



Smoking gun. Although tobacco use has declined in much of the Western world, it is still on the rise in developing countries.

problems, says Rachel Nugent, a development economist and researcher at the University of Washington, Seattle, so it's hard to imagine there's enough money to go around.

"When I'm asked to talk to global health groups, the first question is always 'You don't mean we should do NCDs *before* we've cured AIDS?'" Nugent says. And without question, the image of an obese middle-aged woman on dialysis simply does not evoke the sympathy, or the outpouring of dollars, of a child feverish with malaria or a grandmother dying of cholera. The worldwide rally around HIV/AIDS, a single disease with a known cause and proven prevention strategies, is unlikely to happen for a collection of unrelated diseases with various causes that even experts cannot agree on.

Despite massive health budgets and efforts to promote healthy lifestyles, fighting NCDs has proved to be a losing battle in wealthy countries. In low- and middle-income countries, where 80% of NCD deaths now occur, it's clear that the same strategies will be even less effective. Furthermore, researchers have little data about which particular NCDs plague the populations of many struggling countries—and why.

Too many lists

Undeterred, WHO announced in April that it had identified four major risk factors

for chronic disease: tobacco, physical inactivity, alcohol abuse, and poor diets. Governments,

it recommended, should set these four as priorities when allocating their limited health resources for NCDs. Catalyzed by the unexpected attention, numerous other groups and advocacy organizations have crafted their own lists of "best buys," most of which tend to dovetail with WHO's list. But priorities such as breast cancer screening, HPV vaccination, and—controversially absent from the U.N. agenda—mental health also appear frequently. "There are too many lists out there," says Nugent, who thinks policymakers could easily be overwhelmed.

NEWS

A World of Chronic Disease

The public health community is sounding the alarm about the global epidemic of chronic diseases, but there are no easy fixes

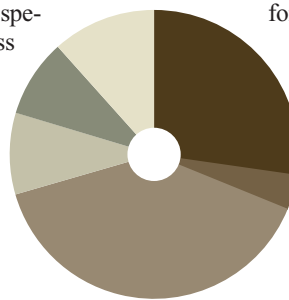
WHEN THE GLOBAL FUND TO FIGHT AIDS, Tuberculosis and Malaria was created in 2001, the world responded enthusiastically. In the ensuing decade, wealthy countries and donors have poured more than \$11 billion into fighting these three diseases. But an increasing chorus of global health experts believes the world has been ignoring another health crisis of equal or even greater magnitude: the spiraling epidemic of noncommunicable diseases (NCDs). Long the scourge of Western nations, cardiovascular disease, cancer, diabetes, and respiratory diseases like asthma now kill more people worldwide than all other causes combined. And the trend will only accelerate as the global population ages and sedentary lifestyles and unhealthy food become more common around the world.

"The rise of chronic diseases calls for some serious thinking about what the world really means by progress," said World Health Organization Director-General Margaret Chan in her opening address at the WHO global forum on noncommunicable diseases in Moscow in April. WHO's report found that 80% of deaths from NCDs occur in middle- or low-income countries. Sub-Saharan Africa is still an exception, but WHO expects NCDs

to surpass all other causes of death there, too, by 2020. The epidemic's spread to the developing world, Chan and other experts say, has been too long overlooked.

That's about to change. In September, the United Nations will hold a special high-level meeting to address the global NCD epidemic. It's only the second time the U.N. has convened a meeting on a health issue, HIV/AIDS being the first. Heeding strident calls from WHO, the U.N. will implore heads of state to tackle the risk factors for NCDs—and funders to open their wallets—but it may be a tough sell.

One of the biggest challenges may be convincing often cash-strapped health ministries to add NCDs to their priority lists. Donors and the broader global health community tend to see preventable infectious diseases and maternal and child health as more urgent



Global NCD Causes of Death, 2008

- Cancers
- Diabetes
- Cardiovascular disease
- Chronic respiratory diseases
- Digestive diseases
- Other noncommunicable diseases

Chronic problems. Of all non-communicable diseases, cardiovascular disease and cancer are the biggest killers of people under 70.

Alan Lopez, a global health expert at the University of Queensland in Herston, Australia, agrees. “Countries can’t be asked to monitor 200 things, because then they’ll monitor nothing,” he says. Indeed, ministries of health in many countries are understaffed, causing these countries to lag in gathering and reporting figures on their NCD rates.

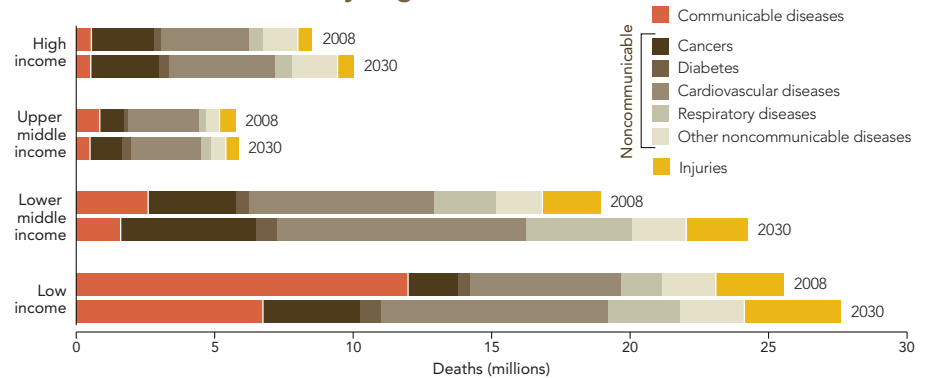
Nugent stops short of saying that the public health world is unprepared for a concerted focus on chronic diseases. “It’s never premature to pay greater attention to NCDs,” she says. But she worries about the “off-the-shelf” solutions, such as smoking bans, that many are recommending. “You have to understand both what the evidence says and what’s politically possible,” she says, no matter how scientifically sound these “best buys” may be. For instance, although heavy taxation and laws prohibiting advertising have effectively reduced smoking in Western countries, pushing these strategies elsewhere may be naïve. Governments such as China’s, which own the tobacco industry, are unlikely to accede to this demand, and forcing fast food companies to cut the amount of salt in their food fails to curb the high salt content of traditional Mediterranean diets.

“It’s one thing for organizations to publicize what countries should be doing, but on the ground, there are hard choices to make with limited resources,” says epidemiologist Bridget Kelly of the National Academies’ Institute of Medicine in Washington, D.C.

Double whammy

For the poorest countries, struggling with HIV/AIDS, tuberculosis, and malaria, the risk factors brought on by Western lifestyles have added to their burden of disease. Gene Bukhman, director of Harvard Medical School’s Program in Global Non-Communicable Disease and Social Change and a cardiologist with the nonprofit Partners in Health, both in Boston, calls poor countries’ NCD rates a “long-tail distribution”: Although each chronic disease affects a very small percentage of people, they add up to a large percentage. But in truth, infectious diseases still cause more deaths than any chronic disease. Bukhman hopes the U.N. meeting will show donors and policymakers that the same poor

Predicted Causes of Death by Region, 2008 and 2030



Rising toll. Between 2008 and 2030, the World Health Organization projects that the burden of noncommunicable diseases will continue to rise, even in the poorest countries.

populations that deal with infectious disease are now doubly strained.

Bukhman is concerned that by lumping NCDs together and focusing on specific risk factors that affect large populations, “the poorest populations could become even more marginalized.” Often, the NCDs of the poorest are not those that have WHO so concerned, and neither are their risk factors. Diabetes is the result of starvation, not obe-

of the global economic crisis, Kelly says: “It’s unlikely there will be a Global Fund for NCDs.” But those researchers and health workers on the ground say they’re not asking for much. Many envision a comprehensive health system that piggybacks on existing funds for infectious disease and serves the patients who suffer from both.

This kind of integrated health care, Bukhman says, is a crucial investment—and cheaper than wealthy countries may think. In Rwanda, Partners in Health has had success building a hospital infrastructure where patients coming in for malaria treatment, for instance, can get their blood sugar checked as well. Specialist doctors are scarce in the developing world, but nurses and pharmacists can monitor blood pressure and hand out over-the-counter drugs such as the inexpensive “polypill”: a concoction of several generic heart medications in a single pill that is currently in clinical trials. But for this piggyback approach to work, says Alafia Samuels, a chronic disease consultant and lecturer at the University of the

West Indies in Cave Hill, Barbados, “we cannot be disease-focused. We have to be patient-focused. We cannot cure [a patient’s] HIV and then send them off to die of diabetes.”

Whether the world is prepared for this epidemic, Bukhman says it can no longer avoid addressing it. “Otherwise,” he says, “we’ll look back in 20 years and say, ‘This is horrible, this 8-year-old kid died because they didn’t have insulin because they happened to be born in Mali.’”

—SARA REARDON



Unprepared. Many developing countries lack the resources to effectively treat renal failure, diabetes, cancer, and other debilitating NCDs.

sity; rheumatic heart disease, not coronary, kills teenagers in the “bottom billion”; and children die of Burkitt lymphoma, a cancer entirely treatable in wealthy countries.

No one advocates that other countries adopt the U.S. health care system, which in 2003 spent \$300 billion, or about \$1000 per capita, on cardiovascular disease alone. Equivalent care for Ghana, whose GDP per capita is about \$1600, is unthinkable.

Chronic disease advocates probably can’t expect much new money in the face