
SERGEY MAXIMISHIN/PANOS

Russia's long struggle to come in from the cold

Russia's health system is both inefficient and inequitable. **Sergey Shishkin** and **Vasiliy Vlassov** describe the challenges it faces and the government's plans for reform

The transition to a market economy caused enormous shock to the Russian healthcare system.[1] Although health services improved during the economic growth in 1999-2007, the system still needs extensive reform. Modernisation of the public healthcare system was one of the highest priorities in the government's 2008 plan for long term socioeconomic development of the Russian Federation.[2] We describe the health reforms implemented in the past few years and the current plans for reform to 2020.

Low life expectancy and huge health problems

The enormous health problems facing Russia have been recognised for several decades. Life expectancy in Russia has been falling since the 1960s, in contrast to the steady rise in western Europe (fig 1). One statistic that caused widespread concern was the sharp rise in mortality in the late 1980s and early 1990s. While this was interpreted as a consequence of Russian drinking habits it is now understood as a temporary phenomenon related to the political crisis and accompanying disorganisation of social life, life habits, and health care.[3 4] Some other problems are long lasting and they are still unclear.

The mortality pattern is unusual as the death rate is high in middle age. Many deaths in this age group are related to trauma, alcohol, and smoking. More than 60% of men in Russia smoke compared with less than 25% in the UK.[5] Chronic diseases have all increased over the past 20 years, and the incidence of cardiovascular diseases and cancer has doubled since 1990. Population ageing is creating additional challenges.

Russia is also facing developing epidemics of HIV and tuberculosis (fig 2). Up to 30% of new cases of tuberculosis are highly drug resistant.[6] The prevalence of HIV was estimated at 1.1% (range 0.8% to 1.6%) in 2007 compared with 0.2% in the United Kingdom and 0.4% in France.[7] Programmes for prevention and treatment of AIDS that were introduced by international donors and implemented by non-governmental organisations have now been adopted by the public healthcare system.[8]

Need for healthcare reform

The main problems facing Russia's public healthcare system are the poor health of the population and the vagueness of healthcare guarantees by the state. More than 40% of patients have to pay for inpatient care and around a third of patients pay for outpatient healthcare services.[9] Although the recent increase in public health funding has stemmed the rise in these proportions, they are still too high. Because doctors and nurses are paid poorly compared with workers in industry (in 2007 the average monthly salary was $392 in health care and $596 in industry) patients often have to make under the table payments.

Inadequate financial and material resources for both primary care and hospitals are coupled with relatively low efficiency of use of the available resources, and structural disproportions between outpatient and inpatient care. Inpatient care accounts for 60% of total government spending on health care compared with 30-40% in most European Union countries.[10] Although the number of bed days per 1000 population is falling, it is still two to three times higher than the figure reported in Western countries. The average length of stay in Russian hospitals is 1.5 times longer than in EU countries. One third of patients who are admitted to hospital could be treated as outpatients.

There are also big regional differences in the availability of healthcare resources and huge income inequality. The per capita public health funding is four to five times higher in rich regions compared with poor regions, and this difference has been growing over the past decade.[11] The proportion of the population

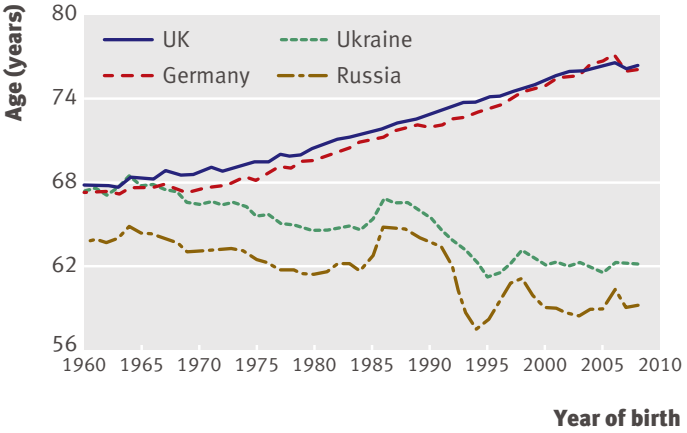

Fig 1 | Life expectancy at birth in UK, Germany, Ukraine, and Russia (http://demoscope.ru)

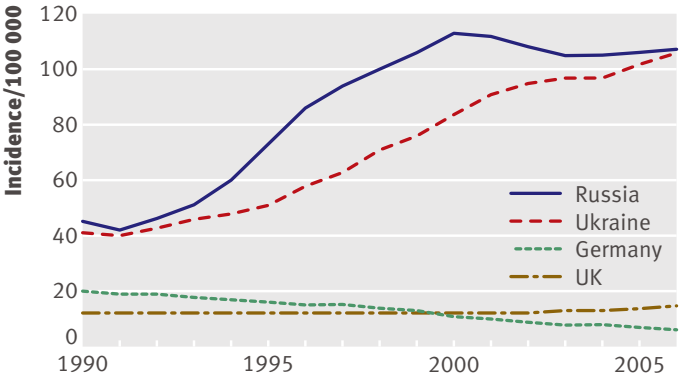

Fig 2 | Estimated incidence of tuberculosis in Russia, Ukraine, Germany, and UK

that has access to free medical services is 1.3 times higher in the more economically developed regions than in less developed regions. National mortality in the first year of life is 9/1000 live births but varies from 5/1000 in two central regions to 17/1000 in two peripheral regions (Russia has not yet adopted the World Health Organization's recommended definition of live birth).

Poor people spend 1.5 times more of their income on purchasing drugs and medical services than do the rich.[11] The burden of health expenditure is higher for households in the regions with a lower level of economic development. In 2003, the average proportion of household income (minus food related expenses) spent on health was 9.2% in 2003 for developed regions and 10.6% for less developed regions.[11]

Rural inhabitants are referred for outpatient care less often than people in urban areas and stay in hospital longer. This seems to be because of both lower use of primary healthcare services and low quality of diagnostics and limited accessibility of outpatient care in the rural areas.

Initiatives since 2000

The resolution of these problems requires large scale reforms in the organisation and financing of health care. Stabilisation of the internal situation in Russia and economic growth since 2000, partially resulting from increased oil prices, has allowed an increase in funding of health care, albeit only to the equivalent of 1991 levels in 2006 (around 3.6% of gross domestic product).[12]

A major part of this increase went on the programme to make medicines free for citizens eligible for social support (mostly disabled people) and then a scheme for free delivery of expensive drugs to transplant recipients and patients with human growth hormone deficiency, haemophilia, cystic fibrosis, Gaucher's disease, and myeloid leukaemia. Unfortunately, the implementation of the first scheme was ineffective, forcing many patients to receive money instead of drugs. The "seven diseases" scheme is more successful and is funded from federal budget for all regions of Russia. For some of these conditions, like haemophilia, it makes a real difference to patients—all of them now have free blood clotting drugs.

The health system has also provided free hepatitis B and rubella vaccination, resulting in a sharp drop in the number of new cases of hepatitis B to the level close to that in western Europe. Screening programmes have been introduced, but unfortunately, some of these programmes—for example, screening for ovarian and prostate cancer using biochemical markers—are not evidence based and are not affordable for many regions of Russia.

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Patients in a tuberculosis hospital in Tomsk, Siberia

Since 2006 health services have received further funding through the national project on health. Federal budget spending on this project is 0.3% of gross domestic product, which is about 10% of total public financing of health care.[11] These additional funds were directed to provide treatment for specific conditions, to supply equipment to outpatient and emergency healthcare facilities, to raise wages of primary care staff, to build high tech medical centres, and to expand provision of high tech care. The project will continue during 2009-12 and will include additional interventions targeted at the major problems of high mortality from road trauma, cardiovascular diseases, and cancer and low birth rate. The government wants to increase the birth rate to compensate for the high mortality that is reducing population numbers.

Alcohol is cheap and readily available around the clock, and up to 40% of deaths in the middle age group may be connected to alcohol misuse

The large scale implementation of reforms of the health system has not yet begun, although activity in the government healthcare policy arena has increased over the past four or five years. Some positive changes have been observed in the management system of the sector as a result of actions taken by both the federal government and constituent territories of the Russian Federation.

In 2006 birth vouchers were introduced and in 2007 birth benefits were increased to encourage medical facilities to raise the quality of medical services for pregnant women and to encourage families to have more than one child. This innovation has contributed to some increase in the birth rate and to a fall in neonatal mortality in 2006-7. Unfortunately, there was also a small increase in neonatal mortality in 2008.

Forthcoming changes

The federal budget for 2009-11 envisages health expenditure increasing by 46% in real terms over three years. The government has declared that public healthcare funding will increase from 3.6% of gross domestic product in 2008 to at least 5.2% by 2020.[2] However, the current economic crisis and expected long recession will inevitably affect these plans.

In the spring of 2008 the government initiated public discussion on a plan for development of health care up to 2020 (http://zdravo2020.ru/). The first draft of the plan was presented last December.[13]

The plan set out a target for the average length of life to be 75 years in 2020 (it is currently about 63). To achieve this challenging target Russia needs to have not only effective health care but also preventive services and better promotion of healthy lifestyles. Unfortunately, smoking is prevalent in Russia (above 60% in some age groups) and tobacco related deaths are high. The influence of the tobacco lobby means the regulation of the tobacco market is outdated.[14] Harm from alcohol misuse is another serious problem.[15] Alcohol is cheap and readily available around the clock everywhere in Russia, and up to 40% of deaths in the middle age group may be connected to alcohol misuse.[16]

The main issue is to be more explicit about what health care is provided by the public system and to ensure it is sufficiently funded. Currently the guarantees of free health care are largely unspecified, with vague boundaries between free and paid care. This results in ineffective use of public finances and general dissatisfaction with the public healthcare system. The 2020 plan says that guarantees will be specified by types of medical services, drugs, and technologies provided.[13] Decisions about what will be provided are expected to be based on a system of medical and economic standards for a range of conditions. These standards are not yet developed.

The compulsory health insurance that was introduced in 1993 is also going to be modernised. Under the 2020 plan it will become a real insurance system with free selection of the insurance company and healthcare facility.

Some changes in health financing mechanisms have already been implemented in 19 pilot regions of Russia during 2007-8. The most important element of this experiment is to increase the contribution of compulsory insurance systems to public funding of healthcare facilities and correspondingly decrease budget subsidies. This move is based on the experience of several pilot healthcare reform projects supported by international donors.

Reforms of public sector pay were introduced in 2008. The new system is more flexible and gives more rights to managers to pay employees according to the volume and quality of their work. The system should create some incentives for doctors and nurses to increase their effectiveness, although it will keep their salary below the average for workers in industry and make their remuneration dependent on hospital managers.

Unfortunately, the major problem of disproportional spending on secondary care continues.[17] Efforts to create a new primary care based model of health care failed because of the resistance of the high profile medical specialist leaders and due to demand from the urban population to have easy access to specialists, despite the low quality of specialist service provided in polyclinics.

The increased funding has also not solved the problem of poor access to health care in rural areas and excessive hospital beds in the cities. Although the 2008 draft proposals discussed making drugs available to all citizens through primary care services, the system is not clearly outlined.

Uncertain future

The economic crisis is starting to influence the development of health care in Russia. The real money income of the population dropped 10-15% during the last months of 2008 compared with the end of 2007 according to the Russian national statistics agency RosStat. When most people have to pay for their drugs this will inevitably result in reduced availability.

The government has already cut expenditure, although it has stated that health and other social programmes will not be affected. The crucial factor for the success of modernisation of the healthcare system is not mere money but persistence of the government in the implementation of a rational system. There is still a high risk that the continued declarations of new healthcare policy objectives are designed to give the impression of change rather than actually implementing large scale reform.

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ANSWERS TO ENDGAMES, p 179. For long answers use advanced search at bmj.com and enter question details

PICTURE QUIZ

Cervical radiography

1 The radiograph shows aplasia of the posterior arch of the atlas.
2 Computerised tomography should be undertaken.
3 Surgery should be considered when symptoms of spinal cord compression are present or if a bony remnant of the posterior arch of the atlas is visible on imaging.

STATISTICAL QUESTION

Study design

c,d

PICTURE QUIZ

A painful rash

1 This patient has Sweet's syndrome.
2 Sweet's syndrome is associated with upper respiratory tract infection; gastrointestinal infection; inflammatory bowel disease; pregnancy; malignancy; and certain drugs (for example, growth factors, various antibiotics, antiepileptics, antihypertensives, antipsychotics, contraceptives, diuretics, non-steroidal agents, and retinoids).
3 The "gold standard" treatment is a tapered dose of systemic corticosteroids (initial dose 40-60 mg per day) over a period of 4-6 weeks.