

Major Findings of the Paris Meeting of the Commission on Macroeconomics and Health

1. Epidemiological studies suggest that hundreds of millions of very poor people lack effective access to adequate public health interventions. These populations are without adequate nutrition, access to safe water and sanitation, and access to medical care. They are often burdened by illiteracy, and by social and political exclusion. The result is millions of unnecessary deaths per year in the world's poor countries, including around 3 million deaths from vaccines preventable diseases, 1-2 million deaths from malaria, 2 million deaths from tuberculosis, more than 2 million deaths from HIV/AIDS, and around 4 million deaths from various respiratory and diarrheal diseases.

2. The heavy disease burden in these regions imposes huge suffering as well as huge economic costs. Foreign assistance programs in non-health sectors (such as economic reform, education, infrastructure development, and trade and investment promotion) cannot function properly unless the health crisis is also addressed. Health is indeed increasingly recognized as one major input of economic growth. Poor health adversely impacts economic well-being in at least five ways. First, households lose the market earnings of breadwinners who are sick, or who die early, or who leave the labor force to care for sick children. Second, societies with high infant mortality tend to compensate with high fertility rates, which in turn have several adverse effects on economic development.¹ Third, repeated illnesses of infants and young children can cause lifelong impairments of physical and cognitive capacities, with consequent impairments of education levels and labor-force productivity. Fourth, a heavy disease burden in a community may create macroeconomic instability and a loss of social cohesion (and social capital). Fifth, a heavy disease burden may suppress foreign investment into the economy.

3. Achieving improved public health in the poorest countries is rightly becoming a central goal of the world community.² The central challenge facing the global community in

¹ These include: low workforce participation of women; large family size, with consequently low investment in health and education per child; a high dependency ratio, in which the under-15 age population constitutes as much as half of the total population; and rapid population growth, which may strain the physical environment and require heavy capital expenditures to cope with a rising population.

² Various health-related international goals are summarized in *2000: A Better World For All*, IMF, OECD, United Nations, World Bank. These include: reducing infant and child mortality rates by two thirds by 2015; access to reproductive health for all by 2015; reduce the proportion of people living in extreme poverty (\$1 per day) by half between 1990 and 2015. At the Millennium Summit in September 2000, the leaders pledged by 2015 to "have halted, and begun to reverse, the spread of HIV/AIDS, the scourge of malaria and other major diseases that afflict humanity." They also committed "to providing special assistance to children orphaned by HIV/AIDS."

disease control in the poorest countries is how to scale up the known public health interventions so that they reach a large proportion of the affected populations within a reasonable period of time. Effective scaling up will require an extraordinary *global effort*, beginning at the community level within each country, and extending to programs at the national and international levels.

4. Most specific interventions operate at the level of households and communities. Health is a product of a complex mix of factors, operating at the level of households, community, nation, and world. A household's susceptibility to a particular infectious disease, for example, may depend on the household's behavior (hygiene), access to clean water (community latrines and protected water supplies), national epidemic surveillance, and cross-border or international movements of infected individuals. Effective, disease interventions must therefore operate at all levels. At the same time, the disease burden must be addressed both through prevention and case management, with the balance of efforts depending on the underlying epidemiology of the disease and the technologies for prevention and case management that are available.

Health providers, such as primary health centers, are most effective when they receive community support and oversight. Communities are vital in overseeing the quality of service delivery – whether doctors are actually in the clinics, drugs in the dispensaries, and facilities accessible to all parts of the community, including minorities, women, and groups suffering discrimination of various sorts. National governments are vital in channeling resources to local communities, organizing payments and delivery systems for the health and health-related sectors, training and monitoring public health officials, and establishing and maintaining medical schools and health-related agencies. International agencies are vital in helping to mobilize the financial backing for health care in the poorest countries, identifying and promoting best practices in public health, and supporting international public goods, such as R&D on tropical diseases and global disease surveillance systems.

5. The heavy disease burden faced by the world's poorest countries is concentrated in a limited number of disease categories, most of which are susceptible to cost-effective health interventions. Ten disease categories constitute a large proportion of excess disease burden of the poor countries in comparison with the rich countries: HIV/AIDS, malaria, tuberculosis, acute respiratory infections, diarrheal diseases, vaccine-preventable diseases, reproductive and perinatal conditions, tropical parasitic infections, nutrient deficiencies, and tobacco-related illnesses.

A detailed account of public health approaches to the ten disease categories reveals a storehouse of interventions that are medically and economically effective *under the conditions of poor countries*. These interventions have been proved in both experimental trials and actual practice. Their results can be monitored, examined *ex ante* and *ex post* for effectiveness, and analyzed with respect to economic costs and benefits (at least approximately, in the latter case).

6. The world's poorest countries can not afford the costs of effective health systems out of their own resources. The "financing gap" between the health needs of the poorest countries and the resources that they can mobilize out of their own resources should be covered by a variety of donors, including: governments of high-income countries, multilateral institutions such as the World Bank, private foundations, non-governmental organizations, and private philanthropic groups.

The poorest countries have per capita incomes on the order of \$300 per person. The realistically achievable payments for health in such countries (both public and private) are likely to be around 5 percent of average annual income, or some \$15 per capita per year. An effective package of public health interventions is likely to be far more costly than that. The specific costs, of course, will depend heavily on the local environment. Regions suffering from holoendemic malaria, for example, or from pandemic HIV/AIDS, will face higher disease control costs than regions with lower endemic disease burdens. Similarly, regions suffering from high levels of illiteracy, low nutritional standards, and lack of access to clean water and sanitation, may also face increased costs of interventions.³ In addition, future costs will depend on the availability of infrastructure (primary health centers, diagnostic labs), expertise (doctors, nurses, epidemiologists, entomologists, sanitation engineers), and need for community outreach. There may have to be heavy investment outlays in early years to raise the capacity of the public health sector.

7. Current levels of donor support will not be sufficient to meet the needs of global public health. The world community is currently giving around \$50 billion per year in overseas development assistance (ODA), of which some 7-8 percent (\$3.5 – \$4 billion) is devoted to health, nutrition, and population. The levels of spending for health have been rising in recent years -- thanks in part to the dedicated activities of health professionals in the World Bank, UNICEF, WHO, and bilateral donor agencies – but the current levels of funding are still not sufficient to meet public health needs, especially in the poorest countries. The current flows do not cover the rising costs of the HIV/AIDS pandemic, nor do they cover the costs of resurgent infectious diseases such as malaria and tuberculosis. The value of ODA is further limited by the fact that many financial flows are in the form of loans (rather than grants) and tied aid (thereby limiting the effective size of transfer to the recipient countries). Many of the poorest countries are also heavily burdened by debt, and the size of debt repayments has been very large, further reducing the effective transfer of resources to the poorest countries.

8. Increased donor support for public health will require increased public confidence in the effectiveness of aid efforts. The public in the high-income countries is likely to support a significantly expanded effort of disease control in poor countries, *but only if*

³ Some regions that achieved good public health performance at low levels of income (e.g. China) were fortunate to be free of holoendemic malaria. Other regions (e.g. Kerala) had a long tradition of literacy, hygiene, and access to ample water supplies, which lowered the disease burden as well as the financial burden on the health services. This suggests that the costs of public health interventions have to be assessed on a needs basis within each specific region. Some of the high-disease-burden, low-income regions, may require health care interventions that are more rather than less expensive than other parts of the world.

there is a high confidence that the effort will succeed. There is currently a widespread skepticism about aid in the United States and some other countries. Many people fear that ODA feeds corruption within the poor countries and does not reach the people who need the aid. Others are skeptical that the problems of the poor can be solved by greater financial expenditures, or that increased aid will be directed by donor agencies in the most effective ways.

Aid is a cooperative process of donors and recipient countries. It relies on trust to be effective, and trust in turn depends on the systems by which aid is allocated, utilized, and monitored. Improvements are needed in each of these areas.

First, an effective aid program should be “owned” by the recipient societies, both governmental and non-governmental. Second, aid should be specific to the local needs, based on projects and processes designed specifically for the local circumstances and usually by local experts (working in tandem with international experts). Third, aid should be based on the best available science and evidence (including technical epidemiological, medical, and ecological evidence). Fourth, aid programs should be subject to *external* and *independent* reviews at key stages (initiation, implementation, and *ex post* evaluation). An improved process of setting goals and monitoring program performance through independent reviews and audits (both by expert health groups and financial auditors) will substantially raise public confidence.

9. Many key areas of public health in the poorest countries can only be met at the international level, through the provision of *global public goods*. Public goods are those goods that are not adequately provided by market forces alone because private actors (e.g. pharmaceutical companies) lack appropriate incentives. Such public goods include the generation of basic scientific knowledge, and the monitoring and control of epidemics. In both cases, individual actors do not have the financial incentive to provide the needed services (research in the first case; epidemiological information and control measures in the second case). Therefore, such services are traditionally provided by governments, or at least subsidized by governments. In the United States, a considerable amount of basic scientific research is carried out by the National Institutes of Health (NIH), while disease surveillance is carried out by the Centers for Disease Control (CDC).

Many public goods can be provided by local governments (e.g. sewerage systems, protection and monitoring of water quality), others by national governments (national epidemic monitoring), and still others only by *groups of governments* or by the *international community as a whole*. The latter are referred to as global public goods.

There are three types of global public goods of enormous significance for a global effort at disease control in the poorest countries. The first is support for research and development of drugs, vaccines, and other new interventions for disease prevention and control. Only a tiny fraction of the \$60 billion or so of annual pharmaceutical research is currently directed at the problems facing the least developed countries. The needs here are both specific (e.g. support for vaccines for malaria, HIV/AIDS, and TB) and general

(e.g. support for long-term research capacity in the poorest countries). The second is support for identifying and diffusing global best practices, the kind of activity that is at the heart of activities of multilateral agencies such as the World Bank and the WHO. The third is the control of infectious disease epidemics that cross national borders. We need international coordinated actions to monitor cross-border flows of people and pathogens; to undertake feasible efforts at global disease eradication (following upon the dramatic success of smallpox, and soon polio); to protect the efficacy of pharmaceutical products by reducing their overuse and thereby avoiding or slowing the onset of drug resistant pathogens.

10. Globalization poses both opportunities and risks for the poorest countries. We should neither forget the benefits offered by globalization, nor ignore the risks. Globalization offers an expanded marketplace for goods and services, thereby increasing the incentives worldwide for innovation, specialization, and welfare-improving trade. But globalization and more rapid technological advance has introduced costs as well, and has tended to reduce the market earnings of unskilled labor and especially of very poor people who are unable to participate effectively in the world of high technology. At a practical level, globalization increases the costs that poor countries face in keeping skilled labor, including managers and doctors. Throughout the poorest countries, medical doctors and other skilled professionals have abandoned public health systems to set up private practice in capital cities, or to emigrate to the Middle East, Europe, and the United States. Globalization, through the spread of systems of intellectual property rights, has probably raised rather than lowered the costs of essential medicines to very poor countries. In designing a global strategy for disease control, these implications of globalization should be kept squarely in mind, and remedial measures should be taken as necessary, such as: increasing international aid in order to cover the rising costs of internationally mobile medical services; and fostering tiered pricing, to ensure low-cost prices for essential medicines in the poor countries.