The Current State of Health Care in the Former Soviet Union: Implications for Health Care Policy and Reform

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ABSTRACT

Objectives. Given the many profound health care problems facing Russia and the other former Soviet republics, there are a number of fundamental policy questions that deserve close attention as part of the reform process.

Methods. Summary data regarding Soviet health care issues were drawn from government agency reports, scholarly books and journals, recent press reports, and the authors' personal research.

Results. Smoking, alcohol, accidents, poor sanitation, inadequate nutrition, and extensive environmental pollution contribute to illness and premature mortality in Russia and the other newly independent states. Hospitals and clinics are poorly maintained and equipped; most physicians are poorly trained and inadequately paid; and there is essentially no system of quality management. While efforts at reform, which emphasize shifting to a system of "insurance medicine," have been largely unsuccessful, they have raised several important policy issues that warrant extensive research and discussion.

Conclusions. Without considering the implications and consequences of alternative policy directions, Russia and the other states face the very real possibility of developing health care systems that improve the overall level of care but also incorporate limited access and escalating costs. Russian health care reform leaders can learn from the health care successes in the West and avoid repeating our mistakes. (*Am J Public Health.* 1996;86:307–312)

Introduction

As we are learning in the United States, reforming an errant health care system is not easy. Our problems, though, pale in comparison to those of Russia and the other newly independent states that once made up the Soviet Union. Each is attempting to resurrect some sort of systematic structure from the ruins of Soviet health care.

How should these states organize their new health care systems? How should they reconcile conflicting needs for medical care services and public health improvement? How can these fledgling democracies avoid the traps that an unregulated market economy holds for health care and other basic human services, the very traps we are struggling to overcome in this country? These types of questions deserve close scrutiny in the often chaotic environment of post-Soviet health care.

Historical Background

Soviet "socialized medicine" was born in the turmoil of the Bolshevik Revolution of October 1917. Lenin and the Bolsheviks inherited a country that was economically ruined and militarily on the verge of collapse. The very stability and existence of the new regime was undermined by epidemics and pandemics that found a ready target in an already malnourished and impoverished people.[1] In 1919, at the height of the epidemics, Lenin bluntly stated: "Either the louse defeats socialism or socialism defeats the louse."[2(p6)] Thus, the first priority of the new regime was the struggle against epidemics through preventive measures.

The subsequent history of Soviet medicine may be divided into two phases.[3] The first, which spanned the decade of the 1920s, tended to be dominated by the Marxist perception that illness was a product of a "sick" (i.e., capitalistic) society and that socialism would rid society of the pathologies of the old order, such as alcoholism, prostitution, drug abuse, and poor industrial hygiene.[4] This orientation deemphasized the scientific and clinical approach to illness and produced physicians poorly trained in modern methods.

This period came to an end by the end of the decade with Stalin's decision to collectivize agriculture and industrialize the Soviet Union under forced draft. At that point, the health system adopted more of a scientific approach to care, its function being to maintain the working capacity of the labor force.[5] Health care was defined as a right of citizenship and became a public service provided by the state, with all health personnel being state employees. The system was highly centralized, bureaucratized, and standardized. Services were free to patients, provided in state-owned facilities, and financed by the state budget and payments from industrial enterprises. Professional associations of physicians were eliminated.

Government leaders placed heavy emphasis on training large numbers of doctors and providing large numbers of hospital beds. In this rush to expand the system, however, the leaders paid little attention to the quality of personnel or facilities. As part of the overall scarcity of consumer goods and services that developed in the Soviet economy, there also

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developed an elaborate system of stratification in the availability and quality of health care services. The best care was reserved for those of the highest occupation or political rank.

During the years of stagnation that characterized the Brezhnev period (roughly between 1964 and the early 1980s), the health care system was beset by a series of increasingly serious problems. These were revealed during the period of *perestroika* and *glasnost* introduced by Mikhail Gorbachev in 1985. According to Evgenii I. Chazov, Gorbachev's first health minister, the health system had severely deteriorated and suffered from an increasing lack of funds.[6,7] In the years that preceded the collapse of the USSR, the Soviet Union was the only major country where the percentage of the gross national product going to health care decreased. Although the Soviet Union boasted more physicians and hospital beds (both absolutely and per capita) than any other country, Chazov often found their quality to be abysmal, well below world standards. Corruption, including bribery in the admission and graduation of physicians (a shocking proportion of whom could not perform the simplest medical procedures), had permeated the entire system. Largely as a result of the very low salaries they drew, some health personnel demanded large sums of money from patients to provide services they were supposed to provide for free. A shortage of pharmaceuticals and other medical supplies intensified, leading often to gray or black markets. And on top of all this, the system was paralyzed by a suffocating bureaucracy and a command mentality.[8]

Conditions in the health care system have since been exacerbated by the economic and political problems that followed the collapse of the Soviet Union. The failure of the state-run health care system is what impels many in the newly independent states to turn toward more "market," "private," "competitive," or "capitalistic" solutions in the often naïve hope that these will automatically provide answers to the many and complicated difficulties. Unfortunately, these solutions, often encouraged by Western advisers, are not necessarily appropriate under post-Soviet conditions. The health care solution for these new entities cannot be found in isolation from the other social, economic, and political problems that face the former Soviet Union.

The Health Status of the Former Soviet Republics

A number of Western scholars have looked closely at the problems in health and health care in the former Soviet Union.[9–15] In the 1970s, Russia was unique among postindustrial societies in having a declining life expectancy and a rising infant mortality. While interpretation of these data is complicated by problems in the way earlier data were reported,[16,17] it is clear that Russia and the newly independent states continue to face severe health problems.*

In 1990, infant mortality in Russia was reported as 17.4 per 1000 live births; for the first half of 1993, it was 18.8.[18] The Russian computation of infant mortality is different from the one accepted internationally by the World Health Organization (WHO). If WHO standards are applied to Russian figures, infant mortality should be increased by 20% to 25% and should reach a level of 24 to 25 per 1000 births in 1994. (Figures for other former republics range from a low of 14 in Estonia and Lithuania to a high of 56 in Turkmenistan and 50 in Tajikistan.[19]) In 1990, male life expectancy at birth in Russia was 63.8 years, 10 years less than in countries in Western Europe.[20] Between 1992 and 1993, it declined by an incredible 3 years, from 62 to a low of 59 years.[21]

Currently, respiratory, infectious, and parasitic diseases account for nearly half of all infant deaths in Russia, compared with less than 10% of such deaths in the United States. Adult deaths from infectious diseases are 10 times higher in Russia than in Western countries.[22] Alcohol is associated with 20% of premature adult deaths. The major causes of maternal deaths are toxemia, infections, hemorrhage, and hepatitis.[23] Even in the relatively affluent Baltic states, the principal needs for improving pediatric health are vitamins and vaccines.[24] On top of these problems, current leaders and planners face environmental pollution of enormous proportions.[25(p1)]

The leading causes of premature deaths in Russia are trauma, poisoning, respiratory diseases (often due to smoking), and complications of pregnancy and childbirth. A report presented in 1993 to President Boris Yeltsin and the Security Council of Russia urged that top priority for improving the health of the population be given to reducing the socioeconomic and ecological causes of disease, with a lower priority for improving the medical care system.[26] In 1992, WHO recommended that priority be given to improved sanitation and maternal and infant care over investments in medical technology and medical care services.[27]

The newly independent states inherited medical care systems that were in a chronic state of disarray. In the final years of the Soviet Union, national health care budgets were in the range of 3% to 4% or even less (accurate figures were never available) of gross domestic product (GDP).[28] Of this amount, as much as half went to finance the "fourth department" of the Health Ministry that provided care exclusively to political elites, who accounted for less than 1% of the population. The remaining 99% of the population got by on 1.5% to 2% of GDP for health care (personal communications, health care administrators in Moscow and Tallinn, 1989). No accurate figures exist for the percentage of GDP currently allocated for health care in Russia.

Most hospitals and clinics continue to be in a poor state of repair; many rural hospitals still lack adequate plumbing. At the time of the Soviet collapse, supplies of sterile needles, syringes, gloves, intravenous tubing, dressing supplies, surgical instruments, and basic medications were sufficient to meet only 10% to 20% of need. While supplies have increased somewhat, severe shortages continue to exist. As recently as May 1994, a major medical facility in Moscow was unable to provide intravenous hydration to a seriously ill patient (a physician!) because of a lack of intravenous tubing and fluid.[29]

Before the collapse, in many areas of the Soviet Union, abortion was the only form of birth control available.[30] Many women had multiple abortions, often under painful and stressful circumstances. (The severe shortage of medications included local anesthetics.) In 1992, government programs called for the purchasing

*In addressing current problems in the newly independent states, we focus our discussion on Russia. However, the problems we identify and the policy issues we raise apply generally to all the states. From the relatively affluent and stable Baltic states to Ukraine, Georgia, and the Central Asian republics, the legacy of the Soviet health care system persists. Movements toward insurance medicine exist in most if not all the states; problems of ensuring access and improving quality vary only in degree. Yet it is doubtlessly true that each of the states has its own unique problems, with differences in domestic politics and available resources. One of the jobs of health policy scholars, then, is to identify these differences and to understand the different paths health care reform is taking in the various regions of the newly independent states.

or production of 35 million packages of birth control pills, funded by the federal government. By 1993, none of these had yet appeared,[31] and more than 3 million abortions were still being performed in Russia.

While physicians were plentiful in number before 1992, their typical skill levels were rudimentary by Western standards. With physicians' professional associations outlawed, there was no system to monitor the quality of care. Physicians worked for salaries less than that of a typical factory worker. Today there still is no effective organization of physicians in Russia, and physicians' attempts to win concessions from the government through organized work stoppages have been largely unsuccessful.[32] With wage increases failing to keep up with inflation, many physicians are worse off now than they were before the Soviet collapse. In 1994, one observer reported that, of the increasing funds for medical care, "virtually nothing is getting to physicians.... Physicians have nowhere to go; most of them are civil servants, live on patients' tips, and keep quiet."[33(p7)]

Health Policy Issues Warranting Discussion

In Russia, political infighting continues to hamper meaningful reform of major social institutions, including health care.[34–38] Before health care reform proceeds much further in this chaotic environment, it is crucial that fundamental questions of health policy, of the consequences of alternative means of achieving established ends, and of the continuous evaluation of health care reform efforts be discussed. It is the intent of this paper to outline some of the issues that should be included in such a discussion.

Public or Private Responsibility for Health Care?

Under the Soviet system, health care was totally a government responsibility. While a few semiprivate clinics were authorized in the Gorbachev years, physicians and other health care professionals were otherwise employees of the state, with working conditions, salary, and professional certification all controlled by the state apparatus. To many in Russia and other former Soviet republics, the abysmal condition of the health care system was equated with government responsibility for health care.

The World Bank's recommendations for health care reform in formerly socialist countries emphasize private finance of health insurance and expansion of the private delivery sector.[19(pp156–171)] Such a system of "insurance medicine" is seen as a way to attract enough additional funds from private firms and individuals to expand the health care sector of the economy.

It is understandable that, with the experience of Soviet medical care fresh in their minds, many patients, politicians, and professionals in Russia wish to get as far away as possible from any government involvement in health care. Although the specifics of privatization proposals vary somewhat from republic to republic, the prospect of getting the government out of the health care business seems to be widely appreciated. A common goal is for physicians to work in some sort of private, nongovernmental group practice and for care to be financed through insurance funds. In Russia, these funds are seen as being employment based, with separate government funding for the elderly and the uninsured.[28,39–41]

Unfortunately, the Russian reform plan has encountered severe problems and seems to lack widespread support. While the plan was initially enacted in January 1993, funding for it did not become available until November of that year. Of the funds collected through a 3.6% employment tax on businesses, one third has been lost through inflation and an additional 29% was diverted into loosely controlled investment accounts; this left only about 40% of funds available to pay for direct medical services.[33] As a result, health care in Russia continues to be woefully underfunded, and many of the more affluent are turning to an increasing array of private health services, available only through cash payment.[33]

The picture that is emerging of contemporary Russian medical care is of a developing dual system: the old state system, facing chronic underfunding, and a second, poorly understood, loosely regulated system of better equipped and staffed private practices available only to those with the cash to pay the doctor's bill. (At one of the best Western-run clinics in Moscow, a routine examination costs US $150 and is only available to those who have paid a prior "membership fee" ranging from US $750 to $1500.[42]) Even the former "fourth department" of the government health service, including the best up-to-date facilities available principally to political elites, seems to be making a comeback.[43] Throughout Russian health care, entrepreneurs and opportunists are looking for ways to capitalize on the developing reforms.

Government reform plans similar to those in Russia are under way in Ukraine,[44,45] Lithuania,[46] Estonia,[47] and other newly independent states. Little has been reported about the success of these plans.

The rush to private insurance medicine is more a rush away from the previous Soviet system than it is a well-thought-out-policy direction. In particular, these proposals do little to address the issues of universal access and cost control. Policy analysts in Russia are beginning to recognize the historical problems Western markets have had in achieving these often disparate goals.[48] If health care in Russia and the other newly independent states is left to private practice and private medical insurance without consideration for cost, access, or quality, existing disparities in the quality and availability of health care services will widen. This is exactly what has already happened in the Czech Republic.[49]

Worldwide, most successful national health care systems involve joint participation by government and private interests. While the distaste for government involvement in health care is understandably based on historical factors, a jump to the other extreme of a fully privatized system without governmental influence may bring on a solution as bad as the original problem. The relative roles of public and private institutions in health care reform need to be thoroughly discussed and debated before Russia and the other states lock themselves into any particular economic model for the provision of care.

How Should Physicians Be Paid?

As a corollary of the distrust of government involvement in health care, physicians in Russia and the other former Soviet republics tend to equate working for a salary with low quality care. By shifting to a fee-for-service system of payment, it is felt that physicians will be rewarded for providing good care.

Even under the previous Soviet system, an unofficial system of fee-for-service physician payment became common. For example, most physicians in Soviet Estonia received extra payments from their patients in the form of gifts or cash tips on a fairly regular basis.[50] In Russia these types of supplemental payments to physicians, still called "thank you money," seem to continue.[33]

From a Western perspective, such payments to physicians are easily seen as

bribes to obtain preferential access to care. However, from a somewhat broader perspective they represent an unofficial fee-for-service mechanism that developed under the former Soviet system. It is understandable that there is pressure to extend and legitimize fee-for-service payment.

The current Russian reform plan relies on capitated payments to health care organizations but says little about how individual physicians should be paid. Before Russia embraces fee-for-service as the payment mechanism of choice, serious consideration should be given to possible adverse consequences of such a system. In the United States, the incentives inherent in such a system have been a major contributor to this country's escalating costs and provision of unnecessary care. Providing care on a fee-for-service basis costs one third more than comparable care provided on a capitation basis,[51] without yielding substantial differences in health outcomes.[52]

Expanding Medical Knowledge: Are Paper and Ink Still the Best Way?

In the United States and other Western countries, the storage and distribution of medical knowledge is done primarily through the use of paper and ink. Medical journals and textbooks are only rarely stored or accessed electronically although this is beginning to change.[53]

In the Soviet Union, Western medical journals and texts were largely unavailable to physicians until after the Soviet collapse, when there began an influx of these resources, most of them donated from the West and many of them older and out of date. Given the enormity of the task of attaining the general distribution of current medical knowledge on paper and ink, health policy analysts in the new states should seriously consider implementing electronic systems for the distribution of medical knowledge. As the Russian infrastructure is being rebuilt, among the first things that appear to be getting attention are the telephone and other communications systems. Except in rural areas, most Russian physicians work as part of large medical groups. Establishing central electronic libraries of medical knowledge and accessing this knowledge through terminals available at physicians' workplaces may prove to be a wiser investment than the comparable investment in paper and ink. In addition, electronic knowledge systems can be used in interactive formats to assist physicians in upgrading their clinical skills during actual patient care situations.

Establishing the Role of Citizen-Based Organizations for Providing Specialized Care

One of the biggest needs in nearly all the former Soviet republics is for alternatives to abortion as a means of contraception. In the United States and other Western countries, organizations such as Planned Parenthood have played a major role in making contraception available to women, regardless of income. Similarly, one of the most widespread epidemics throughout the former Soviet Union is alcoholism. In the United States and other Western countries, Alcoholics Anonymous and other self-help substance abuse treatment programs have been successful for many substance-dependent individuals.

Advocacy for the needs of the disabled was nearly nonexistent in the Soviet Union. While the interests of the disabled are now gaining strength under current reform efforts, resources still fall substantially short of needs. In the United States, organizations such as the World Institute on Disability have been quite successful in obtaining the services and resources needed to improve the quality of life of disabled persons. This institute in particular has developed cooperative working relationships with advocacy groups for the disabled in Russia[54] and recently received two large grants funded by USAID (CCN-0012-A-00-4134-00 and CCS-001-A-00-2022-00) to pursue its work with the population.

Not all health care has to come through traditional medical care systems. Policy analysts addressing the health needs of the former Soviet republics must consider including citizen-based health care organizations such as those mentioned above in any health care reform efforts.

The Social Role of Pharmaceutical Manufacturing Companies

There is general consensus that the production of pharmaceuticals, vaccines, and other medical supplies throughout the former republics must be expanded.[22–24,55] Previously, the Soviet Union relied on cooperative arrangements with Eastern European allies for the production of these needed commodities, never developing a large medical manufacturing base of its own. With these external sources now no longer available, Russia must rapidly establish the capability to produce its own needed medicines and supplies.

WHO has compiled a list of the "highest priority vaccines, drugs, and supplies" needed in the newly independent states.[56] Most, if not all, of the drugs on the list are standard generic formulations, available for manufacture without patent protection. Many of these drugs will be more readily available now that the Russian Ministry of Health has adopted policies that accept US Food and Drug Administration approval of specific drugs as sufficient to meet Russian requirements for import and sales. However, recent experience suggests that political and economic infighting may continue to impede the availability of much-needed medicines.[57,58]

In the words of representatives of Western pharmaceutical manufacturers exploring the possibility of investing in the former Soviet republics, "Western companies have a duty to their shareholders."[59(p35)] It is reasonable to expect that Western pharmaceutical manufacturers will consider profit motives as well as public health priorities in establishing joint import and manufacturing enterprises. In entering the markets of developing countries, drug companies often emphasize higher-priced proprietary drugs rather than lower-priced generic alternatives. In Russia, however, local manufacturers who do produce less expensive generic formulations lack a reliable system of quality control. Western companies can make a convincing argument that their higher quality justifies a substantially higher price.

As in other areas of health care reform, going from one extreme (the socialization of all drug manufacturing) to the other (full privatization of drug manufacturing) carries with it potentially adverse consequences. It might be possible to establish a hybrid role for drug companies, much like that for public utilities in the United States, in which a reasonable level of profits is assured but quality and prices are scrutinized regularly to ensure the optimal use of extremely scarce health care resources for the common good.

Reforming Medical Education

The former Soviet system of medical education was rigid and centralized, lacking adequate teaching faculty, educational managers familiar with world educational standards, and a comprehensive vision of the role of medical education in the health care system and society.[60]

Medical schools—even the higher-quality ones in Moscow and Leningrad—generally were freestanding institutions not affiliated with a university.[12]

The medical school admissions process relied heavily on personal favoritism; examinations were perfunctory. Medical school administrators were expected to meet established quotas in training new doctors without general regard to the quality of the education. In 1987, Dr Chazov asserted that a disturbing proportion of physicians practicing in the Soviet Union lacked basic medical skills and knowledge.[61(p19)]

As weak as the Soviet system of medical education was, the system of training individuals in health policy, research, and management was even worse. There were no schools of public health in the Soviet Union.

The collapse of the Soviet Union left Russia unprepared to operate a system of medical education that comes close to Western educational standards. Various initiatives from abroad are now being launched to help overhaul and modernize that outmoded system. This complex and demanding task will involve several important policy questions.

1. Should medical schools be formally affiliated with universities or remain as freestanding institutes?
2. On what basis should medical school faculty be selected and promoted?
3. Should the medical school curriculum separate preclinical and clinical training?
4. Should all medical school graduates be required to take formalized postgraduate training (i.e., a residency)? If so, for how many years?
5. Should medical schools limit the number of graduates? If so, to what level and by what means?
6. What educational requirements should be established for physician certification and licensure?
7. How should formalized programs of continuing medical education for physicians in practice be established and monitored?

Training Health Policy Experts and Health Care Managers

Finally, it is necessary to see to the training of the scholars, researchers, managers, and public officials who will carry out the health care reforms in the newly independent states. Several excellent programs to train policy and management experts in health care exist at US and other Western universities. Full consideration must be given to broadening government as well as private programs to make their resources available to current and future leaders of health care reform in all the newly independent states.

Conclusion and Recommendations

Improving the health of a society while also supporting the development of stable democratic institutions is far more complex than simply expanding and improving systems of medical care. In the words of the World Bank's *World Development Report 1993,*

> Health sector reform is a continuous and complex struggle. Neither the government nor free markets can by themselves allocate resources for health efficiently.[19(p165)]

The responsibility for those who establish health policy in the newly independentent states, and for the researchers and analysts who assist them, is to consider fully the strengths as well as the weaknesses of alternative models of national health care, and to ensure that scarce resources are invested where they will provide maximum return. To this end, we offer the following recommendations.

1. Organize regular meetings to discuss health policy issues. These meetings could provide a structured forum for discussion and debate of such fundamental yet difficult questions of social policy as those we have outlined. Participation could include physicians and health officials from the former Soviet republics, representatives of international health organizations, and health policy officials and researchers from Western countries. Consensus achieved at these meetings could be an important guide for the fledgling legislatures and ministries that are attempting to establish patterns of legitimate governmental authority in health care. These meetings would also allow Western scholars to gain a better understanding of just who the important organizations and individuals are in the current political struggle over health care reform in Russia and the other states. Additionally, these meetings could facilitate the formation of effective autonomous professional organizations for Russian physicians. Recent experience in the Baltic states, where such organizations have rapidly emerged, has demonstrated the importance of such organizations for the reform process.

2. Facilitate the publication of scholarly articles on post-Soviet health care reform. To get the issue of post-Soviet health care reform into the public forum, scholars need the means of publishing the results of their research. Established journals with wide circulation that regularly include articles addressing health policy issues should take steps to facilitate the publishing of high-quality papers on post-Soviet health care.

3. Coordinate and focus funding from private foundations and government agencies. Too often, social policy reform and health care reform are seen as separate issues. A prestigious philanthropic foundation in the United States explained its granting policy by stating,

> We have decided to focus our work in the former Soviet Union and Eastern Europe on legal and political reform and social and economic policy. We do not support work on health issues in the region.

Addressing key questions of health policy should be an integral part of the formation of basic social and economic policy. It is of the utmost importance that funding agencies, both public and private, recognize the importance of addressing post-Soviet health policy issues in a timely manner. In addition, agencies within the US government need to communicate with each other to coordinate policies and priorities for funding health policy studies and projects involving the newly independent states of the former Soviet Union.

4. Establish a permanent center for health policy research and education. A permanent center for health policy research and education located in one of the new states could facilitate cooperative efforts in addressing these and other health policy issues. Affiliated with a major university, such a center could develop the ongoing research efforts necessary to monitor and evaluate changes in health and health care as they proceed. Only by gathering accurate data about the reform process throughout the newly independent states can a full understanding of that process be achieved. □

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