

## Strategies For Forming A Unified Preventive Environment Of The City (On The Example Of The City With Federal Status, The Administrative Center Of The Central Federal District - The City Of Moscow)

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**Abstract.** Currently, the Russian Federation is actively developing the concept of a unified preventive environment, which is a set of conditions to maintain a healthy lifestyle and to prevent non-communicable diseases by the population on the basis of interagency cooperation. An important task of the country's health care is to create a health-preserving model as a preventive, psychosocial technology based on the use of a complex of educational, psychosocial collective and individual technologies, psychosocial diagnostics and psychosocial therapy. It is in the aspect of the technology for the formation of a healthy lifestyle and the prevention of self-destructive behavior that the model can be implemented within the organization of a single preventive space.

This article presents the goals, objectives and directions of a unified preventive environment in the city. Its main constituent elements are described. The organizational and methodological problems in the creation of a unified preventive environment are indicated. The effective formation of a unified preventive

environment in the city will contribute to the population's health improvement, reduce the prevalence of chronic non-communicable diseases, improve the quality of life of citizens, reduce mortality and disability, which will generally increase the working capacity of the population and the growth of the country's economic potential.

**Key words:** prevention, chronic non-communicable diseases, uniform preventive environment, healthy lifestyle, risk factors, medical examinations.

Introduction. Today, the preventive direction of medicine includes not only work with patients with chronic non-communicable pathology, but also the identification of risk factors (RF) in healthy people for their timely correction [1, 2]. In the Russian Federation, the prevention of non-communicable diseases is a priority direction of the state policy in the field of the citizens health protection [3]. In 2016, the concept of the Strategy for the formation of the population's healthy lifestyle (HLS), prevention and control of non-communicable diseases until 2025 was presented [4]. The key point in the effective implementation of the preventive measures system to protect against noncommunicable diseases is coordinated interagency interaction with the participation of health, education, physical education and sports, internal affairs, social development ministries, as well as the media, legislative and executive authorities, employers, volunteers, public and religious organizations, which permits to create a unified preventive environment [5]. A uniform preventive space or a uniform preventive environment (UPE) is a set of living conditions and human activity that contribute to the formation of a healthy lifestyle of the population, prevent and reduce the prevalence of non-communicable diseases, and cause an increase in life expectancy and its quality [6]. The necessary aspect of an effective UPE creation is to ensure the availability of these conditions for all the population segments at the national and regional levels. The coordination of the UPE participants' actions is carried out by the Government Commission on the Protection of Citizens' Health, created by the order of the Government of the Russian Federation dated September 08, 2012 No. 1864-r. The priority directions of the UPE formation strategy are: the of non-communicable diseases population risk reduction by increase of the citizens' motivation to maintain a healthy lifestyle and provision of the necessary conditions for this; reduction of the number of persons with a high individual risk of non-communicable diseases and those who have these diseases; secondary prevention of non-communicable diseases at the level of outpatient health care; timely and effective treatment of non-communicable diseases and their complications, as well as prevention of repeated adverse events within the provision of specialized, including high-tech, medical care.

The most important tool for the UPE measures implementation is the state program "Healthcare Development", approved by the Decree of the Government of the Russian Federation dated April 15, 2014 No. 294, as well as programs of the constituent entities of the Russian Federation aimed at the prevention of non-communicable diseases and the promotion of healthy

lifestyles [7]. An example of such a program is the Healthy Cities project, aimed at stimulating healthpreserving behavior of citizens, as well as healthy urban planning [8].

**Results.** Preventive activities are carried out in medical prevention offices. The most important aspect of this work is to raise the population's knowledge level in the field of non-communicable diseases prevention and the principles of healthy lifestyle, which is achieved through oral (lectures, conversations, seminars, discussions, quizzes) and written (publication and distribution of leaflets, articles, memos, booklets) propaganda. An effective group organizational form of prevention of significant non-communicable diseases are health schools, which are created on the basis of treatment-and-prophylactic and outpatient clinics, in medical prevention rooms, and health centers [7, 8].

The creation of health centers started in the Russian Federation in 2009-2010 on the basis of polyclinics or hospitals, interacting with medical prevention rooms and medical and physical dispensaries. Currently, health centers are engaged in organizing and conducting sanitary and educational work, as well as prophylactic advising for patients and drawing up individual plans for a healthy lifestyle, including recommendations on nutrition, physical activity, and rejection of bad habits. It should be noted that since its foundation, the activities and structure of health centers have been constantly improving. In particular, family health centers were in demand, in which the whole family can be examined, receive advice on healthy lifestyles and the prevention of major non-communicable diseases, both for children and their parents. A new format for the activities of health centers has appeared - field work with the participation of mobile teams, the formation of "mobile" health centers, which makes it possible to increase the availability of services for the prevention of diseases for hard-to-reach regions and people with limited mobility.

At the same time, there are a number of organizational problems in the functioning of health centers today. According to N.V. Pogosova et al. (2015) a significant obstacle to the citizens who visit health centers is the lack of productive interaction between medical prevention rooms, health centers and district services in medical institutions [9]. V.I. Starodubov et al. (2016) draw attention to the fact that insufficient funding of health centers causes insufficiently high results of their activities and, consequently, the low level of primary prevention of diseases, which is unacceptable due to the current difficult situation with the population health. As an interagency interaction within the city's UPE formation, some authors propose the creation of health centers on the basis of university structures, in close contact with medical and educational organizations, the target audience of which will be the student youth. Despite the existence of certain shortcomings, the health centers system development predetermined a positive shift in the implementation of the preventive direction in medicine.

As mentioned earlier, an integral part of the city's UPE formation is to ensure the conditions for leading a healthy lifestyle: an ecologically safe living environment, clean air, water and soil, decent living conditions, the availability of healthy food and the prohibition or restriction of the sale of products harmful to health, the availability of physical education and sports classes. Measures aimed at providing the population with conditions for a healthy lifestyle should be enshrined in legislative acts at the level of ministries, regional and city administrations, municipalities, as well as employers and educational institutions [9].

One of the promising directions for the UPE development and ensuring the availability of services to maintain healthy lifestyles is the introduction of modern information and telecommunication technologies, which can increase the coverage of the population with sanitary and educational work [10]. The use of telemedicine screening programs in the practice of the outpatient-polyclinic link allows receiving feedback "doctor-patient" without reference to place and time, as well as to reduce the outpatient admission time to patients by 20%. The electronic cabinet is modern technology which is convenient for the patient and quite easy to use. With the help of mobile technologies, the patients can receive reminders about the timely intake of a drug, information about the number of calories consumed, their physical activity, etc. To this end, medical institutions conclude agreements with leading mobile operators, which are already in effect in a number of regions of Russia. However, despite the indisputable advantages of using information technologies in preventive work, today they are not available in all regions of Russia. This is largely due to the lack of a legal framework in the field of telemedicine, insufficient material and technical equipment, and a low level of technical knowledge among the patients.

The effective creation of the city's UPE is possible only if the clinical examination is followed by the consequent dispensary observation or preventive advising of citizens with identified diseases or their development risk factors, as well as the organization of a preventive referral in inpatient and sanatorium-type institutions [10]. In this regard, the study ofDrozdovaL.Yu. et al. (2015) is of practical interest, in whichthe effectiveness of dispensary observation was assessed in curing the patients with circulatory system diseases in 47 constituent entities of the Russian Federation. Low rates of dispensary registration of patients with revealed increased blood pressure (55%), myocardial infarction (69.8%), cerebrovascular diseases (47.3%) and diabetes mellitus (66.4%) were determined. The data obtained indicate the need to improve the organizational and methodological mechanisms of dispensary observation, as well as to increase the awareness of doctors about the dispensary registration principles and the introduction of quality criteria for its conduct.

**Discussion.** As shown by the analysis of literature data on the problem of disease prevention among the residents of Moscow and the creation of a uniform preventive space in the city's environment,

among the reasons for the insufficient effectiveness of preventive measures, one can note the lack of quality control and prevention results by ministries and regional health authorities, as well as insufficient resource and staffing of preventive measures [11]. When comparing the data of the Epidemiology of cardiovascular diseases and their risk factors in the regions of the Russian Federation (ЭССЕ-РФ) study with previous studies, it was revealed that the restrictive measures adopted in our country on the prevalence of smoking and excessive alcoholism, combined with a change in the socio-economic opportunities of society as a whole, led to a decrease in the frequency of smoking and alcohol abuse. However, the prevalence of smoking still remains quite high, especially among young and middle-aged men. In addition, the frequency of such significant risk factors as low physical activity and inadequate nutrition has increased in comparison with the results of previous studies. There is no doubt about the need to develop further effective measures to struggle with the risk factors of noncommunicable diseases.

It should be noted that the ongoing process of accumulating the experience in clinical examination of the population and the analysis of the identified problems during its implementation contribute to the search for solutions to overcome organizational and methodological difficulties. The regulatory and legal framework is being improved, the relevant methodological recommendations are being updated, preventive activities protocols are being created for all levels of primary health care. Traditionally, preventive work in the practice of a district doctor was allocated no more than 25-30% of the working time, however, at least 40% of the working time is necessary to accomplish the tasks for the UPE creation [10, 11]. In this regard, measures are being actively carried out to reduce the burden on medical personnel associated with paper workflow through the digitalization of the outpatient clinic.

Conclusions. Thus, the formation of the UPE in the city will help improve the population's health, reduce the prevalence of chronic non-communicable diseases, improve the quality of life of citizens, reduce mortality and disability, which will generally increase the number of labor resources and the economic potential of the country. However, today there are a number of problems in the organization of the preventive direction in medicine that require the search for effective solutions at the interagency level.

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