NCDs and an outcome-based approach to global health

A decade ago, HIV/AIDS transformed global health. The epidemic affected wealthy nations first, but did most of its damage in low-income and middle-income countries, where HIV/AIDS caused large numbers of premature adult deaths and shook governments. The international community responded by developing life-saving treatments and expanding their availability in poorer countries. That global response saved millions of lives and encouraged international support to address other public health challenges, including malaria, family planning, and maternal and child health.

Today, a new epidemic is emerging. Once thought to challenge only affluent countries, cardiovascular disease, cancer, diabetes, and other non-communicable diseases (NCDs) are now the leading cause of death and disability in low-income and middle-income countries, where they killed almost 8 million people younger than 60 years in 2013.[1] The chronic nature of NCDs means that patients need long-term medical care, which increases costs to households and governments.

Although the health and economic consequences of NCDs are large and escalating, the international aid response to this epidemic is not. The USA has no dedicated programmes or budget to address NCDs globally. Despite the efforts of WHO and the UN to raise the priority of NCDs,[2,3] international aid for NCDs remains low, especially relative to other global health concerns. In 2010, the international development assistance for health dedicated for each disability-adjusted life-year (DALY) lost to HIV/AIDS was US$69·38, $16·27 per DALY lost to malaria, and $5·42 per DALY lost to poor maternal, newborn, and child health—but only $0·09 per DALY lost to NCDs.[4,5]

The urgency of this situation led the Council on Foreign Relations (CFR) to convene an Independent Task Force on Noncommunicable Diseases, and its report, *The Emerging Global Health Crisis: Noncommunicable Diseases in Low- and Middle-Income Countries*,[1] was released on Dec 5, 2014. The report makes four important conclusions.

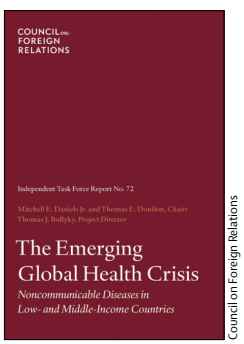
First, increasing rates of NCDs in low-income and middle-income countries are not merely the by-product of success in increasing incomes or achieving reductions in infectious diseases. In low-income countries, the increase in death and disability from NCDs was 300% greater than the decline in the burden from infectious diseases between 1990 and 2010. In lower-middle-income countries, the growth in NCDs outpaced the reduction in communicable diseases by 33% during that period. Premature death and disability from NCDs are increasingly associated with poverty in emerging nations, just as they are in wealthier countries.[1]

Second, NCDs are increasing in the same countries and populations that US and international initiatives target for other global health concerns. The CFR Task Force undertook case studies of the 49 countries in which the USA devoted $5 million or more in aid for health in 2013. NCDs accounted for 3·5 times more premature deaths than HIV/AIDS in these countries, and 1·6 times as many premature deaths as malaria, tuberculosis, and HIV/AIDS combined.[1]

Third, collective action has an important role in the response to NCDs. In high-income and low-income countries alike, long-term progress on NCDs will occur at the national level with the reform of health systems to provide preventive and chronic care, improvements in urban design, and more effective regulatory and agricultural systems. The difference is that the scale of the NCD epidemic is forcing low-income and middle-income countries to undertake those changes faster and with fewer resources than high-income countries. International initiatives can help to slow the rise of this epidemic, lessen its worst effects, and provide national governments with the time and technical assistance needed to tackle the NCD crisis sustainably on their own.

Fourth, progress on NCDs is possible. Despite increasing rates of obesity and physical inactivity, premature death and disability from NCDs have declined substantially in the USA and other high-income countries.[4] Many of the methods of NCD prevention, management, and treatment responsible for that decline are cheap and not widely implemented in low-income and middle-income countries, but could be implemented through established global health strategies.[1]

International efforts should focus on specific NCDs and risk factors that are prevalent in poor working-age (younger than 60 years) people in low-income



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For the **Council on Foreign Relations' Independent Task Force on Noncommunicable Diseases** see http://www.cfr.org/projects/world/independent-task-force-on-noncommunicable-diseases/pr1667

and middle-income countries, and for which there are low-cost interventions that can be integrated with existing global health platforms. Based on those criteria, the CFR Task Force offers short-term, medium-term, and long-term recommendations for action and an investment case for each recommendation. The recommendations range from increased use of low-cost anti-hypertensive drugs and establishing effective tobacco controls to integrating mental health into primary care.[1]

The health needs of low-income and middle-income countries are changing. The US Government and its international partners should examine their global health priorities and act to ensure continued effectiveness. The international programmes established during the past decade primarily to address HIV/AIDS and other infectious diseases provide a positive legacy on which to build. The international community should consider expanding the mandate of these programmes from their current disease-focused goals to more outcome-oriented measures for improving health in the targeted countries and populations. The time to act on NCDs is now.

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1 Independent Task Force on Noncommunicable Diseases. The emerging global health crisis: noncommunicable diseases in low and middle-income countries, Independent Task Force report no 72. New York: Council on Foreign Relations Press, 2014.
2 UN. Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. September, 2011. New York: United Nations, 2011.
3 WHO. Global action plan for the prevention and control of noncommunicable diseases 2013–2020. Geneva: World Health Organization, 2013.
4 Lozano R, Mohsen N, Foreman K, et al. Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease 2010. *Lancet* 2012; **380:** 2095–128.
5 Institute for Health Metrics and Evaluation. Financing global health 2013: transition in an age of austerity. Seattle, WA: Institute for Health Metrics and Evaluation, 2014: 61–62.

Prostate cancer screening comes of age

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The debate over prostate cancer screening has raged for decades. Two large randomised studies tested whether screening reduces prostate cancer mortality and, while the US trial reported no benefit,[1] the European (ERSPC) trial noted a significant reduction in mortality.[2] In *The Lancet*, Fritz Schroder and colleagues[3] now report 13-year mortality data from the ERSPC study. At 9 years, screening appeared to reduce prostate cancer mortality by 15% (rate ratio 0·85, 95% CI 0·70–1·03); this reduction was 22% at 11 years (0·78, 0·66–0·91) and 21% at 13 years (0·79, 0·69–0·91). Importantly, the number needed to invite to be screened to prevent one death fell from 1410 at 9 years to 781 at 13 years; the number needed to detect cancer fell from 48 to 27, showing continued improvement in the absolute effect of screening.

Despite this finding, present prostate-specific antigen (PSA)-based screening is imperfect. With an enormous reservoir of cancers in ageing men, there is a major risk of detection of many cancers that will never cause symptoms or death.[4,5] Additionally, a diagnosis of prostate cancer usually leads to treatment, either radiation therapy or surgery. Treatment side-effects are common, including urinary, sexual (ie, erectile dysfunction), and gastrointestinal complications.[6] An often-overlooked issue with screening is that it does not prevent all disease-related deaths: although 190 fewer prostate cancer deaths in men aged 55–69 years were noted in the screening group by Schroder and colleagues, 355 screened men still lost their lives due to prostate cancer. It is this trio of drawbacks (overdetection, treatment complications, and disease progression) that leads to the uncertainty about the role of screening.

An improved understanding of prostate cancer might tip the balance towards increased use of screening. In ERSPC, most cancers that were detected were low risk. These Gleason grade 6 tumours are similar to those identified at autopsy and have low rates of disease progression if only monitored without treatment, a strategy known as active surveillance. Although most of