# SELF-PRESERVATION BEHAVIOUR AS A CONDITION FOR REDUCING

## MORTALITY AND INCREASING LIFE EXPECTANCY

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Annotation. The article reveals the features of the influence of behavioral factors on mortality and morbidity. It is determined that the behavioral factor a priori lays the terms of life, in this regard, substantiates the reasons for the importance of the study of self-preservation behavior of the population at the Federal level. It is shown that in Russian society the attitudes of selfdestructive behavior of the population are formed, while in order to overcome the negative demographic trends in Russia it is necessary to change the attitude of people to their health, with the help of the development of attitudes of self-preservation behavior. The article proposes the main task of the study of self-preservation behavior of the population to identify the role of a larger number of heterogeneous factors in determining the real, observed life of the population of different regions. At the same time, take into account that it is necessary to look not only for the immediate cause, but also for the "causes" associated with a complex complex. It is concluded that the lack of practical research and measures to improve public health and the formation of a high culture of self-preservation behavior of the population, put the achievement of the goals of the state social and demographic policy at risk.

## Key words. mortality, morbidity, behavioral factor, self-preservation.

Increasing the duration of active life and maintaining the health of the population is one of the serious and not fully investigated demographic problems. Numerically increasing groups of elderly and old people, and at the same time the needs of the economy have become more insistent to demand from science a solution to this complex problem. A comprehensive analysis (conducted by numerous Russian scientific teams and individual scientists) of such prominent causes of mortality as circulatory system diseases; neoplasms; accidents, poisoning and injuries diseases of the respiratory system; diseases of the digestive system; some infectious and parasitic diseases, determine their close relationship with the characteristics of people's lives, their work and nutrition, family and domestic relations, social and psychological changes.

The state social policy of the country as its priority goal today puts at the forefront improving the level and quality of life of the population. The Concept of demographic policy of the Russian Federation for the period up to 2025 determines that the objectives of the demographic policy of the Russian Federation for the period up to 2025 are to stabilize the population by 2015 at the level of 142-143 million people and create conditions for its growth by 2025 to 145 million people, as well as to improve the quality of life and to increase life expectancy by 2015 to 70 years, by 2025 to 75 years [6]. In addition, the main objectives outlined in the Concept, such as: reducing the mortality rate by at least 1.6 times, primarily in working age from external causes; reducing maternal and infant mortality by at least 2 times, strengthening the reproductive health of the population, increasing the duration of active life, creating the conditions and forming the motivation for a healthy lifestyle, decreasing the level of morbidity from socially significant and representing danger for surrounding diseases, improving the quality of life of the patients

suffering from chronic diseases and disabled people - directly point to special attention of the state to the improvement of the nation's health. The stated priorities of state policy determine the close scientific attention to the study and research of self-preservation behavior.

The national project "Demography" [5], which was launched on January 1, 2019, is mainly directed to the formation of a system of motivation of citizens to a healthy lifestyle, including using healthy food and rejecting bad habits; to the motivation of citizens to lead a healthy lifestyle through an information and communication campaign, as well as to involve citizens and non-profit organizations in activities to strengthen public health; to create for all categories and groups of the population the conditions for physical culture and sports, mass sports, including increase of level of provision of the population with sports infrastructure and preparation of sports reserve. Indeed, these are important areas of development, however, it is necessary to approach the implementation of the proposed tasks from a theoretical and methodological position. In other words - to develop a conceptual plan for the formation of a system of motivation and involvement of citizens taking self-preservation behavior as the starting point of scientific research, considering it in close cooperation with other identified factors.

# Problem definition

Considering the high morbidity and premature mortality of the Russian population as the main reason for the low life expectancy of the population, we would like to pay special attention to the factors directly related to the behavior of the person in the modern social environment. In the research the behavioral factor is tightly related with a demographic concept of "self-preservation behavior". Self-preservation behavior is defined as a system of actions and attitudes of the person aimed at preserving his health and prolonging life [1, 268].

The four-year period (2014-2017) showed a tendency (according to Rosstat) to reduce mortality in Russia. Thus, if in 2014 the mortality rate of the Russian population was 13.1, in 2017 the same figure was 12.4. As a rule, such a sharp reduction in the mortality rate of population is justified by factors that reflect the level of socio-economic development of the country during this period. The main factor in reducing mortality is a long and stable growth in the level and quality of life of the population. This, in turn, is determined by the growth of incomes of the population; increase in the availability and quality of medical care, as well as in reduction of smoking and alcohol consumption, etc. However, the socio-economic situation during this period, unfortunately, has not undergone the same dramatic changes as the situation with the mortality of the country's population. Therefore, it is necessary to talk about the discrepancy between the digital and real assessment of the situation, because there are no objective reasons for the reduction of mortality. According to Rosstat, in January-August 2018 compared to the same period of 2017 in Russia there was a decrease in the number of births (in 83 subjects of the Russian Federation) and an increase in the number of deaths (in 52 subjects). In the whole country in January-August 2018, the number of deaths exceeded the number of births by 1.2 times (in January-August 2017 - by 1.1 times), in 29 regions of the Russian Federation this figure was 1.5-1.9. [7]

It should be noted that, in conditions of socio-economic instability, there is clearly a decrease in the living standards of the majority of the population, while rising prices and reducing incomes are among the first indicators of such a situation. In addition, confidence in the future is lost,

which directly affects the psychological tension in society, and if we add here the absolute illiteracy of the population in health matters, it is necessary to conclude that in the near future society will face and is already facing a sharp spike in morbidity and premature mortality.

The increase in the incidence of cancer is an important indicator of the seriousness of the situation, because by the definition of some doctors - it is a "disease of sadness", "the crown of all diseases". Every year, about 0.5 million Russians are diagnosed with cancer, about 280 thousand citizens per year die because of this disease. According to Igor Rusakov, President of the Fund for support of anti-cancer organizations "Together against cancer", the incidence of prostate cancer in Russia is growing annually by 8%, almost 30 thousand men are diagnosed with this disease every year. 51 thousand women annually get breast cancer and 29 thousand men prostate cancer [4].

According to experts of the World Health Organization, the number of cases of cancer by 2035 will reach 24 million people a year [3]. Dr. Chris Wilde, Director of the International Agency for Research on Cancer, while assessing the cancer situation in the world, says that the incidence of cancer is growing worldwide and it is mainly caused by the growth of population and aging of mankind. If we look at the cost of cancer treatment, we can see that it is growing uncontrollably even in high-income countries. The WHO's report on cancer declares that the main causes of cancer, the impact of which can be neutralized or minimized, are smoking, infectious diseases, alcohol consumption, obesity and physical inactivity, exposure to radiation in sunlight and medical examinations, environmental pollution, as well as late birth of children and lack of breastfeeding [3].

All of these reasons are, in fact, behavioral reasons, which once again draws attention to the severity of the problem associated with the study of self-preservation behavior of the population. Focusing only on the fixed causes of the disease is, in our opinion, unacceptable and incorrect. The modern crisis, especially moral and psychological gives rise to stresses, which are the basis of all diseases – oncological, somatic mental. This crisis determines our daily state of memory, thinking, ability to work and activity. Throughout life, a person is affected by endogenous and exogenous mortality factors, but the role of behavioral factor is given very little place in studies. The role of this factor is underestimated, although its influence during the period of working capacity increases significantly compared to endogenous and exogenous factors. The role of endogenous factors throughout human life is constant, while the influence of exogenous factors begins to decline with the reach of the working age and increases only after 60 years of age. According to some studies behavioral factor realizes its full impact on people aged from 15 to 60 years. This period corresponds to the working age of a person. It's worth noting that throughout people's life this factor plays a special role in creating conditions for a healthy and long life.

Today in the Russian society attitudes of self-destructive behavior of the population are forming, whereas in order to overcome negative demographic trends in Russia it is necessary to change the attitude of people to their health through the development of self-preserving behavior. The importance of this statement is proved by a sample survey on "the Influence of behavioral factors on the health of the population", which was conducted for the first time in the practice of the Federal State Statistics Service (Rosstat) with the participation of the Ministry of health and social development of Russia, Rossport and Institute of social research [8]. The survey was conducted in June-July 2018. 2204 people aged 15 years and more were interviewed. The

survey found that despite the fact that all age groups of the population designated health as a value which ranks on the 1-2 place among other important social values, such as material wellbeing, work, education, most of the respondents are not attentive to their own health. So " 64.1% - noted that they do not follow the diet; 76.4% - do not do morning exercises; 33.7% - smoke regularly, of which 48% - smoke from 11 to 20 or more cigarettes a day; 84.7% - consume alcoholic beverages, including one in four drinks vodka, cognac and other strong spirits regularly" [8]. According to the survey, the proportion of those who really care about their health does not exceed 25% of respondents.

Further proof of the particular influence of behavioral factors on mortality and morbidity of the population, are the data of the Ministry of health of Russia, calculated by Goskomstat of the Russian Federation on morbidity of population by main classes of diseases [2], which were diagnosed for the first time in the life (primary disease). Thus, according to these data, from 2013 to 2017 there was a reduction in the primary morbidity of the population by the main classes of diseases by 20.5 people per 1000 population (2.5%) which totally amounted 778.9 people per 1000 population in 2017. However, it is necessary to pay special attention that in comparison with the beginning of the century indicators of primary morbidity of the population by the main classes of diseases are rather high. Thus, in 2001, the indicators of primary morbidity of the population by the main classes of diseases per 1000 population amounted to 719.7 people, in 2017 the increase was 7.6% (778.9 people). In addition, data on primary morbidity of the population by major classes of diseases, such as endocrine system diseases, eating disorders and metabolic disorders; circulatory system diseases; respiratory diseases, show an increase in registered patients diagnosed for the first time in life for the period 2013-2017. The first place is occupied by endocrine system diseases, eating disorders and metabolic disorders - an increase over a five-year period was 32.1%. Adverse environmental conditions, stress, lack of time, violation of regularity in nutrition, poor heredity have a negative impact on this class of disease. Second place - diseases of the circulatory system-an increase of 7.3%. The causes of this disease are frequent stress, suppressed resentment, loss, etc. In third place illnesses of respiratory organs - increase of 4.5%, this is a very large class of diseases, because this includes almost all diseases that, one way or another, a person faces in his life. Also, this class of diseases is directly related to diseases of the blood circulatory system, because breathing (namely, how and what we breathe) supports and nourishes our circulatory system.

Description of the implementation mechanism

This situation causes a long-term trend in the field of deterioration of health and increase in premature mortality of the population, where the determining factor is human behavior. Precisely, the behavioral factor a priori determines the terms of our future life, because the time of onset, duration and speed of aging (during which all the diseases discussed above are activated without exception) directly depend on the reproductive period, which is determined by the period of human development. Therefore, if we study the rapid premature aging of the population of Russia, it is impossible not to consider other significant and affecting periods-development and reproduction. At the same time, it is impossible to ignore the dominant factor of influence – the human behavior itself, which is formed in the period of reproduction, develops during development and gives its results in the period of aging.

Undoubtedly, the reduction of mortality, morbidity and increase in life expectancy of the population cannot be expressed by any one active principle, as it seems to us, the main task of the study should be to identify the role of a greater number of heterogeneous factors in determining the real, observed life expectancy of the population of different regions. Thus to consider that it is necessary to look not only for the direct reason, but also for interconnected "the reasons of the reasons". In this case, self-preservation behavior can be taken as a reference point in the study, considering it in close cooperation with other identified factors, which will create a single hierarchical system of influence on the life expectancy of the population of a particular territory.

The research should be divided into two parts. The first is biological-gerontologicalanthropological, where the aim will be to develop genetic, natural-ecological, physiological, anthropological and personal-psychological hypotheses. And the second-socio-demographicethnographic, which involves the justification of demographic, labor, housing and household, gerontophilic and socio-psychological hypotheses. Next, it is necessary to develop a number of organizational and economic measures aimed directly at eliminating each cause of influence. This is a preliminary outline of the research program, which may also include some other tasks. For example, on the basis of the research, it is possible to develop a modern system of education in the field of population health of different age groups, as well as the population of a specific region, which implies the formation of the modern concept of population care about their health, i.e. the formation of high culture of self-preservation behavior.

# The findings of the study

The goals and objectives of the state social and demographic policy are set, however, the lack of practical research and measures to improve public health and the formation of a high culture of self-preservation behavior of the population, put the achievement of the goals of the entire state policy at risk. Focusing exclusively on large amounts of funding, professional change and material security will assure only short term outcome. Undoubtedly, the formation of a culture of self-preservation behavior is a long process, which along with the birth rate will bear significant fruit only over time. Therefore, it is necessary to pay special attention to this resource of society, creating an effective state strategy, introducing and forming attitudes of formation of culture of self-preserving behavior in society from the very birth.

The government's strategy for reducing mortality and increasing life expectancy is a General, non-detailed plan that covers a long period of time. One of the priority goals of the state strategy in the field of mortality is the formation of a high culture of self-preservation behavior of the population. The strategy is formed when there are not enough own resources to achieve the goal, so the task of the strategy is to assure the most effective use of available resources to achieve the main goal. Thus, the main strategic tools are action plans and programs.

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