# People in Transition: Reforming Education and Health Care

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The education and health of the labor force have a significant impact on a country's economic performance. To reap the benefits of modern technologies and increase productivity, the transition countries need urgently to reform their education and health care systems.

HE education system was one of the great sources of pride of the communist system. Countries in Central and Eastern Europe (CEE) and the newly independent states (NIS) of the former Soviet Union had achieved almost universal enrollment, high levels of literacy, and impressive levels of basic numeracy and engineering skills. Access was relatively equitable, for girls as well as for boys—a big plus given the powerful effects of educating girls on health and productivity. In areas such as literature and technology, the former system has left a world-class legacy. In China, too, educational attainments were-and still areimpressive compared with other developing countries, although the rural population's access to education is a major problem.

The health care system in CEE countries and the NIS was equally impressive, at least during the early postwar period. All citizens were entitled to a full range of health services, and the health sectors were well endowed with basic physical infrastructure and trained staff. During the decade beginning in the early 1950s, health improvements in CEE countries outpaced those in most Western countries, and by the mid-1960s, life expectancy in the CEE countries was only one or two years less than in the industrial countries. Thereafter, however, the gap in life expectancy started to increase, strikingly so for middle-aged adults. By the mid-1980s mortality rates from heart disease among 45- to 54-year-old men in the former Czechoslovakia were double those in Austria, whereas thirty years earlier the rates had been virtually identical. The growing health gap between the centrally planned economies and the market economies was a major issue even before transition began.

## Need for reform

Initially, many people thought that the education and health systems of the transition countries would not require substantial reform. They have been proven wrong.

One reason reform is necessary is that education and health care have the same kinds of deficiencies that are undermining the performance of state enterprises: an emphasis on inputs; few incentives to use resources efficiently and, therefore, considerable waste; an absence of quality control;

and a lack of responsiveness to consumers. Under central planning, the allocation of resources in the education sector was unrelated to demand. Scarce resources were often wasted on duplicate provision, as many enterprises and ministries developed their own facilities. There was heavy overstaffing in both the education and health sectors: some kindergartens had one teacher for every two or three children, and hospitals had too many doctors. The solutions, though not the same as for state enterprises, will be based on some of the same principles—for example, incentives to improve efficiency and encourage greater responsiveness to consumer demand.

Perhaps even more important, the education system inherited from the days of central planning is not capable of providing people with the full foundation they need to function in a market economy—and, in many countries, to be citizens in a democracy. Similarly, the health care system misallocates resources and has failed to produce a healthier society.

## Adjusting the skills mix

The primary responsibility of ministries of education is to ensure that the education system imparts knowledge and skills and—just as important—transmits certain values. In carrying out this responsibility, education ministries must achieve a number of subsidiary goals: ensuring equitable access to education and training; producing the types of education that equip individuals—economically, socially, and politically—for

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the societies in which they live (external efficiency); running schools and other institutions as well as possible (internal efficiency); and financing education in efficient and equitable ways.

Adapting education and training to the needs of a market economy. Education under central planning sought to impart a uniform interpretation of history and national purpose, and mastery of a fixed body of knowledge to train workers for slots specified in the central plan. The system therefore emphasized both conformity and specialization. Relative to the needs of a market economy, this approach has major deficiencies. First, although early basic education was often superior to that in many Western countries, subsequent training was excessively specialized from too young an age. Second, adult education and training, essential for mobility in a market economy, were neglected because workers were expected to remain in the same occupation throughout their working lives. Third, subjects that are important in a market economy, such as economics, management, law, and psychology, were ignored or underemphasized.

Like the former centrally planned economies, liberal market economies also use education to transmit cultural, political, and national values. However, they emphasize personal responsibility, intellectual freedom, and problem-solving skills.

Problem-solving skills have three dimensions:

- the ability to solve a known class of problem;
- the ability to apply a given technique to a new problem; and

• the ability to choose which technique to use to solve a new problem.

In many countries with centrally planned economies, the third dimension—which involves independent critical thoughtwas regarded as seditious. Chart 1, based on an international study of children's abilities in mathematics and science, illustrates both the strengths of the old system and the need for change. Children in the countries of the former Soviet Union, Hungary, and Slovenia have test scores considerably above the international average—however. they do better in tests of how much they know than in tests of their ability to apply that knowledge in new circumstances. The ranking for children in Canada, France, and the United Kingdom is exactly the reverse.

These results suggest that the education systems of both the market and the centrally planned economies have been effective in achieving their different objectives. They also point to the types of educational reforms needed to enable people in CEE countries and the NIS to make the transition to a market economy. Higher education in China faces a similar challenge.

Policy directions. Adapting the education package will not be easy. There were important gaps in subjects studied, leading to missing concepts and, in consequence, to missing words. "Efficiency," for example, means something very different to a manager trying to carry out a central plan than to one trying to increase profits and market share in a competitive system. Though language develops rapidly, missing concepts and words can still create communication problems that impede speedy and effective transfer of knowledge and skills.

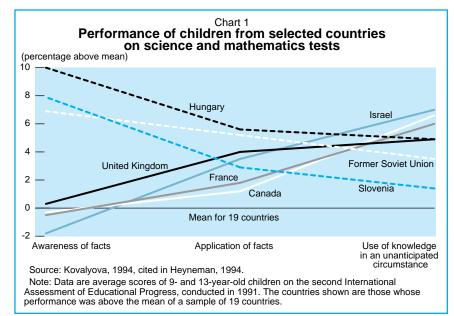
The financing of education—as well as content and delivery—need to be reformed. Financing should provide incentives for efficiency. For example, public funds for training and higher education could be allocated on the basis of enrollment to make the system more responsive to demand, although, as discussed below, this measure would need to be accompanied by improved accountability. Financing reform is important because it can lead not only to more efficient management of schools (internal efficiency) but also to improved educational content (external efficiency), by empowering consumers. Another aspect of financing reform should be increased access to education for all segments of the population—access is a particular problem in rural China, for example, particularly for the very poor.

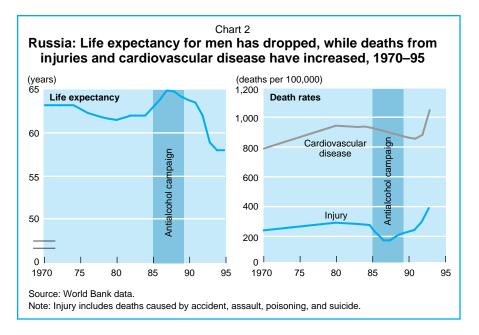
The adoption of new curricula—particularly in subjects like economics and history—is important, not least to develop a greater capacity for critical thought. New textbooks will be needed. At least as important is increased accountability through training, stronger incentives for effective performance, more effective assessment of teachers, and examinations that test the capacity to use knowledge as well as to accumulate it.

Improving delivery generally requires decentralizing the system to make it more responsive to local needs and increasing the diversity of suppliers and educational practices to promote competition and enhance individual choice. These measures, however, will require a major change in the role of the state, which will need to establish a framework for funding, accreditation of providers, and monitoring of quality.

Progress to date. There has been some progress, but much remains to be done. During the early stages of transition, while real spending on education dropped, there was little effort to reduce overstaffing; a growing share of education spending now goes to teachers' salaries. There has been a major decline in the provision of preschool education, with potentially devastating consequences for the learning ability of large numbers of children, and a decline in access to compulsory education in the less affluent countries, particularly for minorities. The state sector, particularly secondary vocational and technical training, has responded slowly, and many graduates now feed the unemployment lines.

On the positive side, new—often private—institutions have sprung up, many of them in the social sciences and business. Most of the CEE countries and the NIS have





revised their curricula, especially in history and the social sciences. Although the content of lessons may have changed, teaching methods have not. Yet this is a vital—if daunting—aspect of reform. No education system can hope to foster choice, autonomy, and accountability unless it first acquires these characteristics itself.

# Improving health

The primary aim of health policy is to improve citizens' health. Health is determined by a whole range of factors, of which health care is only one. Subsidiary objectives of health policy include ensuring equitable access to health care; producing the quantity, quality, and mix of health interventions (including preventive care and health education) that can bring about the greatest improvement in health (external efficiency); running medical institutions as efficiently as possible (internal efficiency); and financing health interventions efficiently and equitably.

Health during transition. Is transition bad for health? Two conclusions emerge: fast reform has not necessarily been unhealthy; and slow reform—or no reform—has not halted the long-run deterioration of health seen in many countries.

Infant mortality rates have dropped and life expectancy has increased in all of the advanced reformers in CEE countries. Infant mortality in Poland fell from 19.1 to 13.4 per 1,000 live births between 1989 and 1995, and life expectancy increased by one year for men and six months for women. The same, broadly, is true of the Czech Republic and Hungary. Elsewhere among the CEE countries, the picture is

more mixed. For example, there has been a significant increase in low-birth-weight babies in Bulgaria, Romania, and the Slovak Republic. This is due to a combination of poor diet, stress, smoking, and excess alcohol consumption during pregnancy—risk factors that have all increased during transition.

In much of the NIS, the long-term trend toward higher mortality rates accelerated, particularly for men. The most dramatic change was in Russia, where, between 1990 and 1994, life expectancy fell from 64 to 58 vears for men (Chart 2), and from 74 to 71 years for women. The decline may have stabilized; in 1995, men's life expectancy remained static, while women's actually rose by a year. The largest increase in mortality rates (about 50 percent) was among men aged 25 to 54-for older men mainly because of an increase in cardiovascular disease, for younger men mainly because of accidents, suicide, and murder. Adult mortality is now 10 percent higher in Russia than in India. Similar, though less dramatic, increases in mortality rates have occurred in the other European NIS.

Defective data are unlikely to be behind the increase in mortality rates. A second explanation—that transition is a direct cause of higher mortality rates—is the subject of continuing investigation. However, two factors can undoubtedly be considered partial contributors. The first is substance abuse. Alcohol consumption was significantly reduced during the Gorbachev campaign to curb abuse during 1985—88; however, relaxation of the campaign in the late 1980s coincided with rising mortality rates. The second factor—less well

documented but supported by extensive observation—is a decline in the quality of, and access to, medical care over the past five years, which has increased mortality rates for those with serious injuries and cardiovascular emergencies. Transition may have aggravated both factors. It is easy to imagine a link between declining living conditions, greater uncertainty and stress, and alcohol consumption. Deterioration in law enforcement, particularly with respect to alcohol production and road safety, increases the risk of injury.

Maternal mortality dropped dramatically in the CEE countries between 1990 and 1995 but increased slightly in the NIS, where mortality rates are now about four times higher than the European average. The situation deteriorated considerably in the Central Asian republics between 1988 and 1991. The major causes include lack of contraception, high abortion rates, deteriorating socioeconomic conditions, and inadequate health services. Abortions are a particular problem, illegal abortions an even greater one.

The story in China has generally been very different, although parallels are now beginning to emerge. China's health status by the end of the 1970s was remarkably good compared with countries at similar income levels. Health gains, though partly the result of sound health policies, were largely due to the positive effects of rising incomes on diet, education, access to clean water and sanitation, and the like. Recent analysis suggests that these gains—at least as indicated by mortality rates for children under the age of five—tailed off in the early 1980s. This downturn in health performance, relative to China's income level, coincided with changes in rural health policy that dramatically reduced access to collective insurance. As a result, rural access to health care is a major problem, particularly for the absolute poor, and health conditions are far worse for China's poorest than for less impoverished Chinese.

Policy directions: how can health be improved? Health depends on four groups of factors: income, lifestyle, environmental pollution and occupational risks, and the quality of available health care. Of these, income and lifestyle are by far the most important.

Life-style choices are central. The single largest contributor to the health gap between Eastern and Western Europe is cardiovascular and cerebrovascular disease—heart attacks and strokes—for which the main risk factors include

excessive consumption of alcohol, smoking, obesity, unhealthy diet, and lack of exercise. All these factors—especially smoking, the single most important factor—are more prevalent in the CEE countries and the NIS than in industrial countries. In the third quarter of 1995, Lithuanians spent 4 percent of GDP on alcohol and tobacco, compared with 2.1 percent on health care. Policies that can be adopted to reduce these risk factors include taxation to discourage consumption of alcohol, tobacco, and unhealthy foods, and legislation on alcohol, tobacco advertising, and food labeling. Other critical measures that can be taken include educating the public about diet (the benefits of reduced consumption of alcohol, fat, and salt, and of increased consumption of fruit and vegetables), exercise, and the risks of smoking and other dangerous behavior.

Pollution and occupational risks are also widespread in these countries. In the "Black Triangle," where Germany, the Czech Republic, and Poland meet, about 6.5 million people are exposed to very polluted air. That said, cigarette smoke does more damage to health than smokestacks, highlighting the importance of individual behavior. Unhealthy environments and behavioral risk factors are both particular afflictions of the poor and the undereducated. As with other social policies, improving health will require focusing on the most disadvantaged groups, disseminating information, and maintaining equitable access to health care.

Health services under the old regimes were strong on preventive health care, especially immunization. Too little priority has been given to maintaining this impressive record in prevention. This is not to say that curative health services—primary health care and hospitals—should be neglected. Though they have a smaller direct impact on life expectancy than public health measures, procedures such as a hip replacement or the removal of a cataract can greatly enhance the quality of life.

Improving the delivery of health care. The quantity, mix, and quality of health services all need reform. Curative health services in the CEE countries and the NIS are still almost as inefficient as they were in the days of central planning. In the NIS, people can admit themselves to hospitals; this leads to long stays for nonclinical reasons (21 percent of the population in Russia spent time in the hospital in 1993, compared with 16 percent in the industrial countries and about 10 percent in middle-income countries). Hospitals have too many doctors, and hospital funding is related to inputs, such as the number of

beds, rather than to treatment given or to health outcomes, so hospital managers try to have large numbers of beds even if they are empty.

Financing health care. How should transition countries pay for their health care? In market economies there are four approaches. Out-of-pocket payments remain the main form of health finance in the very poorest countries, which have neither the tax revenues for public funding nor the institutional capacity for insurance. The main source of health finance in many countries is social insurance; in others, it is tax funding. Private, for-profit insurance is important only in the United States.

There is a reason for public funding of health care. Much medical care is too costly for out-of-pocket payments; there is thus a need for some kind of insurance. Private insurance, however, can lead to gaps in coverage (because of uninsurable risks) and to exploding costs. The United States suffers from both problems. About 17.5 percent of US citizens below retirement age have no insurance—but total spending on medical care in 1994 absorbed over 14 percent of GDP, a much higher fraction than in any comparable country (the United Kingdom spent 7 percent of GDP). To contain costs and promote access, industrial countries have increasingly financed health care through taxation, social insurance, or a mixture of the two. Although this type of financing is not without problems, many of the transition economies have already switched from using taxes to pay for health care to using social insurance, and many others are considering doing so.

Alongside the question of how to raise revenues is the separate issue of how to pay doctors, hospitals, and other providers (the expenditure side). Fee-for-service payments create an incentive to oversupply-for example, doctors have an incentive to prescribe more treatment, and if the insurance company pays most of the costs, patients have no incentive to limit the amount of treatment they receive. The resulting cost explosion has been a problem in almost all countries where fee-for-service payments are a significant part of health finance. Paving medical providers has triggered a series of problems in the CEE countries and the NIS—not least, runaway expenditures. In 1992, the Czech Republic introduced a fee-for-service system without the necessary regulatory structure, resulting in an entirely predictable—and predictedspending overrun.

How to make funding and delivery compatible. Cross-country experience

yields some clear lessons about how different methods of funding and delivery should—and should not—be combined. First, access and cost containment are both assisted by a substantial reliance on public, rather than private, funding. Second, health services can be delivered effectively by private providers for profit, by private nonprofit providers (often nongovernmental organizations), by the public sector, or by a combination of these. Third, different approaches to funding and the different types of delivery cannot be mixed indiscriminately. One compatible package is tax funding of health care provided by the state. Another is public funding combined with private, fee-for-service health care and regulation to contain expenditure (this last element is critical).

The political economy of reform. While all available evidence suggests that the way to improve health is through higher living standards, improved lifestyles, preventive action, and basic health care, the medical profession tends to be more interested in state-of-the-art techniques and the hospital sector. The medical lobby in many of the transition economies is powerful. In the CEE countries and the NIS, unlike in the West, the health minister is often a medical doctor, as are many parliamentarians. As a result, the ministry of health can easily become the ministry of the health profession. Here, as elsewhere, policymakers ignore at their peril the politics of reform. F&D

This article is based on Chapter 8 of the World Development Report 1996: From Plan to Market, Oxford University Press for the World Bank (New York).

Suggestions for further reading:

Richard Feachem, 1994, "Health Decline in Eastern Europe," Nature Vol. 367 (6461), pp. 313–14.

Stephen P. Heyneman, 1994, "Education in the Europe and Central Asia Region: Policies of Adjustment and Excellence," World Bank, Europe and Central Asia Region, Internal Discussion Paper, Report No. IDP-145 (Washington).

Bruno Laporte and Julian Schweitzer, 1994, "Education and Training," in Nicholas Barr (editor), Labor Markets and Social Policy in Central and Eastern Europe: The Transition and Beyond (New York and Oxford: Oxford University Press). (Also in Hungarian, Romanian, and Russian.)

Alexander Preker and Richard Feachem, 1994, "Health and Health Care," in Barr, ed. (1994).