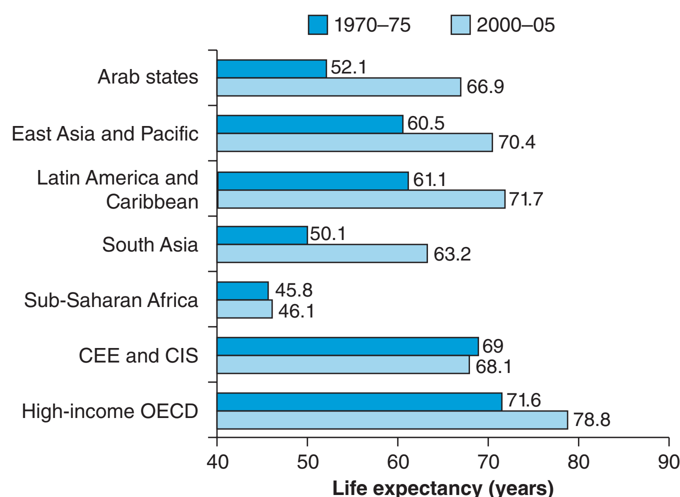

FIGURE 13e-3 Regional trends in life expectancy. CEE and CIS, Central and Eastern Europe and the Commonwealth of Independent States; OECD, Organization for Economic Co-operation and Development. *(Source: World Health Organization: Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health. Commission on Social Determinants of Health Final Report, 2008.)*

progress, sub-Saharan Africa and the former Soviet states have seen stagnation and even reversals.

As average levels of health vary across regions and countries, so too do they vary within countries (Fig. 13e-4). Indeed, disparities within countries are often greater than those between high-income and low-income countries. For example, if low- and middle-income countries could reduce their overall childhood mortality rate to that of the richest one-fifth of their populations, global childhood mortality could be decreased by 40%. Disparities in health are mostly a result of social and economic factors such as daily living conditions, access to resources, and ability to participate in life-affecting decisions. In most countries, the health care sector actually tends to exacerbate health inequalities (the "inverse-care law"); because of neglect and discrimination, poor and marginalized communities are much less likely to benefit from public health services than those that are better off. Reforming health systems toward people-centered primary care provides an opportunity to reverse these negative trends.

Health services have failed to make their contribution to reducing these pervasive social inequalities by ensuring universal access to existing, scientifically validated, low-cost interventions such as insecticide-treated bed nets for malaria, taxes on cigarettes, short-course chemotherapy for tuberculosis, antibiotic treatment for pneumonia, dietary modification and secondary prevention measures for high blood pressure and high cholesterol levels, and water treatment and oral rehydration therapy for diarrhea. Despite decades of "essential packages" and "basic" health campaigns, the effective implementation of what is already known to work appears (deceptively) to be difficult.

Recent analyses have begun to focus on "the how" (as opposed to "the what") of health care delivery, exploring why health progress is slow and sluggish despite the abundant availability of proven interventions for health conditions in low- and middle-income countries. Three general categories of reasons are being identified: (1) shortfalls in performance of health systems; (2) stratifying social conditions; and (3) skews in science.

SHORTFALLS IN PERFORMANCE OF HEALTH SYSTEMS

Specific health problems often require the development of specific health interventions (e.g., tuberculosis requires short-course chemotherapy). However, the delivery of different interventions is often facilitated by a common set of resources or functions: money or financing, trained health workers, and facilities with reliable supplies fit for multiple purposes. Unfortunately, health systems in most low- and middle-income countries are largely dysfunctional at present.

In the large majority of low- and middle-income countries, the level of public financing for health is woefully insufficient: whereas high-income countries spend, on average, 7% of the gross domestic product on health, middle-income countries spend <4% and low-income countries <3%. External financing for health through various donor channels has grown significantly over time. While these funds for health are significant (~$20 billion [U.S.] in 2008 for low- and middle-income countries), they represent <2% of total health expenditures in low- and middle-income countries and hence are neither a sufficient nor a long-term solution to chronic underfinancing. In Africa, 70% of health expenditures come from domestic sources. The predominant form of health care financing—charging patients at the point of service—is the least efficient and the most inequitable, tipping millions of households into poverty annually.

Health workers, who represent another critical resource, are often inadequately trained and supported in their work. Recent estimates indicate a shortage of >4 million health workers, constituting a crisis that is greatly exacerbated by the migration of health workers from low- and middle-income countries to high-income countries. Sub-Saharan Africa carries 24% of the global disease burden but has only 3% of the health workforce (Fig. 13e-5). The International Organization for Migration estimated in 2006 that there were more Ethiopian physicians practicing in Chicago than in Ethiopia itself.

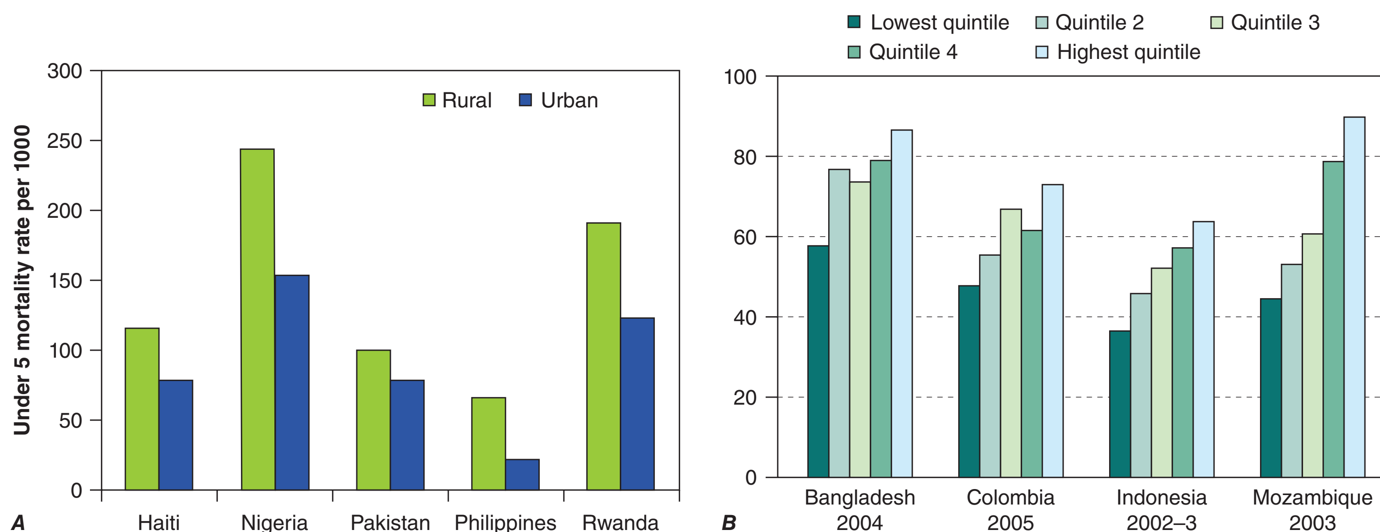

FIGURE 13e-4 ***A.*** Mortality of children under 5 years old, by place of residence, in five countries. *(Source: Data from the World Health Organization.)* ***B.*** Full basic immunization coverage (%), by income group. *(Source: Primary Health Care: Now More Than Ever. World Health Report 2008.)*