

**Review article:**

**Actual aspects of public health policy formation on the example of Ukraine**

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**Abstract:**

Our publication is devoted to the evolution of the public health system, its role in public health promotion and determination of the basic notions. According to the definition of the World Health Organization, public health is a science and practice of the diseases prevention, increase in life expectancy and health promotion with the help of the organized actions of the society. Yet in practice, public health formed under difficult conditions.

In the article we consider the following questions: stages of public health system formation in the world and in Ukraine; analysis of public health system formation in Ukraine: institutional frameworks and strategic priorities and basic operational public health functions in Ukraine. We propose suggestions on legal procedures state improvement in public health in Ukraine in the context of European integration.

**Keywords:** public health; health policy of Ukraine; European integration.

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**Introduction:**

**Public health formation in the world:** Public health takes its roots since ancient times. Since human civilization origin, it was acknowledged that polluted water and absence of proper waste disposal cause infectious diseases spreading. Ancient religions tried to influence social life, especially in the aspects concerning health: from the type of consumed food and up to behaviour regulation. For example, alcohol consumption or sexual relations. State leaders were responsible for their citizens' health to ensure social stability, prosperity and order maintaining.

The origin of epidemiology as a science started from considering the polluted public water pump as a source of cholera outbreak in 1854 in London. In the process of communicating with local citizens, the scientists determined the outbreak source – it was a pump of communal water supply in the street. This

persuaded local authorities to turn off the well pump. Also during this period the connection between water source quality and cholera cases was proved with the help of statistic methods. It was determined that water supply company performed water intake from the river Thames areas, polluted with waste waters. It caused increase of cholera cases frequencies. Such investigations were the most important events in the history of public health. They are considered to be fundamental for epidemiology.

At the edge of the 20th century, due to the works of Pasteur and Koch, which were fundamental for bacteriology, the methods of malignant bacteria isolation were developed and vaccines were invented. British medical doctor Ross discovered that mosquitoes are malaria vectors, and thus made basis for fight against the disease. Also there was a revolution in surgery due to antiseptics for infections

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elimination. It was confirmed that plague is carried by fleas, parasitizing on the rats. It was revealed that mosquitoes carry yellow fever virus. After the victories over epidemiological diseases, public health started focusing on chronic diseases, in particular, cancer and cardiovascular diseases<sup>1, 2</sup>. Previous efforts on the use of preventive methods in many developed countries had resulted in sharp decrease in mortality by that time<sup>3, 4, 5</sup>.

Scientists pay special attention to the study of the issues of the patients' rights protection in health care. In particular, the issues of discriminations against women, palliative medicine, bioethics, aspects of public police in public health are investigated<sup>16-11</sup>.

Researchers distinguish such phases of public health system development:

Phase of control – 1880–1920.

Phase of ideas promotion – 1920–1960.

Phase of social engineering – 1960–1980.

Phase “Health for all” – 1981–2000.

Phase “Health in all state policies” – since 2000 till now.

Thus, it is necessary to mention that distribution of the principles of public health system around the world yields positive results and requires additional scientific research and synthesis.

**Stages of public health system formation in Ukraine.** Health care in Ukraine has its old and interesting history. Recently, new details of the formation and development of health care management system, including public health, were revealed for a wide circle of readers. Due to accurate work of the specialists at museums and archives, new previously unknown facts appear.

Thus, at the beginning of the 20th century, after the range of revolutions and Russian Empire decline, Ukraine started formation of own governance structures, in particular, in the field of public health. It was envisaged, that the whole medical and sanitary structure would be based on democratic principles, developed by public medical thought, which had been the basis for country medicine before. Its basic principles were free medical aid, its general availability, preventive trend, participation of the community in the development of medical and sanitary aid system. Its managerial aspects were based on self-government principle. New medical care managing bodies started forming on this basis in Ukraine. The development of town councils activities with the departments of public health, governorate and district country councils with sanitary bureaus began.

A new conception was forming at these institutions. It was based on the consolidation of public health and care principles and reconstitution of historical heritage of the domestic medicine. Thus, as far back as in the 15th century, medical custodial institutions were grounded in Ukraine. Thereby, comprehensive approach to the issue of population's health care was implemented. The functions of the Ministry of public health and custody formed according to the priority requirements of those times: organization of health care of civilian population, provision of the merchant fleet with sanitary care, promotion of repatriation of Ukrainian citizens, help to the captives, return of the Ukrainian emigrants from West and Far East countries, purchasing medications for Ukraine abroad.

A long and complex way was gone during Ukraine's staying within the USSR. The functions of the Republic Ministry changed and became more complicated according to the tasks, which were put forward at different stages of the economy and social policy development.

After the independence of Ukraine was proclaimed in 1991, the Ministry of Health faced the task to arrange health care of the independent state under the conditions of economic crisis. There appeared a need to reform the branch according to new economic conditions and to develop corresponding medical and sanitary legislation.

In general, having saved some amount of medical and sanitary aid provision, the institutions of the branch in some regions got failure. Thus, an acute issue of the branch reorganization is on the agenda, and first of all, it is the field of public health. The strategy of medical aid reorganization, from the point of view of the branch leaders, should be carried out in several directions. Firstly, it is necessary to proclaim prophylaxis and fundamentals of healthy life style as the essence of all institutions activities. Secondly, it is necessary to form new system of the branch management, based on the fundamentals of the market economy, involving the methods of modern management. Provision of the conditions for private sector development, family medicine basics and medical insurance implementation as new forms of sociomedical and economic relations, arrangement of the rational system of medicines and logistics support and reformation of medical education will add up an opportunity to lead the health care branch of Ukraine to the level of the developed countries<sup>12-16</sup>.

**Analysis of public health system formation in Ukraine.**

Nowadays, a state and regional policy of health preservation and productive human life is implemented in Ukraine. The legislation on public health system is based on the Constitution of Ukraine and Laws of Ukraine:

- “Fundamentals of health legislation of Ukraine”,
- “On provision of sanitary and epidemic well-being of the population”,
- “On population protection from infectious diseases”.

Ukraine in its European integration processes is oriented at the policy “Health-2020: fundamentals of the European policy for support of the state and society actions in favour of health and well-being”<sup>17</sup>, at “European plan of actions on consolidation of the potential and services of public health”<sup>18</sup>, which became an orienting point in public health development in the European region, and at the requirements of the Agreement on association between Ukraine and EU<sup>19</sup>. A national-level document, which determines general course of actions, is a Strategy of sustainable development “Ukraine-2020”<sup>20</sup> and National strategy of reforming health care system in Ukraine in 2015-2020, which is a constituent of the national actions plan on reforming.

Now, the Conception of public health development, which was adopted in 2016, is being implemented in the state<sup>21</sup>. The conception will help in creation of appropriate unified system. This means that each leader of central and local body of executive power will take into account the consequences of their decisions for health of the population and give priority to the measures, which will help people to avoid diseases and injuries. The process of strategic planning of the system development is implemented including interested parties and measures planning at national, regional and local levels. The conception establishes the basics for health care system focusing on the reorientation from treatment policy to the policy of health promotion and preservation and diseases prevention.

In order to reduce impact of non-infectious diseases, it is implemented an approach, which will give people an opportunity to choose measures, aimed at their health promotion on their own. It also will permit to expect and demand, from local self-government bodies in particular, to take corresponding decisions. The Conception implementation will push forward complex reform of health care system. The Cabinet of Ministers of Ukraine in 2017 approved the Plan of measures on realization of the Conception of public health system development<sup>20,22</sup>.

The plan foresees:

- development and adoption of the Communication strategy on the priority issues of public health;
- development of staff resources in the public health system, amending the national occupational classification according to the specialization “Public Health”;
- creation of referent laboratories;
- implementation of the electronic system of information management in the laboratory network of public health system;
- development and adoption of the statutes of public health regional centres;
- development of the regional plans of complex measures and programmes on prevention and treatment of diseases, causing the most negative socio-demographic and economic influence;
- development and adoption of the model provision on regional (district at hospital districts) coordination councils on the issues of response to emergency situations in public health.

Measures on impediments elimination in public health include:

- - communication improvement by means of informing and influence on motivation of individuals and groups of people on health preservation;
- - public health advocacy as activity on representation and protection of human interests in public health.

The first pilot projects on the development of regional system of public health in Ukraine were initiated in 2017 in 6 regions: Rivne, Poltava, Chernivtsi, Kherson and Sumy regions and in Kyiv city with the aim to develop corresponding organizational mechanisms.

Also, according to the models of European integration processes of the High medical school development in Ukraine, the speciality “Public Health” was created at some higher educational institutions in qualification levels Bachelor and Master. At the same time, educational programme “Public Health” requires improvement, development and implementation of the European experience<sup>23</sup>.

In order to coordinate the efforts at national level, the Centre of public health at the Ministry of Health of Ukraine was founded. This institution implements the best European experience in Ukraine. Thus, for instance, the Centre implements common project together with Norwegian Institute of Public

Health. Cooperation foresees development and implementation of international medical and sanitary rules and system of preparedness and response to emergency situations. Moreover, national systems of antimicrobial resistance and infection control will be implemented. Separately with the Norwegian colleagues the system of public health registers and of the environmental factors monitoring estimation (air and water) are improved. Norwegian experience will be useful for reformation of the similar directions of public health system in Ukraine <sup>24</sup>.

Thus, taking into account the given data, a new model of public health is actively implemented in Ukraine, legislative and normative-legal acts are developed with European experience implementation.

### Strategic priorities and basic operational public health functions in Ukraine.

The main problems of public health in Ukraine are:

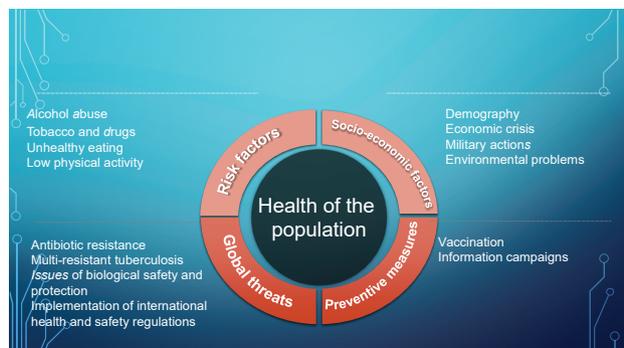
- declined life expectancy;
- Ukraine takes the first place in Europe in the spread of HIV/AIDS;
- tuberculosis spreading (Ukraine is among top five world leaders);
- antibiotic resistance;
- critically low rate of vaccination population coverage;
- high rates of mortality from non-infectious diseases (86% as of 2016) <sup>25</sup>.

In the structure of non-infectious diseases mortality factors the main factors are diabetes <sup>26-28</sup>, cancer, chronic obstructive pulmonary diseases, cardiovascular diseases <sup>29-31</sup>.

Key risk factors of non-infectious diseases are considered below (see scheme 1).

Scheme 1

Key risk factors of non-infectious diseases



Taking into account the mentioned conditions, target indicators of National action plan on reduction of non-infectious diseases morbidity rates in Ukraine were chosen by the public health specialists:

- 25% reduction of premature mortality from non-infectious diseases;
- at least 10% reduction of alcohol abuse;
- 10% reduction of improper physical activity incidence;
- 30% reduction of average salt consumption by the population;
- reduction of the incidence of the tobacco products consumption by the population at the age of over 15 to 18.5% index;
- termination of the obesity and diabetes incidence growth.

But here occurs a question how to achieve the mentioned indices, by means of which state administration tools in public health? Operational public health functions, considered in the scheme 2, will help us (see scheme 2).

Scheme 2

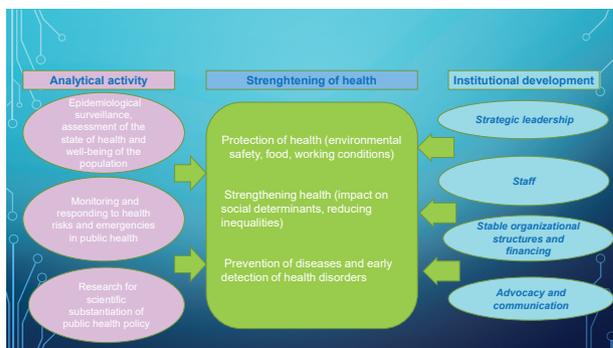
Operational public health functions (how to do?)



In our opinion, the increase of work efficiency in public health can be achieved by means of consolidation of the efforts of all involved state and regional structures. This cooperation can be represented as inter-sectoral interaction (see scheme 3).

Scheme 3

Inter-sectoral interaction in public health



### Suggestions on legal procedures state improvement in public health in Ukraine.

The study of the legal aspects of the development of the public health system was conducted in Ukraine in 2017.

In this context, the Center for Health Services Studies of the University of Kent, Kyiv Economics Institute, Kyiv School of Economics, is interesting. In particular, researchers have come to the following conclusions. Improvement of the available legislation, amendments to the laws, introduction of new professions and practices is an integral part of each public health programme. However, not much is known about the extent to which these activities were implemented. Key informants that investigators interviewed for this study emphasized that Laws of Ukraine do not meet today's requirements, and further changes are needed to the regulatory framework. Lack of supportive legislation was named as one of the main difficulties of the implementation of the programme on combating the spread of infectious socially dangerous diseases in the Dnipropetrovsk region in 2008-2012 years. For instance, confidentiality of the patients' diagnosis is one of the debated topics. Family doctors and experts at specialized health care centres believe that the "confidentiality" norm must be deleted from the law. According to the available legislation, doctors are criminally responsible for disclosure of information about HIV / AIDS positive people. To avoid criminal liability, they do not inform other professionals about HIV / AIDS status of their patients. This increases health risks of both HIV / AIDS positive and negative people, affects timely provision of specialized medical aid and contributes to stigmatization of HIV / AIDS positive people, according to some interviewed doctors.

The available legislation also does not take into account force majeure. As a result, national programmes limit activities to local medical personnel and administration staff. The division of responsibilities for program implementation between local and national government lacks flexibility and does not consider cases of force majeure when any party fails to accomplish program activities. In case national government fails to implement any part of the public health program it is responsible for, local government cannot overtake responsibility for its implementation either as it will be subject to criminal liability. For instance, in the framework of the National program on tuberculosis, the national government took responsibility for providing BCG vaccine, but did not supply it. In such circumstances local government could not purchase vaccine from

local budgets either even though they had the funds available. Allocation of local funds into activities not stipulated by the programme would be a subject to criminal liability in Ukraine<sup>32</sup>.

In the context of globalization, the human right for health care stops being just an individual property. It becomes the most important value for the state and civil society. In order to eliminate contradictions of the normative and legal acts, it is necessary to make a major revision of the principal fundamentals, which are a basis for the whole social legislation, its transformation into balanced system, where the aims and vectors do not contradict, are not mutually exclusive and work for common aim, determined in the Constitution<sup>33</sup>.

### **Conclusions**

Summing up, we would like to mention that the necessity of the public health specialists' activity should be comprehended by all state and municipal bodies of power and government, business and population. Public health centres are expected to fulfil a responsible mission of all society efforts consolidation. In particular, mass media, religious organizations, schools, universities, enterprises and small business, centres of mental health, subjects of transport service, judicial and law enforcement authorities, charity organisations, grantors, ecological structures and communities themselves at the level of streets and residential quarters under the aegis of the public health centres should gradually unite into integrated systems of local partnerships.

**Ethical clearance:** (no need for review article)  
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### **Authors' contribution:**

Data gathering and idea owner of this study:  
Demikhova N.

Study design: Demikhov O., Dehtyarova I.

Data gathering: Demikhov O., Dehtyarova I.

Writing and submitting manuscript: Demikhov O., Demikhova N.

Editing and approval of final draft: Demikhov O., Demikhova N.

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