

and strengthen the quality and cost-effectiveness of preventive and treatment services offered by the health system. And finally, institutions of independent accountability—monitoring, reviewing, and remedying deficiencies in the health system. These institutional functions deserve our greater attention, which would allow space for the proper discussion of a broader set of political determinants of health.

A second contextual issue is the notion of sustainable development itself. The global community has yet to comprehend fully what sustainable development means. It is an entirely different concept from poverty reduction, the overriding objective of the MDG era. Sustainable development is about all of us, not some of us. It is about taking the health of future generations as seriously as we take our own. And it is about rethinking the economic models on which our present highly consumptive societies depend. The kind of economy one needs to deliver sustainable and inclusive development is likely to be very different from the economy of today.

The third and final contextual issue is the meaning of health itself. We believe we need to move beyond the concept of global health towards the broader idea of planetary health. Planetary health includes global health, but it adds two further dimensions. One is the health of

the physical planetary systems our species depends upon for life. Another is the health of the human civilisations we have created (and which, as history attests, can so easily collapse). The “health” of these two systems can be summed up in a single word—resilience. Investing in health means investing in resilience. Health without resilience is unsustainable. Resilience without health fails to satisfy one of the most important human qualities we value—which our Commission on Investing in Health at last makes so abundantly clear.²

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- 1 The World Bank. World development report 1993: investing in health. Washington, DC: World Bank and Oxford University Press, 1993.
- 2 Jamison DT, Summers LH, Alleyne G, et al. Global health 2035: a world converging within a generation. *Lancet* 2013; published online Dec 3. [http://dx.doi.org/10.1016/S0140-6736\(13\)62105-4](http://dx.doi.org/10.1016/S0140-6736(13)62105-4).

Reinvesting in health post-2015

During the past few years we have jointly forged a strong case for health and its links to sustainable development in the post-2015 agenda, with an overarching goal that seeks to maximise health at all stages of life, and with universal health coverage and access as the key means to its achievement. We have acknowledged the need to accelerate progress on the current Millennium Development Goals; to broaden the agenda to encompass non-communicable diseases; and to give more prominence to sexual and reproductive health, with particular emphasis on the health of adolescents.

The review of, and lessons learned, in the past 20 years since the launch of the World Bank's 1993 World Development Report, *Investing in Health*,¹ is strategically important and timely. Since the early 1990s, health gains and economic progress have been extraordinary.

The number of people living in low-income countries has fallen from 3.1 billion people (57.8% of the world's population) in 1990 to 820 million (11.7%) in 2011, and much of the world's poor population now lives in middle-income countries. For the first time in history most countries see their citizens living longer, and fewer of their babies and infants dying unnecessarily. Life expectancy in such countries as China, Ethiopia, Mexico, and India has almost doubled. These are transformational shifts.

So clearly we are on the right path. The results of both the *Lancet* Commission on Investing in Health² and the Global Investment Framework for Women's and Children's Health³ make a powerful case that the full impact of health investments goes beyond gross domestic product (GDP) to the value of being alive and well, the most basic human right of all: when



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Jenny Matthews/Franos

this is recognised, the return on these investments is magnified several times over. We welcome the specific evidence that both reports provide.

From the Global Investment Framework for Women’s and Children’s Health³ we know that increasing health expenditure by an additional US\$5 per person per year in 74 high-burden countries would save the lives of 147 million children and 5 million women between now and 2035. Potentially, 32 million stillbirths could be prevented. Health-sector investments would thus prevent 65% of child deaths, 62% of maternal deaths, and 46% of stillbirths. This \$5 per person per year increase is equivalent to a mere 2% overall increase up to 2035 above current health expenditure per person in the 74 high-burden countries. These investments could yield up to nine times that value in economic and social benefits, including GDP growth from increased productivity, higher labour participation rates, and increased savings.

We also see that the world is on the verge of achieving a “grand convergence” with the mortality rates of poor countries approaching those enjoyed by rich nations, practically ending preventable child and maternal death in a generation. From the estimates of the *Lancet* Commission on Investing in Health² we have evidence that benefits would exceed the costs of this convergence by a factor of between 9 and 20 during 2016–35 and would avert 10.3 million deaths across low-income and lower-middle-income countries. So the benefits are clear and the costs are not insurmountable.

However, it is not only about adding more money. We must also use available resources more effectively. Interventions need to be integrated to maximise health benefits. The *Lancet* Commission on Investing in Health² concludes that science and innovation will account for a third of the effort to bend the survival curve by 2035. Medical solutions are needed but prevention and health promotion—actions across sectors—are increasingly important to improve people’s health. For this, we recognise that we need to become better at engaging with those outside the health sector.

While ministries of health are involved in the implementation of health programmes, ministries of finance and parliamentarians are largely responsible for the allocation and appropriation of funds to direct national policies on health and help foster national momentum in addressing the burden of mortality and disease. The *Lancet* Commission on Investing in Health² makes clear that half the investment needed should be aimed at strengthening health systems.

Investing in health is not only about investing in nurses, midwives, doctors, infrastructure, and drugs. It is about knowing the main health concerns and their underlying causes, and using this knowledge. Investing in health is about governance, management, and leadership to address inequalities, reach the most vulnerable and marginalised people, and create an enabling policy and legal environment.

Investing in health is also about holding ourselves accountable. The Commission on Information and Accountability for Women’s and Children’s Health gave clear recommendations about what needs to be done.⁴ To take just one of the recommendations, on civil registration and vital statistics, we will not know if we are making progress unless every birth, death, and marriage is recorded. Until then we are dealing with data gaps and guesstimates. It is, again, the most basic of human rights to exist officially. And it is harder to marry off a child whose age is known.

The *Lancet* Commission on Investing in Health² shows clearly the significant impact of the shift in economic transition, with most countries labelled low-income in the year 2000 reaching middle-income status by 2020, and the increasing importance of domestic resources. There is a growing need to reform health financing for equity and sustainability to address the substantial unmet needs in lower-middle-income countries.

This will have an effect on the role of development cooperation for health. The combined analysis provided by the *Lancet* Commission indicates that overall investment needs are greatest in low-income countries, especially in sub-Saharan Africa. However, the reality facing most low-income countries, including post-conflict settings, is a very tight fiscal situation coupled with high development financing needs.

To support the most vulnerable people in growing economies, development cooperation needs to be gap filling, catalytic, innovative, and aligned with the increased domestic flows for health and development. In low-income countries, and especially in fragile states, development cooperation has an important role, both in volume and delivery; its role and function is a central question and will continue to have relevance if we are to improve health outcomes beyond 2015.

We have evidence to show that the financial costs to realise these benefits are significant but affordable. This is a conversation that needs to take place in all countries. We need to mobilise more resources. Simultaneously we need to ensure greater effectiveness of the existing domestic and external resources. Additional investments can make a major difference, and it is in all our interests to maximise the value of every dollar spent.

The main conclusions we draw are that, first, the benefits are clear—there are substantial long-term economic returns on investment in health both for the individual and for society. Investing in health makes for sound economic policy and contributes to poverty reduction. Second, the required investments are substantial but not insurmountable. More funding is needed for gaps, but we also need to ensure that our existing technical and financial resources are used more effectively. Third, the required investments for health in low-income countries need to come from multiple complementary sources. Sources of domestic revenue need to be broadened, particularly to harness responsible private sector investment, and external resources need to match and align to national priorities and investments. Other new sources of revenue should be harnessed. Fourth, countries should be supported to develop sustainable financing mechanisms, including through strengthening progressive tax revenue schemes, which maximise flows from budgets and other traditional finance flows but also harness the benefits from prepayment, pooling,

and other mechanisms of financial risk protection towards universal health coverage. Finally, for effective investments it is essential that ministries of finance and other ministries, as well as the private sector, are informed and engaged. Multisector action is critical for success, identifying that health is both a contributor and outcome to development. The engagement of parliamentarians, civil society, media, and academia who can ultimately hold the government's budgetary decisions and implementation to account is a part of our route to success.

We need to work towards more efficient partnerships to address the right to health for all. Country-owned national strategic health plans that identify local priorities and high-impact cost-effective interventions should form the basis for investment. The International Health Partnership provides a framework for how the international community can respond to national health and development challenges and be mutually accountable with national governments for resources and results.

We are convinced and committed to do our utmost to position health and wellbeing as an important dimension and outcome of sustainable development. We know what needs to be done and we need to mobilise more, not least domestic resources, as well as using the resources available more efficiently. All these efforts aim to enable people to survive and live healthy lives.

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Sex and percutaneous coronary intervention

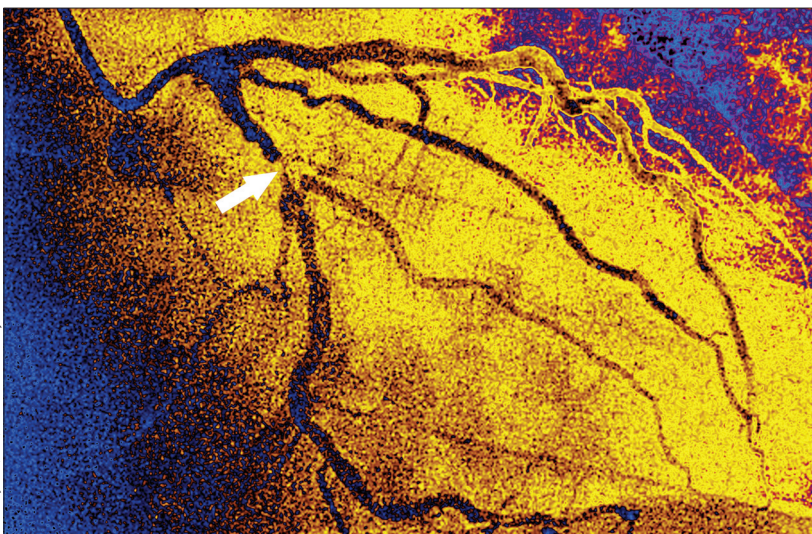
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Ischaemic heart disease shows sex differences in terms of clinical characteristics and pathophysiological mechanisms. Women presenting with ischaemic heart disease are generally older, have more comorbidities,¹ and have an increased risk of bleeding compared with men.²⁻⁴ Furthermore, they have a higher frequency of atypical causes of angina pectoris and acute coronary syndromes—microvascular disease, spasm, plaque erosion, and spontaneous coronary dissection—as opposed to the more frequent stenotic atherosclerotic plaque and plaque rupture.^{5,6} The feasibility, safety, and efficacy of percutaneous coronary interventions might therefore be different in women, and until now there have not been any precise data for women, mainly because of the small proportion of women in the reported randomised

trials. Sex differences in the invasive treatment and outcome of patients admitted with acute myocardial infarction have been reported in observational studies.^{7,8} In a Danish national observational cohort study, with data from nationwide registries, women with acute coronary syndromes were given much less invasive interventions and received less interventional treatment than did men, even after adjustment for differences in comorbidities and number of clinically significant stenoses.⁹

In *The Lancet*, Giulio Stefanini and colleagues¹⁰ investigated the safety and efficacy of drug-eluting stents in women during long-term follow-up. They pooled patient-level data for 11 557 female participants from 26 randomised trials of drug-eluting stents and analysed outcomes according to allocated stent type (bare-metal, early-generation drug-eluting, or newer-generation drug-eluting). 1108 (9.6%) women received bare-metal stents, 4171 (36.1%) early-generation drug-eluting stents, and 6278 (54.3%) newer-generation drug-eluting stents. At 3 years, the overall rates of death or myocardial infarction (the primary endpoint) were 10.3%, target lesion revascularisation 8.0%, and definite or probable stent thrombosis 1.6%.

The rates of death or myocardial infarction in women treated with bare-metal stents, early-generation drug-eluting stents, and newer-generation drug-eluting stents were 12.8%, 10.9%, and 9.2%, respectively, and were significantly lower in women treated with newer-generation drug-eluting stents. This endpoint differs from the most often used primary endpoint of target lesion failure, and further it was attributed by Stefanini and colleagues to differences in myocardial



Blockage in coronary artery

Cavallini James/BSIP/Science Photo Library