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Perspective Piece

The Post-2015 Development Agenda: Keeping Our Focus on the Worst Off

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Abstract. Non-communicable diseases now account for the majority of the global burden of disease and an international campaign has emerged to raise their priority on the post-2015 development agenda. We argue, to the contrary, that there remain strong reasons to prioritize maternal and child health. Policy-makers ought to assign highest priority to the health conditions that afflict the worst off. In virtue of how little healthy life they have had, children who die young are among the globally worst off. Moreover, many interventions to deal with the conditions that cause mortality in the young are low-cost and provide great benefits to their recipients. Consistent with the original Millennium Development Goals, the international community should continue to prioritize reductions in communicable diseases, neonatal conditions, and maternal health despite the shifts in the global burden of disease.

THE GROWING BURDEN OF NON-COMMUNICABLE DISEASE

As the 2015 deadline for the achievement of the Millennium Development Goals (MDGs) nears, discussion of the next round of global development priorities is underway. Considerable, though uneven, progress has been made toward achieving each of the health-specific MDGs. Since 1990 it is estimated that maternal mortality has nearly halved and child mortality fell from 12.6 million to around 6.6 million in 2012. From 2000 to 2012, estimated global malaria deaths fell to 627,000, a 42% reduction.[1]

Concomitant with these achievements have come rapid demographic and population health changes, particularly in low- and middle-income countries (LMICs). In many LMICs, life expectancy has increased and populations are aging. The leading global causes of death and disability have shifted from communicable diseases affecting children to non-communicable diseases (NCDs) that predominately affect older adults.[2]

These changes have prompted international efforts to raise the priority of NCDs.[3] In 2013, the World Health Assembly unanimously adopted an ambitious plan to reduce premature deaths from NCDs by 25% by 2025. Near-consensus now exists that "NCDs should be embedded in the post-2015 development agenda, since they are leading causes of death and disability."[4]

Calls to combat NCDs in LMICs, particularly among the young and very poor,[5] are laudable. Programs for which new funding can be specifically procured, as well as very low- or no-cost measures—such as tobacco and alcohol controls—should be part of the post-2015 agenda.[6] Nevertheless, efforts to elevate the priority of NCDs raise tough questions about what global health donors should focus on. Resources for health in LMICs will likely remain scarce. One estimate puts the annual price tag of investing in "best buy" interventions for NCDs in LMICs at $11.4 billion USD,[7] over one-third of total global health assistance.[8] Meanwhile, despite much progress, millions of children still die of communicable diseases and neonatal conditions each year, and hundreds of thousands of women die of childbirth-related complications.

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Given the political fact of resource scarcity, trade-offs are unavoidable: assigning higher priority to one health goal diverts resources and attention away from others. Therefore, international health policy-makers must ask: should the shift in the burden of disease from communicable diseases to NCDs prompt a corresponding shift in the priorities of international health investments? The answer, we argue, is no: the global community should continue to prioritize maternal and child health, in large part because these interventions target the globally worst off.

SETTING PRIORITIES FOR HEALTH SPENDING

Health allocation decisions often use cost-effectiveness analyses. However, while cost-effectiveness matters, it is not all that matters. Policy-makers should also take into account how benefits are distributed within a population.[9] In particular, highest priority should be given to helping the worst off.

Studies of popular preferences suggest that people regard health improvements of the same size as much more important when the beneficiaries are worse off. In one study, an improvement that took someone from a disability that left them totally bedridden to a very severe impairment was rated 28 times as valuable as an improvement that took someone from a moderate impairment to a slight impairment, even though the amount of benefit to each individual was regarded as equivalent.[10] Similar findings have been widely replicated.[11,12] Moreover, the idea that the worst off deserve priority is widely endorsed in medical ethics and philosophy. Jonathan Wolff and Avner De-Shalit[13] argue that the dominant views in moral and political philosophy all "converge on the same general policy prescription in the short to medium term: *identify the worst off and take appropriate steps so that their position can be improved*."

This convergence suggests the following approach to priority-setting: health policy-makers should, first, identify the diseases and conditions that affect the worst off, and, second, implement the most cost-effective interventions to ameliorate those conditions. This prompts the question: who are the worst off?

First, being badly off, for the purposes of health priority-setting, is not simply a matter of one's health state at a particular time. The final hours of a dying 20-year old and a dying 80-year old may be equally bad and yet, clearly, the 20-year

old's life will have gone worse if she dies. Instead, those who are worst off are those with *the worst overall lives*. Individual episodes of ill health that befall a person matter primarily because of the negative contribution they make to her overall life. A concern with how people's lives go *overall* best fits with a number of ethical judgments people make. It explains why people often think it reasonable to make sacrifices now to gain benefits in the future. It also explains why someone can be compensated for a past harm through the provision of benefits later. And, it explains why people with chronic health problems are regarded as worse off than those with only recent ailments, even when their prognoses are the same.

Second, how well a person's overall life goes is a function of both the quality and length of her life. Someone's life is worse overall if she lives with chronic pain, rather without it. Moreover, her life goes worse if she dies prematurely, rather than living a full lifetime. That both years of life lost and years lived in poor health matter is reflected in patients' everyday judgments, as well as in summary measures of health like quality-adjusted life-years and disability-adjusted life-years (DALYS).[14]

If the worst off are those who have the least overall healthy life, then those who die young will always be among the worst off. To illustrate, compare someone who dies at age 5 with someone who dies at age 50. Suppose the 5-year old was in perfect health until her death. Could the 50-year old be worse off even though he lived 10 times as long as she did? In order for them to have had the same amount of valuable life, the 50-year old would have to have spent his life in a state of illness valued, on average, at 0.9 on the DALY scale (where perfect health is 0 and death is 1). Only 18 of the 220 health states for which disability weights are provided have disability weights of 0.5 or greater, and none is judged to be nearly as bad as 0.9.[15] This means that no one who lives to age 50 will have had a worse overall life than someone who dies at age 5. Similar (though less dramatic) results hold for adolescents and young adults: those who die at 15 or 20 years of age are very likely to be far worse off overall than those who die in their 50s and older.

Factors other than people's health conditions can affect how badly off they are. Economic poverty, poor access to education, the violation of civil and political rights, and other disadvantages make people worse off. Insofar as these factors are relevant to decisions about health expenditure, they only reinforce our conclusions, since those who die young are almost all very disadvantaged in other respects as well. The vast majority of under-five deaths occur in LMICs and disproportionately among the poor in these countries.[16]

Giving priority to the worst off therefore implies that children, adolescents, and adults who die young deserve the highest priority when allocating health resources. The leading causes of death and disability in younger age groups remain conditions related to childbirth, nutritional disorders, and communicable diseases such as lower respiratory infections, malaria, diarrheal diseases, meningitis, and human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS).[17] In contrast, NCDs primarily affect older adults and the elderly. Only 17% of NCD deaths in LMICs occur among people under the age of 50.[18] Because resources for international health assistance are scarce, changing spending priorities to focus more on NCDs is likely to divert resources from the worst off (children) to people who are comparatively better off (older adults).

Of course, assigning higher priority to the worst off is not the end of the story. Considerations of cost and benefit are also relevant to priority-setting decisions. However, these considerations also support focusing on conditions that affect those who die young, since many interventions that prevent death in infants, children, and young adults are cheap and they confer huge benefits—the opportunity for decades of worthwhile life that would otherwise have been lost. Many interventions designed to target communicable diseases and child mortality, such as vaccinating against common childhood diseases, are extremely cost-effective.[18] There are also well-studied, cost-effective measures to treat and prevent diseases such as malaria, HIV/AIDs, diarrheal diseases, nutritional disorders, and to make childbirth safer for mothers and babies. Conversely, while there are a few highly cost-effective strategies that target common causes of NCDs, many interventions for NCDs are considerably more expensive.[7]

Young people in LMICs die primarily of communicable conditions, birth-related complications, and nutritional disorders. The health-specific MDGs target these diseases, and their target reductions will not be achieved by the 2015 deadline. Even when the targets are reached, 4 million children under 5 years of age and over 100,000 women will still die annually. Further progress on the health-specific MDGs should remain a priority for the post-2015 development agenda, even though the global burden of disease has dramatically changed. While the MDG targets need updating, the high priority given to the conditions that kill the young does not. Child mortality, communicable diseases, and maternal mortality ought to remain "at the heart of global health and development goals."[19]

In conclusion, the global health community ought to continue to focus on maternal and child mortality for three reasons. First, policy-makers should prioritize the worst off and those who die young are the worst off. Second, interventions to prevent many of these deaths are low cost. Third, preventing these diseases confers enormous benefits.

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