their voices and health needs will be included in the decision-making process. The complex landscape for leadership at the national level is mirrored in many ways at the international or global level. The transnational character of health and the increasing interdependence of countries with respect to outbreak diseases, climate change, security, migration, and agriculture place a premium on more effective global health governance.

EXPERIENCES WITH PRIMARY CARE IN LOW- AND MIDDLE-INCOME COUNTRIES

Aspects of the primary health care approach described above, with an emphasis on primary care services, have been implemented to varying degrees in many low- and middle-income countries over the past half-century. As discussed above, some of these experiences inspired and informed the Declaration of Alma Ata, which itself led many more countries to attempt to implement primary health care. This section describes the experiences of a selection of low- and middle-income countries in improving primary care services that have enhanced the health of their populations.

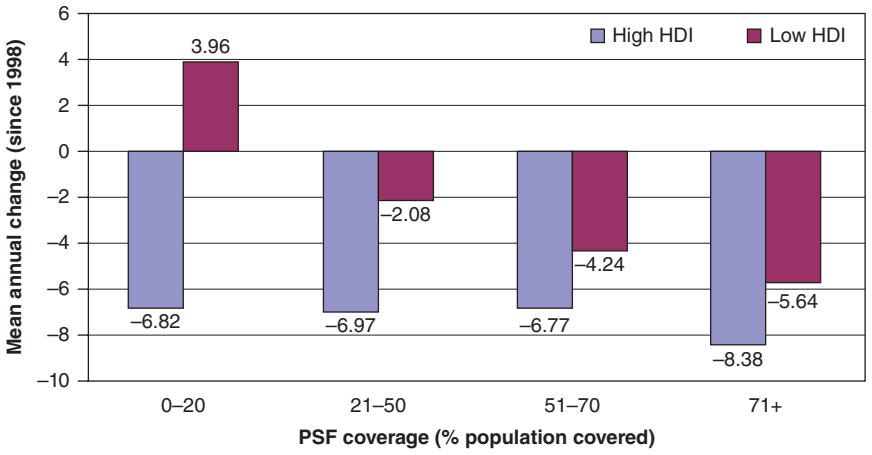

FIGURE 13e-8 Improvements in childhood mortality following the Family Health Program in Brazil. HDI, Human Development Index; PSF, Program Saúde da Família (Family Health Program). *(Source: Ministry of Health, Brazil.)*

Before Alma Ata, few countries had attempted to develop primary health care on a national level. Rather, most focused on expanding primary care services to specific communities (often rural villages), making use of community volunteers to compensate for the absence of facility-based care. In contrast, in the post–World War II period, China invested in primary care on a national scale, and life expectancy doubled within roughly 20 years. The Chinese expansion of primary care services included a massive investment in infrastructure for public health (e.g., water and sanitation systems) linked to innovative use of community health workers. These "barefoot doctors" lived in and expanded care to rural villages. They received a basic level of training that enabled them to provide immunizations, maternal care, and basic medical interventions, including the use of antibiotics. Through the work of the barefoot doctors, China brought low-cost universal basic health care coverage to its entire population, most of which had previously had no access to these services.

In 1982, the Rockefeller Foundation convened a conference to review the experiences of China along with those of Costa Rica, Sri Lanka, and the state of Kerala in India. In all of these locations, good health care at low cost appeared to have been achieved. Despite lower levels of economic development and health spending, all of these jurisdictions, along with Cuba, had health indicators approaching—or in some cases exceeding—those of developed countries. Analysis of these experiences revealed a common emphasis on primary care services, with expansion of care to the entire population free of charge or at low cost, combined with community participation in decision-making about health services and coordinated work in different sectors (especially education) toward health goals. During the three decades since the Rockefeller meeting, some of these countries have built on this progress, while others have experienced setbacks. Recent experiences in developing primary care services show that the same combination of features is necessary for success. For example, Brazil—a large country with a dispersed population—has made major strides in increasing the availability of health care in the past quarter century. In this millennium, the Brazilian Family Health Program has expanded progressively across the country, with almost all areas now covered. This program provides communities with free access to primary care teams made up of primary care physicians, community health workers, nurses, dentists, obstetricians, and pediatricians. These teams are responsible for the provision of primary care to all people in a specified geographic area—not only those who access health clinics. Moreover, individual community health workers are responsible for a named list of people within the area covered by the primary care team. Problems with access to health care persist in Brazil, especially in isolated areas and urban slums. However, solid evidence indicates that the Family Health Program has already contributed to impressive gains in population health, particularly in terms of childhood mortality and health inequities. In fact, this program has already had an especially marked impact on childhood mortality reduction in less developed areas (Fig. 13e-8).

Chile has also built on its existing primary care services in the past decade, aiming to improve the quality of care and the extent of coverage in remote areas, above all for disadvantaged populations. This effort has been made in concert with measures aimed at reducing social inequalities and fostering development, including social welfare benefits for families and disadvantaged groups and increased access to early-childhood educational facilities. As in Brazil, these steps have improved maternal and child health and have reduced health inequities. In addition to directly enhancing primary care services, Brazil and Chile have instituted measures to increase both the accountability of health providers and the participation of communities in decision-making. In Brazil, national and regional health assemblies with high levels of public participation are integral parts of the health policy–making process. Chile has instituted a patient's charter that explicitly specifies the rights of patients in terms of the range of services to which they are entitled.

Other countries that have made recent progress with primary health care include Bangladesh, one of the poorest countries in the world. Since achieving its independence from Pakistan in 1971, Bangladesh has seen a dramatic increase in life expectancy, and childhood mortality rates are now lower than those in neighboring nations such as India and Pakistan. The expansion of access to primary health care services has played a major role in these achievements. This progress has been spearheaded by a vibrant NGO community that has focused its attention on improving the lives and livelihoods of poor women and their families through innovative and integrated microcredit, education, and primary care programs.

The above examples, along with others from the past 30 years in countries such as Thailand, Malaysia, Portugal, and Oman, illustrate how the implementation of a primary health care approach, with a greater emphasis on primary care, has led to better access to health care services—a trend that has not been seen in many other low- and middle-income countries. This trend, in turn, has contributed to improvements in population health and reductions in health inequities. However, as these nations have progressed, other countries have shown how previous gains in primary care can easily be eroded. In sub-Saharan Africa, undermining of primary care services has contributed to catastrophic reversals in health outcomes catalyzed by the HIV/AIDS epidemic. Countries such as Botswana and Zimbabwe implemented primary health care strategies in the 1980s, increasing access to care and making impressive gains in child health. Both countries have since been severely affected by HIV/AIDS, with pronounced