

Contemporary Issues of Russian Population's Health Economics

Egorov E.V.^a

Tsalikova V.V.^b

Razumovskaya E.M.^c

^aLomonosov Moscow State University, Moscow, 119991, Russia

^{bc}Kazan Federal University, Institute of Management, Economics and Finance, Kazan, 420008, Russia

Doi:10.5901/mjss.2015.v6n1s3p391

Abstract

Theory and practice of public health promotion in today's Russia are considered in the article which is based on substitution of healthcare service economics for public health economics. Herewith various approaches to health economics are analyzed: human capital theory, human development theory, public health care concept and models of public health. Special attention is paid to determining risk factors of public health in the Russian Federation and policy of a healthy lifestyle. In particular, it is defined in a new Government program of the Russian Federation "Public health services development" for 2013-2020. Students' physical education and development and expansion of the Russian Federation cities' participation in the "Healthy cities" project carried out by the European regional bureau of the World Health Organization (WHO) are matters of great importance.

Keywords: health economics, health capital, human development, health protection, public health, risk factors, healthy lifestyle, physical activity, healthy cities.

The aim of the paper is the comparative analysis of modern health economics concepts for development of an effective policy of public health promotion. It is conducted on the basis of limited resources distribution among priority areas to reduce damage from significant life and health risk factors for the Russian population.

The outline of the paper includes the analysis of health capital concepts, human development, public health care, models of public health, internal and external risk factors to life and health of the Russian Federation population, definition of the contribution of major risk factors to the general death rate in the country, short analysis of the Russian Federation Government program on "Public health services development" for 2013-2020, in particular its sub-programs aimed at diseases prevention and formation of a healthy lifestyle. The analysis of similar programs development and implementation in the Russian Federation regions, in particular, in the Vologda region is given here. In the final part of the article the author's recommendations on the ways of healthy lifestyle formation in educational institutions of all levels are given. It is done on the basis of promoting physical education and development system, facilitating decrease in disease level and young generation health promotion. Besides, active participation of Russian cities in the project "Healthy cities" of the European regional bureau of the WHO is recommended.

The research methodology involves comparative analysis of various health economics concepts from the point of view of their applicability for development of effective strategy to promote health of the Russian population under limited resources and constant increase in demand for medical aid among the population; revealing the most effective strategy supported by comprehensive preventive approach aimed at reducing life and health risk factors for the population of Russia in the conditions of disability and death rate prevalence, chronic non-contagious diseases and external controllable reasons in its structure.

The obtained data and conclusions: the analysis has shown the necessity to change the policy of population health protection and promotion in the Russian Federation – from healthcare service economics (medical aid) to public health economics based on modern models of public health and on revealing major internal and external risk factors influencing life and health of the country's population. As a result a complex strategy is to be developed; and on its basis – the state and municipal programs of public health services development and public health promotion at various levels of management. The programs should include set of measures generating formation of a healthy lifestyle, in particular, in educational institutions of all levels with facilitation of students' physical education and development. Taken that urban population prevails in the Russian Federation, active participation of the Russian cities in the effective WHO project "Healthy cities" is of significant importance.

Practical and social application: the public health economics concept may become the basic one, taking into account social and economic damage from the major risk factors. The concept could be considered as a basis for prioritizing strategies and distributing resources for public health care areas and integrated programs of healthy lifestyle formation in the country at regional and local levels. Recommendations on formation of students' healthy lifestyle can be implemented by the Ministry of Education and Science of the Russian Federation and educational bodies of consistent entities of the Russian Federation.

In the article the author's approach is presented to interpretation of public health economics concept in view of implementing both – traditional and comparatively new risk factors for Russia (crisis of spirituality of the nation, external risk factors), which should be considered when developing strategies and policies for public health protection and promotion. The author's suggestion on introduction of courses on a healthy lifestyle in educational institutions of the Russian Federation – a basic one – in the comprehensive schools, an advanced one – at the universities, is of great value for promoting operational programs on formation of young generation's healthy lifestyle, in particular, with regard to sports, tourism, and cultural life.

At the heart of the effective strategy formation for health promotion of the population of Russia is a transition from healthcare economics (health services) to public health economics reflecting an integrated approach to issues of optimum allocation of limited economic resources on priority orientations of health promotion of the country's population.

The performed analysis of contemporary health economics concepts and models of public health shows that there exist various representations.

The theory of the human capital which includes the health capital concept reflects an approach to health economics from the point of view of human capital quality improvement as the major factor of modern knowledge economics and innovations development. It plays a key role in the structure of modern capital and social wealth, especially in the developed countries. For modern economics of Russia the health capital concept has a special value taking into account high contagious and death rate of the country's population, especially of men at active working age. It reduces scales, quality and efficiency of the human capital, interferes with steady economic growth, national economy modernization and reduces its competitiveness in the world market. About 40 percent of all death ratio of the population of Russia is accounted for the persons who have not reached age of 60. The given fact calls for acceptance of a set of measures at all levels of management on the basis of intersectoral interaction for maintenance and increase of the operating and potential manpower health capital of Russian national economy.

The concept of human development reflects another approach to public health as it is aimed at development of human potential of all citizens as an ultimate objective of economic development. It includes necessity of health preservation and promotion for both - abled and disabled citizens irrespective of their contribution to national economy development. Increase in expected life expectancy including a healthy life of all age groups of the population is the major criterion for development of the country' human potential and for expansion of freedom in choosing various forms of participation of all the citizens in public, political, spiritual and economic development of the society. The Russian Federation comes 66th in the rating – 2011 on a free index of human development among 187 countries of the world. Therewith, it occupied the 120th place (68,8 years) on expected life expectancy (ELE), according to the rating. It testifies the non-efficient use of economic resources of the country aimed at promotion of the population health¹. By the end of 2011 average life expectancy in the country has raised, according to Ministry of Health of Russia, to 70,3 years.

Modern concepts of health protection and public health models are to be given particular emphasis in formation of an effective strategy. The first ones are based on the system approach to public health care of the country taking into account all major medical and non-medical factors influencing the population's health positively or negatively, with a support on social and medical prevention of disease, physical disability and death rate. Herewith, the major feature of modern epidemiological transition is prevalence of chronic non-contagious diseases (cardiovascular, oncologic ones), and also external reasons for mortality (murder, suicide, poisoning and traumas) among the essential reasons for physical disability and death rate in the post-socialist countries, including Russia. Population ageing aggravates an issue of attaching particular importance to chronic non-contagious diseases in the country.

The public health models developed by Russian and foreign scientists experts of the WHO allow to reveal the major factors defining public health potential and to estimate the contribution of each of them in public health. Level and way of life of the population, environment conditions, heredity, and also medical aid level are key factors of public health. Therewith, the first factor influences public health at 50 % and more on the average, heredity and ecology make 15-20 %, and medical aid share is 10-15 %. The given indicators allow to have approximate reference points for more rational

¹ The report on human development 2011. *The Sustainable development and equality of possibilities: the best future for all / the Lane with English; ПРОВОД. М: All World, 2011.*

distribution of the limited economic resources allocated for public health care on priority areas of public health promotion. Thus, the ratio of their contribution to public health should take into account social and economic, demographic and ecological features of a particular country and its regions. For example, in mono-industrial cities of the Russian Federation value of the ecological factor (emissions from industrial city-forming enterprises) is considerably higher, that defines a priority role of resources allocation on implementation of effective ecological programs in combination with other areas of health protection of their population.

Each of the above-mentioned factors, on the one hand, can have positive influence on public health conditions (high level and healthy way of life, ecologically clean environment, favorable heredity, accessible and qualitative health services) that is the factors promoting public health. On the other hand, each of them can be a risk factor – the raised probability of disease, temporary disability, physical disability and death rate (bad habits, drugs consumption, improper food, sedentary lifestyle, environmental pollution, harmful working conditions, low incomes, unfavorable heredity, low availability and quality of health services). High risks cause a considerable damage to public health (conduct to death rate growth, reduce life expectancy, including shortening of healthy life period), reduce labour potential of economy, lead to decrease in volume of manufacture of gross national product and growth of expenses on treatment and rehabilitation of patients, on payment of grants and pensions, to considerable economic losses for the country. By estimations of the experts from the Ministry of Health of the Russian Federation, the cumulative economic damage makes about 1 trn. rubles a year only from circulatory diseases.

In the research of scientists conducted in the years of market reforms in the post-socialist countries, including Russia, (Doctor of Medicine, prof. I.A.Gundarov) such a risk factor was revealed, which determined a public health condition, as crisis of spirituality of the nation², caused by loss of traditional spiritually-moral values and reference points. It happens under the conditions of system transformational social and economic crisis and in the absence of new spiritually-moral reference points in the society with liberal market values. Spirituality crisis manifests itself in growth of death rate of the population from murders and suicides that demands consideration of the given risk factor in modern public health models in Russia and also in the state policy concerning education, culture and public health care.

At formation of effective strategy of public health care of the Russian Federation and other countries, it is necessary to consider *external risk factors* also which are of great importance in the age of globalization and competition aggravation in the world markets, accompanied by international terrorism growth and political-military conflicts. External risks for life and health of the population of Russia increase in these conditions, in particular, under openness of the national economy and its dependence on import of food, alcoholic and tobacco production. Besides, drugs deliveries (heroin, etc.) increase to the Russian Federation from the territories of the adjacent states, non-conventional moral and cultural values are spread through the Internet, as well as health destructive stereotypes of behavior. In general external risk factors destructively influence mind, culture and health of the country's population, promote growth of disease, criminality and death rate of its citizens. External public health risk factors should be objects of special attention for the state authorities and be considered in the strategy and policy of public health care in each country.

The integrated approach to determining major risk factors and policy of decrease in the level of corresponding risks for life and health of the population of the Russian Federation is reflected in the approved by the Government of the Russian Federation on December 24th. 2012 Government program of the Russian Federation "Public health services development" for 2013-2020. It is done with the use of methods of social and medical prevention. The state program includes 11 subprograms, in particular "Disease prevention and formation of a healthy lifestyle. Development of primary medical care". It is planned, that ultimate results of the state program implementation will be the increase in average life expectancy of the population of the Russian Federation to 74,3 years, the decrease in the major risk factors and death rate (Table 1).

Table 1. Prevalence of risk factors among the adult population of Russia, 2011-2020 (%)

Prevalence of risk factors	2011	2015	2020
Smoking, %	39,1	35,2	25,4
Consumption of the salt, %	50	47	40
Small consumption of vegetables and fruit, %	40	38	36
Arterial hypertension, %	38	35,7	30
High blood cholesterol, %	51,0	47,1	40,5

Source: Government program of the Russian Federation "Public health services development" for 2013-2020. The Collegium of the Ministry of health of Russia on September 28th. 2012. % - the percentage of the adult population.

² I.A.Gundarov *Demographic accident in Russia: the reasons and overcoming ways.* – in symposium 'Why Russian die out'. Moscow, 2004.

Herewith it is stated in the program that subprograms on non-contagious diseases prevention and formation of a healthy lifestyle basics (complex ones and by certain directions) are financed in 60 subjects of the Russian Federation. Therefrom, 15 consistent entities of the Russian Federation have complex programs and 10 of them are financed independently. Thus, an essential issue for implementation of the present subprogram is active participation of all regions of the country in developing of corresponding programs. Taking into account that a number of regional budgets are subsidized the subprogram's implementation demands development of state-private partnership. When adjusting the program it is also expedient to draw on experience in development and implementation of the Long-term target program "Formation of population healthy lifestyle in the Vologda region for 2009-2010".

Work intensification in this direction is to become a significant area for formation of a healthy lifestyle among children and young people in educational institutions of all levels. It seems reasonable to introduce new courses: "Basic concepts of healthy lifestyle" for pupils of comprehensive schools and secondary vocational educational institutions and "Healthy lifestyle – a basis for growth of welfare and family well-being" - for students of higher educational institutions. Besides, an important tool for formation and development of a healthy lifestyle of students is the organization of system work on physical education, training and sports in educational institutions of comprehensive, professional and additional education. According to the Ministry of Sports of the Russian Federation, less than 50 % of pupils and students are regularly engaged in physical training and sports (in 2010 – 45 %). Herewith the growth of diseases among children and teenagers has been observed in recent years, in particular, of respiratory apparatus, locomotor and excitatory system. According to profound prophylactic medical examination of teenagers in 83 regions of the Russian Federations in 2011, the 1st health group makes 16,4 % and the 2nd group – 54,3 % of them. In accordance with findings of prof. N.D.Graevsky, sick-rate of students-sportsmen in comparison to those who attend only physical training course according to the curriculum is 1,5 times lower; cardiovascular diseases rate – 3,8 times, liver diseases – 2,75, flu – 2,1, and an average number of disability days – 1,8 times lower³. The research findings are supported by the WHO experts investigating influence of physical activity on health (decrease in risk of overweight, development of ischemic heart disease, a stroke, diabetes of II type, colorectal and breast cancer, depression, improvement in locomotor system and psychological status)⁴. It is necessary to develop, apart from physical education lessons, out-of-school and other additional activities on physical training and sports: sports clubs at schools, higher education institutions and at place of residence, sports leagues, subsidy membership at sports facilities, sports competitions for students of various levels, children's and youth sports schools. In 2011, according to the Federal State Statistics Service data, the total number of sports clubs in the Russian Federation made 20 thousand with 2,6 million people engaged there. Therewith, it is necessary to upgrade existing sports facilities and build the new ones, provide them with up-to-date sports equipment and outfit, using private-public partnership tools. Physically active way of life is an important component of formation a healthy lifestyle of young generations of the Russian citizens.

References

- Egorov E.V., Bukin A.K. Programs of integrated cardiovascular diseases prevention within the framework of health economy concept. – "Standards of living of the Russian regions population", №2, 2010.
- Graevsky N.D.. Sports and health. – "Theory and practice of physical education" Scientific-theoretical journal, № 4, 1996.
- The report on human development 2011. Sustainable development and equality of possibilities: the best future for all / English transl.; PROON. M. All World, 2011.
- Human development: new determination of social and economic progress: textbook / under the editorship of prof. V.P.Kolesov (Economic department of Moscow State University). – 2nd ed – M: Human rights, 2008.
- Innovative development of service sector: textbook/ under the editorship of E.V.Egorov, T.B.Belyaeva – M. Economic department of Lomonosov Moscow State University, 2010.
- Strategy of development of physical education and sports in the Russian Federation for the period till 2020 (approved by the order of the Government of the Russian Federation d/d August 7th, 2009 № 1101-r
- Healthy cities. – Newsletter. Documentary centre of the WHO. CRIHOI Ministry of Health and Social Development of the Russian Federation. March 2010.
- Physical activity and health in Europe: arguments in favour of actions. Under the editorship of Nick Cavill, Sonja Kahlmeier, Francesca Racioppi. European regional bureau of WHO. Copenhagen, Denmark, 2006.
- Governmental program of the Russian Federation "Public health services development" for 2013-2020. Approved by the order of the Government of the Russian Federation d/d December 24th, 2012 № 2511-r.

³Graevsky N.D. *sport and health/the Theory and physical training practice. Scientific-theoretical magazine. 1996. № 4. With. 15.*

⁴ *Physical activity and health in Europe: arguments in favour of actions. Under the editorship of Nick Cavill, Sonja Kahlmeier, Francesca Racioppi. The European regional bureau the CART. Copenhagen, Denmark, 2006, p.7.*

- Shigabieva A.M., Safiullin L.N., Mazitov V.M., Saipullaev U.A. Some methodological foundation of an innovation theory. *Life Science Journal* 2014; 11(6s): 388 – 391.
- Panasyuk, M.V., Pudovik, E.M., Malganova, I.G. (2014). Modified index method in scenarios of regional socio-economic development. *Mediterranean Journal of Social Sciences*, 5 (18 SPEC. ISSUE), pp. 331-334.