

Health Care, Medical Practice, and Medical Ethics in Russia Today

Barrie R. Cassileth, PhD; Vasily V. Vlassov, DrMedSci; Christopher C. Chapman

FOR DECADES Russian leaders sacrificed health care to the financial and human resource needs of military and space efforts. Centralized and government controlled in every respect, Soviet health care became disjointed, inequitable, and inadequate.¹ Presumably egalitarian, the health care system was in fact strictly hierarchical. Bribery to obtain better quality care was common. Physicians had access only to Soviet medical literature. The government concealed information about scientific and clinical advances produced outside of the Soviet Union from most physicians and the general public. Limited information was available, but only in restricted areas of selected central libraries in Moscow and Leningrad (now St Petersburg). Concurrent environmental pollution, alcoholism,² tobacco addiction, and poor nutrition led to public health crises of major proportions.³

For editorial comment see p 1622.

Soviet leaders withheld internationally accepted standards of medical ethics, human rights, and patient protection. Thus, Soviet medical ethics did not protect patients from being used in medical experimentation without their consent or knowledge. Other abuses of patients' rights also occurred. Human subjects, for example, were used in aerospace experiments without their permission, explanation, or indication of their right to decline.^{4,5} The Nuremberg Code did not appear in print in the former Soviet Union until 1993⁶; only then was the principle of subjects' rights officially acknowledged. That same year, the concept of patients' rights to receive information about their illness and treatment, to decline therapy or experimental care, and to play a role in treatment decisions was introduced officially.

Although political turmoil in Russia continues to impede national health system reform, linkages between Russian scientists and members of the international medical community have been established.⁷ Russian physicians actively seek previously unavailable information and contacts with the West, where government and private efforts have been extended to facilitate such collaborations and interactions. In this article, we attempt to broaden understanding of medical care in Russia and shed light on current transitional efforts to help foster interest and promote scientific interaction. Such urgently needed collabora-

tion can assist willing Russian physicians and health system reformers gain the knowledge needed to counter the massive public health and medical problems that confront Russia today.

Health Status of the Russian People

Poor medical care, inadequate diet, environmental pollution, and lack of public health efforts contribute to life expectancies in Russia that have declined steadily since the late 1980s and that are lower than those of all major industrialized countries.^{8,9} The average life expectancy at birth is now 59 years for men and 72 years for women.¹⁰ According to data gathered in 1988 by the State Statistical Committee of the former Soviet Union,¹¹ mortality in Russia was attributable primarily to cardiovascular disease (57%), cancer (18%), and trauma (10%).^{11,12} Trauma included injuries, traffic fatalities, homicide, suicide, and fatal alcohol poisoning syndrome. Approximately 17 000 people were reported to die from acute alcohol poisoning in 1988.¹²

The high mortality rates and abbreviated life expectancies contribute to Russia's population decline, as does the low birth rate. In 1992, births exceeded deaths in Russia by 184 000.^{10,13} In 1993, deaths exceeded births by nearly 800 000.¹¹ Abortion is the most common form of birth control used by Russian women today.¹³

The Ministry of Health faces the looming challenges of a population on the decline, falling average lifespans, rising rates of infant and maternal mortality, increased childhood illnesses, inadequate nutrition, and the spread of previously controlled infectious diseases.¹⁴ These problems must be addressed in a formidable context of scarcity. They must also be addressed while implementing procedures to elevate and standardize the quality of medical care delivered throughout Russia and attempting to comply with recent mandates to develop, for the first time, insurance-based payment systems¹⁵ and ethical requirements to protect patients' rights.

The Health Care System

Soviet leaders deemed the availability of universal access to health care at no charge a major Soviet achievement. The Communist party program of 1919 mandated egalitarian access to free, high-quality medical services, and a state health care system led by the People's Commissariat for Public Health was established to implement the policy.¹⁶ The system that eventuated, however, deviated radically from this ideal. A complex, stratified system of health care developed under the Soviet regime and continues today. Its facilities ranged from hospitals available exclusively for the elite, to primitive regional hospitals, to physician assistants providing most rural area care. Such stratification along with the combina-

Edited by Annette Flanagan, RN, MA, Associate Senior Editor.

From the Department of Medicine, University of North Carolina at Chapel Hill (Dr Cassileth), the Department of Community and Family Medicine, Duke University School of Medicine, Durham, NC (Dr Cassileth), and the Department of Aerospace Medicine, Saratov Medical University, Saratov, Russia (Dr Vlassov). Mr Chapman is a research assistant for Dr Cassileth.

Reprint requests to 8033 Old NC 86, Chapel Hill, NC 27516 (Dr Cassileth).

tion of extremes—excellent modern facilities for the wealthy and native healers to treat the poor—is also common in parts of Africa, China, and other underdeveloped, highly regulated societies throughout the world.¹⁷ Distinctive to Russia, however, was the Soviet government insistence on the availability of universal access to sophisticated medical services.

In reality, high-quality care, modern equipment, and international scientific literature were available exclusively in *pokazivat* (show) hospitals: Moscow's vast and elegant marble-floored specialty medical centers. These facilities, originally created to demonstrate Soviet medical superiority, are available to Muscovites and occasionally to citizens from other parts of the former Soviet Union. Less well known is the hospital system developed as a special fourth department of the Ministry of Health (*Chetvertoe Glavnoe Upravlenie*). Secluded by high walls, these hospitals are found in Moscow and in regional centers throughout the former Soviet Union. They were exclusively for the use of party chiefs and even now are available only to the elite. Regional centers, then, contain at least two hospitals, one for the general population and the other for government officials. The hierarchy continues even within the hospital walls of the latter, as strict rules of differentiation govern the quality of medical treatment, food, and other aspects of hospitalization according to the patient's government rank.

However, physicians practice and most patients receive care in yet another hospital system—the typically large but primitive regional hospitals. In the sparsely populated provinces, *feldshers* (physician assistants trained to provide emergency or initial care) provide most of the health care. Feldshers are the only providers of health care to most people in distant provinces.¹⁸ Predominant outpatient services include freestanding clinics known as dispensaries, which are dedicated to a medical specialty such as dermatology or substance abuse, and polyclinics, which are the outpatient arms of the regional hospitals noted above.

The State Statistical Committee of the former Soviet Union reported in 1990 that 24% of hospitals lacked plumbing, 19% lacked central heat, 45% lacked bathrooms or showers, 49% lacked hot water, and 15% operated without any water at all.¹⁹ Most hospitals are poorly equipped and have inadequate supplies even of rudimentary medications and other basic necessities such as antibiotics and bandages. Medical care is dependent on imported medications, as some Russian pharmaceutical companies are bankrupt and domestic production of many drugs falls far short of demand.²⁰ For example, a local anesthetic or ether may be used, or surgery may be postponed for lack of appropriate anesthetics. These extreme shortages and a medical system resembling that of many undeveloped countries encourage use of unorthodox therapies and discourage use of medical services.

The Practice of Medicine

In 1990 the Soviet Statistical Committee reported that Russia had 1 305 000 physicians, which included 42 000 *zubnie vrachi* (dentists).²¹ In the United States, there is one physician for every 404 people and one hospital bed for every 198 people.⁹ Great Britain has one physician per 611 people and one hospital bed per 138 people.⁹ In Russia, these ratios are one to 259 and one to 72.¹⁰ Additionally, Russian physicians have lower levels of training and educational requirements when compared with those in the United States and Britain.

Russian physicians are paid approximately \$24 per month on

average—less than bus drivers and less than half the average salary of industrial workers.^{22,23} Most physicians (76%) in Russia are women.²⁴ The preponderance of women in medicine is deemed both a result and a rationale for the meager wages, the latter because husbands' incomes are assumed to augment the low salaries. Physicians' wages, however, are no better for men or for senior physicians of either gender, regardless of medical specialty. For example, the monthly income of a thoracic surgeon ranks just above the official poverty line (60% of salaries earned by cleaners in the metro station) and the chief of nephrology at Russia's best children's hospital uses his car as a taxi and earns in 4 days what he makes as a physician in 1 month.²⁵

Bribery remains a common business practice throughout Russia, including the health care arena. Many patients use bribery to gain access to better physicians or superior facilities,²⁶ and physicians and dentists in Russia supplement their income with bribes and private medical practice or other earnings.²⁶⁻²⁸

Set by the state, the Soviet wage structure placed coal miners and other heavy industry laborers at the top of the scale and service workers such as physicians and teachers at the lowest extreme. The wage structure reflected Communist ideology and perceptions of the relative importance of various types of work to the economy and the state. Manual labor, exalted in heroic sculpture and prose, was prized substantially above intellectual and human service activity. These values and priorities are deeply rooted in Soviet culture, and many Russians still denigrate those who do not toil with their hands.

This prevailing value system contributes to the lack of respect afforded physicians, which in turn enhances the appeal of magician-healers and feeds public reluctance to seek timely medical care. Consequently, patients often present with advanced disease, a problem that contributes to the high and premature mortality rates that characterize Russia today. The cycle persists—public wariness of physicians; patients' delays in seeking health care; scarce availability of modern facilities, technology, and public health; inadequate clinical knowledge and care; and a profession that draws those willing to work into low-salaried, poorly esteemed jobs.

The oversupply of physicians compounds these problems, and the oversupply is seen by many as a sign of inefficiency: quantity trying to compensate for inadequate quality. An analogy can be drawn between Russian physicians and the many individuals called engineers in Russia who are actually technicians lacking the relevant knowledge, qualifications, and responsibilities of professional engineers.

Breaks in the cycle have begun. In 1988 under perestroika, Minister of Health Evgeniy Chazov, DrMedSci, introduced reforms to keep hospitals under state control while allowing them simultaneously to seek private revenue. These reforms were successful in some regions and represented initial steps toward changes in Russian medical care and financing. After strikes and strike threats, the government recently promised to double the salaries of physicians and teachers.²³ While actual salary increases have occurred inconsistently, the move is seen as promising. Further, the main goals announced in 1992 by the Ministry of Health included reducing the numbers and increasing the quality of both physicians and hospital beds.²⁹

Tightened entrance requirements and higher test scores for acceptance to medical training programs have been implemented.³⁰ Although required continuing education programs

have been in place, they often covered outdated information, and discussion of developing a system of quality assurance for physicians was not initiated until 1994.³⁰ This is a crucial step, because improved quality of medical practice is essential to enable optimal patient care, help Russia achieve a modern health care system, and counteract the widespread mistrust and lack of respect for medical care and physicians.

Public Perceptions of Health Care and Medicine

Patients often refuse hospital admission, decline needed surgery, and seek medical care after their disease has progressed to advanced stages.³¹ A survey of patients in oncology departments throughout the Vinnitsa region who were determined to need surgery for stomach cancer revealed an average refusal rate of 12.9%.³² Of 108 patients who refused surgery, 8% guessed or knew that their diagnosis was cancer and therefore decided treatment was useless. The others indicated that they had adapted to the discomfort of their disease or gave miscellaneous reasons for declining treatment.³²

The cost structure also contributes to delayed and refused care. Inpatient care is traditionally free, although some hospitals are beginning to charge fees. With the exception of treatment for some illnesses such as diabetes, tuberculosis, and some psychiatric disorders, however, outpatient treatment is not covered by the government. Consequently, patients willing to seek treatment prefer free hospitalization to initial or continuing outpatient care for which they must pay.

Reports of incorrect diagnoses, delayed diagnoses, and inadequate treatment are not uncommon.^{16,33,34} Inadequate treatment has been attributed to failure to refer patients to specialists,³⁵ but also may result from pessimism concerning the value of treatment for some illnesses. A recent survey of all 234 fourth-year and fifth-year medical students at Tver Medical Institute who had completed a course in oncology revealed that half considered cancer prevention ineffective and distanced themselves from patients with cancer, and 10% viewed cancer as contagious.³⁵ These views were common among the US public early in the 1900s.³⁶

Misperceptions of this kind persist in Russia, as the borders of scientific medicine have been blurred in clinical practice. The continued popularity of magic and nonscientific medical practices in Russia highlight the general mistrust of medicine as well as its unequal availability. For example, outside the major specialty centers in Moscow and St Petersburg, many physicians assume that iridology diagnoses and similar procedures are components of scientific medicine equivalent to radiologic diagnoses, antibiotics, or optical surgery.³⁷ Recognizing these and other problems that attend various aspects of medical practice, the Russian government has taken steps to confront them. In 1993, Decision 5488-1, a law covering major facets of health care practice in the Russian Federation, was adopted.³⁸

One article in the new law prohibited "mass healing events" as of September 18, 1993. Yet, millions of Russians still place bottles of liquids and creams in front of their television sets to be infused with curative powers through the screen by popular faith healer Alan Chumack.³⁷ Chumack also claims to send healing airwaves through daily broadcasts on Radio-I, the most widely received station in Russia and neighboring countries. Also, despite the prohibition, Russian faith healers offer mass healing events through countrywide tours. These *narodnyetseliteli* (faith or folk healers) must be accredited by

local health administrators in accordance with the new health legislation. As yet, however, there is no official regulation of this local bureaucratic process, and some fear that bribery may come to govern it.

The Ministry of Health might have difficulty enforcing the law against mass healing. Anatolii Kashpirovskii, a popular psychic, faith healer, and television hypnotherapist, was elected to the Russian Parliament in the December 1993 elections.³⁹ In 1990, the Communist party newspaper *Pravda* devoted a half page in support of this healer. According to a 1991 article written by Sergei Kapitza, then president of the Physical Society of the USSR and editor of the Russian edition of *Scientific American*, "the medical profession has voiced only feeble opposition, which can in no way countermand Kashpirovskii's huge popularity."⁴⁰

One of us (V.V.V.) talked with a woman who, following a diagnosis of breast cancer, sought treatment from a neurologist in Russia who claims to cure illness with the special energy released through his hands. We visited that neurologist, who explained that he moves his hands above the patient's body to detect "deformations of the biological field," the shape of which can then be corrected through transmission of his healing energy. After 10 months of this therapy, the woman was admitted to a hospital with widespread disease. Patients' use of such healers may contribute to delayed diagnoses, late treatment, and increased mortality rates.³⁷

Patients' Rights and Medical Ethics

Russia's public health system, ransomed to space and military endeavors, was created as a mirage for the outside world and a source of pride for its citizenry. A clinical system geared to optimize efficiency enabled these beliefs. Little information or choice was provided to patients, and protection of human subjects was withheld for many decades after it had become standard throughout the world. Soviet leaders emphasized quantitative aspects of health care to the detriment of quality. Current discussions of patients' rights and medical ethics in general symbolize attempts to reverse this emphasis.

The abuse of medicine necessary to support this system was permitted and perpetuated by Soviet deontology. Under Soviet rule, medical ethics was represented by deontology, the science of professional duties, ethics, and etiquette. The Soviet physicians' oath declared one's obligation to defend the interests of the state. The conflict between physicians' duties to patients and their duties to the state, intrinsic to deontology, often worked to the detriment of the patient. Use of psychiatry to quell political dissent is a well-known example.^{41,42} In addition, under a fundamental deontologic principle, physicians were obligated to protect patients from knowledge of their diagnoses when potentially fatal illnesses were involved.⁴³

A long time may elapse before Russian physicians become comfortable with the 1993 law that mandates an opposite approach.³⁸ The law outlines patients' rights to know the illness for which they receive treatment. It grants, also for the first time, (1) patients' rights to confidentiality, (2) to see their test results and medical documents, and (3) to select their physicians, request consultation, and refuse treatment. However, medical practice remains inadequate in many respects. Confidentiality and other rights for patients testing positive for the human immunodeficiency virus, for example, are not uniformly respected.

The new law further mandates informed consent experi-

mentation (but only "free consent" to clinical trials) and ethics committees for hospitals. "Free consent" involves obtaining approval from potential subjects to participate in a study, with no explanation of the study provided. Guidelines for obtaining informed consent have yet to be developed in Russia. Russia's first ethics committees, established only in 1993, will confront the need to develop such guidelines. To date, very few ethics committees exist in hospitals or elsewhere. Physicians and hospital administrators do not widely accept the mandate for ethics committees, and their formal role as part of clinical medicine has yet to emerge.

The 1993 law also acknowledges the public's right to information about their own health as well as information about environmental and other public health factors. The law prescribes punishment for withholding this information. Ethics committees and hospital review boards will have to become institutionalized facets of Russia's medical system to provide oversight and protection in these areas. Similarly, current implementation of physicians' professional societies, assisted by Western clinicians, may contribute to the acceptance of new bioethical emphases.⁴⁴ However, implementing informed consent regulations will require dramatic change. We conducted a review of all clinical research articles published in 1992 in *Voprosy Onkologii*, a major peer-reviewed oncology journal in Russia. Of 98 articles involving human subjects, not one mentioned consent or stated that patients agreed to participate in the study. A journal of similar reputation, *Chirurgiya* (Surgery), reported 135 studies involving human subjects in 1994, none of which mentioned consent.

According to a recent survey of oncology patients' attitudes toward knowing their diagnosis, this previously unknown level of openness may be welcomed and appreciated by many patients.⁴⁵ However, physicians may find such openness more difficult to accept. Russian physicians still do not communicate serious diagnoses to their patients and generally view obtaining consent for surgery as excessive and unnecessary.

When one of us (B.R.C.) spoke to physician audiences in Russia in late 1993, a description of communication patterns in cancer medicine in the United States was received with incredulity. Questions from the audience concerned whether physicians were available in the United States to perform euthanasia when cancer diagnoses are discussed with patients. Ironically, physicians are more comfortable discussing euthanasia than serious diagnoses, and they continue to assert the importance of presenting false diagnoses or none at all to "help patients form adequate mechanisms of defense."⁴⁶

Euthanasia of all kinds—active, passive, and assisted suicide—was banned by Decision 5488-1. However, euthanasia remains a subject of active debate in Russia.⁴⁶ Arguments presented by a strong proponent, pediatric surgeon S.Y. Doletskii, reflect the influence of economic factors. In a 1992 interview for a Russian newspaper, Professor Doletskii stated that he supports passive euthanasia for severely premature or disabled children to relieve the suffering of parents.⁴⁷ He and other physicians who support euthanasia criticize as impractical the expenditure of funds for the disabled when money is in short supply for infants and children free of defects and disabilities. The controversy continues.⁴⁸

Concurrent with the new law and its guidelines for the protection of medical patients and human subjects, the Russian Society of Psychiatry drafted a Code of Professional Ethics.⁴⁹ The extent to which the tenets of this code will

actually be followed is unknown, as it is "based on the humanistic traditions of Russian psychiatry and fundamental principles of defense of rights and freedoms of men and citizens."⁵⁰ The Code states that "every psychiatrist bears moral responsibility for the activities of the psychiatric services that he represents," and that diagnoses may not be based only on deviation from societal norms. Medical means of persecuting patients are forbidden. These and other key points provide needed projections and reflect attempts to correct the former ethical abuses of Soviet psychiatry.

Toward a Transition in Russia's Health Care System

The new codes and regulations, as well as the entry of Russian medicine into the international scientific community, already have produced substantial changes. Not all are deemed positive. As the United States struggles to address its own health care crisis, the Russian government is trying to overcome its financial crisis in health care by implementing that same US system. Free state medical care will give way to private medical insurance according to a 1991 law mandating "Medical Insurance for the Citizens of the Russian Federation."⁵¹

Although the insurance program has been successfully implemented in St Petersburg according to as-yet-unpublished official data, a similar shift to private insurance was problematic in Britain,⁵² and many believe that it will be even more so in Russia.⁵³ In Britain, significant opposition was voiced by many physicians who believed that health care consumers, rather than a lack of competition, caused the alleged inefficiency cited as the basis for reform. Thus, introducing market forces, they claimed, would not only fail to alleviate the problem of inefficiency, but would create new sources of inefficiency as well.

Not only medical care finance, but the entire structure of Russian health care is likely to undergo privatization. A draft proposal by the Ministry of Privatization would establish a semiprivate system of hospitals leased from the state and run by physicians.⁵⁴ Such semiprivate trusts, modeled after Britain's National Health Service, could establish partnerships with private companies. In addition, the draft proposal would allow physicians in polyclinics to function as private practitioners. The overall thrust of the ministry's efforts would introduce market mechanisms aimed at lowering reliance on inpatient care, promoting preventive care, and making providers more responsive to patients. These proposals may come before the Duma (the lower house of the Russian Parliament) later in 1995.⁵⁴

Bribery remains a problem in Russia. An insidious means of vitiating the Soviet ideal of egalitarian medical care, bribery has been a prerequisite to the receipt of good medical care, and sometimes to the receipt of any medical care. Thus, bribery sustained separate and unequal access to medical services. We hope Russia's new regulations and emerging ethical models of clinical medicine will help reduce this practice.

Some changes are more promising. Under Soviet rule, physicians able to travel to Moscow or St Petersburg could gain access to Western journals and texts. However, articles about patients' rights or bioethics in those journals were torn out or black lined. Today, Western medical journals are available and eagerly sought by medical libraries throughout Russia. In hospitals fortunate enough to afford them, the pages remain intact. Censorship is no longer enforced.

In addition, demands such as those from the Russian Academy of Sciences for adoption of US and European environmental standards, indicate a willingness to acknowledge and begin to correct the severe environmental degradation that is a major threat to public health.⁵⁶ It is hoped that action to alleviate Russia's air and water pollution¹³ will soon follow.

The first-time public exposure to the realities of Soviet medicine complicates the current transitional period in Russian health care. Many Russians as well as members of the international community are learning only now the full extent of human rights' abuses, the real meaning of Moscow's "show hospitals" and excessive numbers of Russian physicians, and the contrast between Russian health care and the substantially higher level of public health, medical technology, and care available in the developed world. This new awareness, along with Russians' pervasive mistrust and dissatisfaction with their health care system,¹⁷ should help foster necessary change.

Conclusion

Achieving a modern Russian health care system will require massive shifts in many areas of the culture simultaneously. These include implementing a more democratized structure; better access to care; the expansion of modern medical technology and facilities beyond a small number of hospitals; more selective acceptance of medical students and better training of physicians; professional and public education about health maintenance, bioethics, and physician-patient communication; broad public health measures; and continued access to information and events from other countries. Collaboration among Russian and international experts in management as well as science in each of these areas is needed and feasible.⁵⁶ Several examples of this collaboration already exist. They include "NISHEALTH," a computerized information clearinghouse that collects and disseminates information about the health care system and health-related assistance projects in the former Soviet Union and Eastern Europe. Other examples are the American Russian Medical Exchange and private and public partnerships between Russian and American health experts.⁵⁷

The United States and other countries have committed billions of dollars to assist Russia's shift from 70 years of Communism to a free and democratic society. Repairing the health care system represents a daunting challenge for the Russian government and Russia's medical leaders. Russia's efforts to create conditions consistent with its extraordinary cultural and scientific heritage will not succeed without attention to health care as a vital, basic component of the country's quality of life.

References

- Gellert GA. International health assistance for Eurasia. *N Engl J Med*. 1992;326:1021-1024.
- Fishbein JJ. *Do dna: alcoholism in the Soviet Union*. *JAMA*. 1991;266:1211-1212.
- Feshbach M, Friendly A. *Ecocide in the USSR: Health and Nature Under Siege*. New York, NY: Basic Books; 1992.
- Chugunova N. Without limitations [in Russian]. *Ogonyok*. 1991;43:6-7.
- Iseev L. The human subject in sealed capsule [in Russian]. *Med Gazeta*. April 8, 1994;27:6.
- Nuremberg Code. *Vrach*. 1993;7:56.
- Franz MJ. Thank you very much—it was great! [in Russian]. *Diabetes Educ*. 1991;17:466-469.
- Record high life expectancy. *Stat Bull Metrop Insur Co*. 1993;74:28-35.
- Hoffman MS, ed. *The World Almanac 1993*. New York, NY: Pharos Books; 1992:940.
- Specter M. Climb in Russia's death rate sets off population implosion. *N Y Times*. March 6, 1994;section 1:1.
- Before the dilemma [in Russian]. *Med Gazeta*. December 16, 1994;98:6.
- Population of the USSR 1988 [in Russian]. Moscow, USSR: Goskomstat SSSR [State Statistical Committee of USSR]; 1989:664.
- Feshbach M. Mortal danger: health and environmental crises in the former Soviet Union. *Am Enterprise*. May/June 1993;24(3):14-16.
- Ryan M. Personalism and the current health crisis. *BMJ*. 1993;306:909-911.
- Robbins A, Caper P, Rowland D. Financing medical care in the new Soviet economy. *JAMA*. 1990;264:1097-1098.
- Korotkiikh RV. The social and ethical implications of universal access to health care in Russia. *Kennedy Inst Ethics J*. 1993;3:411-418.
- Mackay J. *The State of Health Atlas*. London, England: Simon and Schuster; 1993:66-69.
- Kassoy E, Ohry A. *The Feldshers: Medical, Sociological, and Historical Aspects of Practitioners of Medicine With Below University Level Education*. Jerusalem, Israel: The Magnes Press, The Hebrew University; 1992.
- Protection of Health in the USSR [in Russian]. Moscow, USSR: Goskomstat SSSR [State Statistical Committee of USSR]; 1990:150.
- Nechaev E. Letter. *Med Gazeta*. December 2, 1994;94:3.
- USSR in Numbers, 1990 [in Russian]. Moscow, USSR: Goskomstat SSSR [State Statistical Committee of USSR]; 1991.
- Griffin GC. In Moscow, doctors are paid less than bus drivers. *Postgrad Med*. 1991;90:15-16.
- Russia doubles the salaries of its doctors and teachers. *N Y Times*. May 14, 1994;section A:10.
- Soshnikov EI, Sidamon-Eristavi VG. Some special aspects of physicians' work [in Russian]. In: Ovcharov VK, ed. *Labor and Health of Medical Workers* [in Russian]. Moscow, USSR: Meditsina; 1985:7-17.
- Erlanger S. Medical care in Russia seems near a collapse. *N Y Times*. May 9, 1992;section 1:1.
- Shvirkov GY, Chetokin VI. The market for medical services and shadow medicine [in Russian]. *Zdravoochr Ross Feder*. 1992;10:7-12.
- Barach I. What lies behind bribery [in Russian]? *Ogonyok*. 1989;11:13.
- Kisunko G. *Second Economy Health Care Services: Value and Patterns of Use in the USSR*. Durham, NC: Duke University Economics Dept; 1994.
- Montague AJ. Health care in Eurasia. *N Engl J Med*. 1992;327:737.
- The cost of operating medical schools in the traditional way [in Russian]. *Med Gazeta*. October 21, 1994;82:7.
- Petrov MN, Vovin NR. Analysis of cases of late application for medical care and refusal of hospitalization [in Russian]. *Sov Zdravookhr*. 1989;10:30-32.
- Boliuh BA. Causes of refusal of surgery among patients with stomach cancer [in Russian]. *Vopr Onkol*. 1993;38:98-101.
- Babaitsev AV. Analysis of the quality of clinical diagnoses based on autopsy data [in Russian]. *Klin Med*. 1992;70:93-96.
- Starinskiy VV, Gritsman I, Vekhova LI, Batinov IN, Popova AA. Principles of specialized oncogynecologic services [in Russian]. *Sov Zdravookhr*. 1989;5:17-20.
- Aseev AV. Medical students' attitudes toward cancer patients [in Russian]. *Vopr Onkol*. 1992;38:851-854.
- Cassileth BR. The evolution of oncology. *Perspect Biol Med*. 1983;26:362-374.
- Komarov G. On magic [in Russian]. *Med Gazeta*. December 28, 1994;101:4.
- Supreme Soviet. Foundations of Legislation of Russian Federation on Defense of Health of Citizens. Decision 5488-1, July 22, 1993.
- Faith healer elected to Russian Parliament. *Raleigh News and Observer*. January 10, 1994;section 1:2.
- Kapitza S. Antiscience trends in the USSR. *Sci Am*. August 1991;32:38.
- Solzenitsyn AI. *The Gulag Archipelago 1918-1956*. New York, NY: Harper & Row; 1975.
- Gluzman SG. Abuse of psychiatry: analysis of the guilt of medical personnel. *J Med Ethics*. 1991;17(suppl):19-20.
- Blinov NN, Komiakov IP, Shipovnikov NB. On the attitudes of oncology patients to knowing their diagnoses [in Russian]. *Vopr Onkol*. 1990;8:966-969.
- Enhancing the image of the medical profession [in Russian]. *Med Gazeta*. November 18, 1994;90:2.
- Blinov NN, Demin EV, Chulkova VA. On quality of life of cancer patients after radical treatment [in Russian]. *Vopr Onkol*. 1989;35:643-648.
- Letters. *Med Gazeta*. September 4, 1993;70:2.
- Doletskii SI. The right to die. *Meditsinskaya Gazeta*. July 3, 1992:15.
- Gromov A. Euthanasia: charity or crime [in Russian]? *Med Gazeta*. March 30, 1994;24:7.
- Code of professional ethics for psychiatrists [in Russian]. Moscow, USSR: Council of the Russian Psychiatry Society; April 30, 1993. Draft.
- Russian medicine takes foray into bioethics. *Am Med Newsday*. May 10, 1993:9.
- Supreme Soviet of the RSFSR. On Medical Insurance for the Citizens of the RSFSR. Decree Number 1499-1, June 28, 1991.
- Light D. Perestroika for Britain's NHS. *Lancet*. 1991;337:778-779.
- Zakirova SA. Need for temporary moratorium on consideration of insurance law [in Russian]. *Zdravoochr Ros Feder*. 1993;10:3-6.
- Bilmes L, Limquist J. The bear has a sore head. *Financial Times*. August 26, 1994;section 1:13.
- Revich BA. Lead in hair and urine of children and adults from industrialized areas. *Arch Environ Health*. 1994;49:59-62.
- Gellert GA, Kaznady SI. Melting the iron curtain: opportunities for public health collaboration through international joint ventures. *BMJ*. 1991;302:633-635.
- Introducing ARMX. *Health Bridge Newslett*. Fall 1994;1(1):2.