that can give the governments of emerging-market nations courage in the face of industry opposition. Closer collaboration between U.S. trade and regulatory officials on international standards could make it easier for developing countries to adopt strict tobacco, food, and drug regulations that would facilitate both commerce and public health. The United States should coordinate its efforts with the WHO and regional entities such as the Pan American Health Organization, which convene states with similar cultures, economic circumstances, and demographic challenges. With these low-cost measures, the United States can extend the same lifesaving support that it has provided to the little boy in a rural, dusty village to the working-age woman living in an urban slum.

Thomas J. Bollyky is Senior Fellow for Global Health, Economics, and Development at the Council on Foreign Relations.