

A. H. SHULHAI, H. S. SATURSKA, O. V. SATURSKYI, N. O. TERENDA, N. Ya. PANCHYSHYN,  
Yu. M. PETRASHYK**THE CONCEPT AND CURRENT TRENDS OF PUBLIC HEALTH SYSTEM  
IN UKRAINE**

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**Purpose:** to highlight the concept of public health system and public health services in Ukraine.**Materials and Methods.** Scientific methods of analysis, synthesis and generalization were used in order to achieve this goal.**Results.** Considering in detail the functioning of public health institutions in Ukraine at the national and regional levels, we can note that to ensure the epidemiological surveillance and assessment of health and well-being of the population modern new tools were created. These tools have been used to monitor public health. The basic standards of activity and priorities are used. There are new structures, such as a clear reporting system, financing, monitoring of the quality of labor resources and rendering of services to consumers.

The current state of social programs in public health research has shown the presence of a number of theoretical, methodological, economic, organizational, legal problems. Evidence suggests that investing in public health is generally cost-effective for the health care sector, other sectors, and the economy in a broad sense. A clear position of the state is important for the further development of social programs in public health. The state created the basic conditions for the development of such programs and these conditions were important for the initial stage of their formation. It is a need for creation a regulation system of such programs, which will reflect not only tax benefits, but also other preferences for developers of such programs. Particular attention should be paid to overcome the COVID-19 pandemic, which has made significant changes to the number of chronic and acute diseases and to the public health system.

**Conclusions.** The adoption of the Concept for the Development of the Public Health System in Ukraine in 2016 was a driving stage in the modernization of public health in Ukraine and had a positive impact on its development. There are still problems with the need to improve the further development and modernization of the public health system in Ukraine, which ought to be addressed at the national and regional levels, taking into account the international experience of the highly efficient systems in Europe and the World.**KEY WORDS:** public health system; public health services; social programs.

The public health system in Ukraine has undergone significant and extremely important changes, which aim to have a positive impact on the health of the population of Ukraine. Over the last decade, the task of building a public health system in the regions of our country has become an urgent need. The creation of the Concept for the Development of the Public Health System in Ukraine and its approval by the Cabinet of Ministers by Order No. 1002-r on November 30, 2016 [6] has become the driving force behind these changes.

The Concept for the Development of the Public Health System in Ukraine was created to ensure the intensive development of the public health system in Ukraine. According to this document, the Ministry of Health of Ukraine has established a Public Health Center - a health care institution responsible for maintaining and strengthening the health of the population, socio-hygienic monitoring of diseases, epidemiological surveillance and biological safety, population prevention of disease, epidemic control and strategic management in the field of public health [6]. However, due to various reasons, including political, economic and social, this process cannot be estimated as very intensive and quite productive [5]. Since then, the Center of Public Health, which is a leading governmental professional Public Health

organization, has been making a significant impact on the development of Public Health in Ukraine.

**The purpose** of the study is to highlight the concept of public health system and public health services in Ukraine.

**Materials and methods.** Scientific methods of analysis, synthesis and generalization were used in order to achieve this goal.

**Results and Discussion.** Analyzing and studying documents on public health, many scientists and experts agree that the main services provided by public health institutions located in the following areas:

- Surveillance and assessment of health and well-being of the population;
- Monitoring and responding to health hazards during health emergencies;
- Health protection, including the safety of the environment, labor, food, etc.;
- Promoting health, influencing social determinants and reducing health inequalities;
- Disease prevention, early detection;
- Ensuring strategic management in the interests of health and well-being. The strategic planning process, with the participation of all stakeholders;
- Providing the public health sector with qualified personnel in sufficient numbers;

- Ensuring the functioning and feasibility of the existence of organizational structures and funding and incentives in the public health system, which should ensure the implementation of operational functions;

- Awareness-raising activities (advocacy), communication and social mobilization in the interests of health.

Considering in more detail the functioning of public health institutions in Ukraine at the national and regional levels, we can note that to ensure the epidemiological surveillance and assessment of health and well-being of the population modern tools were created. These tools have been used to monitor public health. The basic standards of activity and priorities are used. There are new structures, such as a clear reporting system, financing, monitoring of the quality of labor resources and rendering of services to consumers.

The demographic processes in Ukraine have signs of a long demographic crisis, which is closely related to the historical and socio-economic features of the country. It is one of the most important peculiarities of Ukraine, it is well known, that Ukraine is one of the countries with a gradual decline in demographic and reproductive potential, which leads to depopulation and population decline. At the beginning of 2016, the number of children among the population of Ukraine was 16.1 %, people of working age - 61.8 %, older people - 22.1 %. The prevalence of women among the elderly due to higher mortality among men is a feature of gender imbalance. Along with the aging population, the increase in mortality, which is associated with circulatory and neoplasms, respiratory diseases, digestive disorders, infectious and parasitic diseases, is a topical issue. In Ukraine, cardiovascular diseases (e.g. stroke, heart attack) and malignant neoplasms are the leaders in prevalence and mortality among non-communicable diseases. The burden of non-communicable diseases in Ukraine is the result of a combination of genetic, physiological, environmental and behavioral factors, so public health centers have to play a significant role in preventing them, and their effectiveness should be enhanced. Behavioral factors are modified factors and can be changed. These include tobacco use, lack of physical activity, poor diet and alcohol abuse. Other equally important factors include metabolic factors: high blood pressure, overweight/obesity, hyperglycemia, hyperlipidemia. Among the non-communicable diseases caused by these risk factors, there are significant diseases of the digestive system and an increase in the proportion of deaths. Liver fibrosis, alcoholic and nonalcoholic liver diseases, which account for more than 50 % of deaths from digestive diseases, have contributed significantly to mortality from these causes of death.

In Ukraine, experts consider four main risk factors for non-communicable diseases (tobacco, alcohol, nutrition and physical activity). Alcohol is considered to be the main risk factor for adverse event deaths around the world. In Ukraine, mortality due to alcoholic liver disease (ALD) has taken the second

place in the structure of death caused by diseases of the digestive system. Therefore, the efforts of public health professionals and community initiatives in Ukraine are needed to reduce risks, including bad habits such as alcohol and smoking.

Regarding the monitoring and response to health hazards and during health emergencies, this area is also undergoing reform and innovation changes, including the improvement of systems and procedures to ensure preparedness and response to public health emergencies. This function also applies to the implementation of the International Health Regulations (IHR) [7].

The 2005 International Health Regulations (IHR 2005; sometimes the International Health Regulations; 2005) are an official document of the World Health Organization (WHO), adopted by the 58th WHO Assembly on May 23, 2005 [7]. This document regulates the actions of the World Health System in case of various emergencies in the field of health care. GH centers in Ukraine strictly adhere to the International Health Regulations 2005, the main purpose of which is to «prevent the international spread of diseases, control them and take appropriate measures at the level of public health.»

An extremely important function of the Public Health Service in Ukraine is to protect the population's health, including ensuring the safety of the environment, labor, food, etc. This function of the Public Health Service of Ukraine covers the issues of risk assessment, management and communication, which are necessary to ensure the safety of the environment, work and food safety.

Through their activities at the national and regional levels, public health institutions of Ukraine promote health promotion, study and control the impact on social determinants and reduce inequalities in health indicators, which significantly affects the achievement of goals 3 and 10 of the SDGs. The Gini coefficient in Ukraine is 26.1 (2018) which is estimated as low, the Human Development Index in Ukraine is 0.779 (2019) which is estimated as high.

Disease prevention and early detection is another important function of public health institutions in Ukraine. This feature focuses on health services primarily within the health care system. It includes the prevention of diseases, their early detection and assistance to patients in managing diseases and maintaining the maximum quality of life.

The Main Center for Public Health in Ukraine, located in Kyiv and subordinated to the Ministry of Health of Ukraine, has taken on a key role in ensuring strategic management for the health and well-being of the population, overseeing and ensuring the strategic planning process, with the participation of all stakeholders. A relatively new function of the Center for Public Health in Ukraine has been the strategic planning of personnel policy in the industry, consulting and cooperation with educational institutions to provide the public health sector with qualified personnel in sufficient numbers.

In the research, conducted by Lototska Olena et al. (2019) [1] on the basis of health care institutions

in Vinnytsia (a city in Central Part of Ukraine), an anonymous survey of 150 medical workers of different clinical departments was conducted. A number of questions were given to assess the symptoms of the emotional burning syndrome. Most of them were closed and provided answers «Yes» or «No», or the choice of one of the proposed options. The age of the respondents ranged from 20 to 50 years old. Work experience ranged from 2 to 25 years. Nurses from the psychiatric, surgical, resuscitation, therapeutic, neurosurgical, operating, traumatological, neurological, hematological, otolaryngological physiotherapeutic and admission departments of the hospital were interviewed. It was found that the negative impact of psycho-emotional factors on their health is noted by 62 % of respondents. Most complaints of increased irritability for minor events were made by nurses of neurosurgical (76.9 %) and admission (71.4 %) departments; dizziness was most noted by physicians of intensive care units (46.6%) and ENT departments (41.6 %). Employees of physiotherapy (66.6 %) and psychiatric (58.8 %) departments complained the most about headaches. Rapid fatigue was noted by 56.2 % of nurses in the surgical department and 44.4 % in the neurology department. Among nurses who have experienced a deterioration in their health, more than half (55.9 %) of respondents are aware of the problem and prevent the further development of emotional burnout by various preventive measures. Carrying out a set of measures aimed at preventing the onset of emotional burnout will be useful not only to improve the quality of professional duties of nurses but also to create a favorable atmosphere in hospitals and other health care facilities [1].

Public health centers ensure the functioning and expediency of the existence of organizational structures and funding and incentives in the public health system of Ukraine, which should ensure the implementation of operational functions.

Awareness-raising (advocacy), communication and social mobilization in the interests of health Centers of Public Health are aimed at improving the level of sanitary literacy of the population of Ukraine, which is traditionally at a high level, but with the emergence of new threats and challenges. Communication to increase the ability to receive, understand and use information, protect health policies and improve the well-being, quality of life and health of citizens is an important component of the work of Public Health Centers in this direction [3, 4].

It is very promising and necessary for the further development of the public health service in Ukraine to promote the development of research in the field of health care to create a strong evidence-based scientific basis for relevant policies and practices.

The main argument in favor of reforming preventive medicine in Ukraine, which is aimed at reorienting from health surveillance and infection control to the implementation of preventive measures more educational, is the promotion of a healthy lifestyle. Involvement of united territorial communities in this activity in the conditions of decentralization,

transfer of funding to the local level and finally entrusting a significant part of the organization and implementation of preventive measures (educational work, registration and investigation of infectious diseases, including examination of disease foci, the establishment of contact persons, maintenance of relevant documentation, etc.) transferred to the primary care.

It should be noted that prior to the adoption of the Concept for the Development of the Public Health System in Ukraine in 2016, there was a system, the main part of which was the state sanitary-epidemiological service, which had similar tasks and functions that apply to the Public Health system today, such as preventive medicine; providing epidemiological surveillance, health assessment, monitoring of factors that affect human health; conducting educational work; involvement of the executive authorities and local self-government and the public in preventive measures; training; planning and conducting research and strategy. Nevertheless, they needed improvement, some changes in activities, increasing responsibility, updating in accordance with the requirements of contemporary situations and problems. It was also necessary to intensify international cooperation and partnership and to establish highly effective inter-institutional cooperation both in Ukraine and with foreign partners.

An example of this is the consolidation of the efforts of the Ministry of Health of Ukraine, the Center of the PH of Ukraine, and the regional centers of the PH, which have taken on a huge burden in the fight against the existing outbreak of coronavirus in Ukraine and the world. In Ukraine, the main burden of implementing anti-epidemic measures fell on the shoulders of state institutions "Regional Laboratory Centers of the Ministry of Health of Ukraine" with their separate structural units, former structural units of regional centers of sanitary and epidemiological services of Ukraine.

Another serious problem of the PH system in Ukraine, which was especially evident during the reform of the industry, is the insufficient number of public health specialists of epidemiological profile (epidemiologists, assistant epidemiologists) in the regions. They are trying to solve this personnel crisis by opening new educational and professional programs in Ukrainian universities, where bachelors and masters of public health are being taught.

The formation of social programs in public health is largely unsystematic - there are no generally accepted standards of public social reporting [2]. In this regard, the urgency of studying the basics of social programs, as well as practical mechanisms, their implementation in accordance with modern requirements is growing.

The current state of social programs in public health research has shown the presence of a number of theoretical, methodological, economic, organizational, legal problems [2]. Evidence suggests that investing in public health is generally cost-effective for the health care sector, other sectors, and the

economy in a broad sense. A clear position of the state is important for the further development of social programs in public health. The state created the basic conditions for the development of such programs and these conditions were important for the initial stage of their formation. It is a need for creation a regulation system of such programs, which will reflect not only tax benefits, but also other preferences for developers of such programs. Particular attention should be paid to overcome the COVID-19 pandemic, which has made significant changes to the number of chronic and acute diseases and to the public health system.

### Conclusions

The adoption of the Concept for the Development of the Public Health System in Ukraine in 2016 was a driving stage in the modernization of public health in Ukraine and had a positive impact on its development. There are still problems with the need to improve the further development and modernization of the public health system in Ukraine, which ought to be addressed at the national and regional levels, taking into account the international experience of the highly efficient systems in Europe and the World.

**Prospects for further research** are to study the results of the implementation of operational functions of public health in Ukraine.

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**КОНЦЕПЦІЯ ТА СУЧАСНІ ТЕНДЕНЦІЇ РОЗВИТКУ СИСТЕМИ ГРОМАДСЬКОГО ЗДОРОВ'Я В УКРАЇНІ**

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**Мета:** висвітлити концепцію системи громадського здоров'я та служб охорони здоров'я в Україні.

**Матеріали і методи.** Для досягнення цієї мети використано наукові методи аналізу, синтезу та узагальнення.

**Результати.** Детально аналізуючи функціонування закладів громадського здоров'я в Україні на національному та регіональному рівнях, можна відзначити, що для забезпечення епідеміологічного нагляду і оцінки здоров'я та добробуту населення створено сучасні нові інструменти, які застосовують для моніторингу здоров'я населення. Також використовують нові стандарти діяльності, нові структури, такі як чітка система звітності, фінансування, моніторинг якості трудових ресурсів та надання послуг споживачам.

Сучасний стан соціальних програм у дослідженнях охорони здоров'я показав наявність низки теоретичних, методологічних, економічних, організаційних, правових проблем. Дані свідчать про те, що інвестиції в охорону здоров'я в цілому є економічно вигідними для сектору охорони здоров'я, інших галузей та економіки в широкому сенсі, тому чітка позиція держави важлива для подальшого розвитку соціальних програм у галузі охорони здоров'я. Держава створила базові умови для розробки таких програм і ці умови мали значення для початкового етапу їх формування. Необхідно створити систему регулювання таких програм, яка відобразить не тільки податкові пільги, а й інші переваги для розробників таких програм. Особливу увагу варто приділити подоланню пандемії COVID-19, яка внесла значні зміни у поширеність гострих та хронічних захворювань та в роботу системи громадського здоров'я.

**Висновки.** Прийняття Концепції розвитку системи громадського здоров'я в Україні у 2016 р. стало рушійним етапом модернізації охорони здоров'я в Україні та позитивно вплинуло на її розвиток. Проте існуючі проблеми у даній сфері, зокрема ті, що пов'язані з необхідністю покращення подальшого розвитку та модернізації системи громадського здоров'я в Україні, потрібно вирішувати на національному та регіональному рівнях з урахуванням міжнародного досвіду вискоелективних систем у Європі та світі.

**КЛЮЧОВІ СЛОВА:** система громадського здоров'я; служби громадського здоров'я; соціальні програми.

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