

Strategic Health Care Management: Challenges and Realities of Emergencies

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ABSTRACT

The article is devoted to strategic management system improvement in the sphere of health care in conditions of emergencies by the example of Ukraine. Pandemic conditions and military actions substantiate the relevance of the research. The study aims to improve the system of health care system's strategic management in emergencies. The research's novelty is proposing a new model of interaction between emergency response bodies. An analysis of foreign experience, scientific literature, and normative regulation was carried out to find problem solutions. Methods of analysis, synthesis, induction, and deduction allow to find weaknesses of strategic management and offer ways of liquidation. The study results show the current state of strategic management in healthcare by systematizing the strengths, weaknesses, opportunities, and threats and conducting a SWOT analysis. As a result, weaknesses of the system are identified, and directions for their elimination are proposed. For this purpose, it is necessary to change the work of the Cabinet of Ministers and Health Service with the Emergency Services. The practical value of the research consists in the possibility of application of its results in forming new, more effective strategic aims of public health system development in the case of military operations.

HIGHLIGHTS

- The article is devoted to strategic management system improvement in the sphere of health care in conditions of emergencies by the example of Ukraine.
- The study results show the current state of strategic management in healthcare by systematizing the strengths, weaknesses, opportunities, and threats and conducting a SWOT analysis.

Keywords: Health care system, strategic management, organizational structure, COVID-19, war in Ukraine

Health care is one of the critical functions of any state and one of the main priorities of state social policy. In turn, public health is an essential element in a country's socio-political and economic potential, ensuring the society's sustainable development. The importance of this function worldwide has been exacerbated since the COVID-19 pandemic began when the emergency associated with the rapid increase of morbidity became a feature of everyday life.

During the pandemic in Ukraine, it became clear

that preserving human health and life requires improving medical care systems. It requires a new strategic approach to innovative development, increased attention to basic medical and biological science, and the introduction of new effective treatment and diagnostic technologies.

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The situation worsened in 2022 with the beginning of full-scale military operations in Ukraine. Under the conditions of martial law emergency, doctors have to perform the critical function of continuing the fight against COVID-19 that went nowhere and at the same time performing thousands of operations daily to save military and civilian lives.

In general, today is characterized by the increasing complexity of public health management processes, which differ significantly from other types of management due to the specifics of health care activities. Therefore, it necessitates taking into account all factors influencing the external and internal environment and transforming the overall management policy of medical institutions based on strategic management (Rogachevsky, 2020).

The strategic goal of health care management is a purposeful influence of the government on the creation, distribution, and consumption of medical services by solving current problems of medicine, which Ukraine faced in emergency and long-term problems such as public health, reduction of morbidity, increasing life expectancy, etc. All this requires updating the strategic management approaches of the health care system, which defines the study goal.

The study aims to improve the health care strategic management system in emergencies.

Literature Review

Health policy and public administration problems in health care are the subjects of scientific interest of a wide range of domestic and foreign researchers. In particular, only in 2019–2021 Knysh (2019), Krinichko & Vatanov (2020), Nabhan & Moiseenko (2021), Rogachevsky (2020), Sazonenko & Tolstanov(2021) devote their works to the issue of building effective policies in the health sector.

In particular, Knysh (2019), in his study, showed measures to improve public administration in healthcare, where he determined that the improvement of public administration in healthcare is possible through the involvement of a group of international experts from EU member states to determine the optimal mechanism for transition to a general compulsory public health insurance system. Krynychko & Vatanov (2020), in their study, noted the importance of reforming the health care system

in the area of financing, investment and innovation activities, and human resource management, which will result in improving the health care service provided to the population. Nabhan & Moisejenko (2021), in their work, also note an essential component of strategic management – improving the quality of health care delivery. Therefore, it is necessary to expand the range of medical services, increase the productivity of medical professionals, expand the sources of financial support for medical institutions, and improve organizational and managerial structures to achieve this goal.

According to Rogachevskaya (2020), applying systems research methods significantly expands the possibilities of planning long-term health policy. It stipulates a multipurpose and comprehensive approach to intra-branch organizational and functional segments in the medical sphere of the country.

Despite the considerable amount of domestic research in strategic health management, there is insufficient literature on emergency and strategic management policy in emergencies. To this end, a range of foreign literature has also been examined. In particular, quite a large amount of literature shows the methods and ways of medical sphere policy formation (Farmbry & Krauskopf, 2013) in emergencies, as well as the construction of forms of rapid response, which is necessary in case of emergencies. Especially valuable is the experience of rapid response by medical facilities to covid conditions faced by European countries and therefore were forced to work cohesively and quickly, completely changing the established standard of routine medical care in everyday situations (Romero *et al.* 2021).

Most research has focused on emergency management techniques and evaluating state performance, including institutional organizations. In their study, Davies & Savulescu (2022) show different countries' cases. In addition, a study of the U.K. medical system shows how a rapid response system can be built in response to an emergency, the outbreak of the Covid-19 epidemic.

The United States provides emergency medical care through the National Disaster Medical System (NDMS). The central authority for organizing medical institutions' work is the Department of Health and Human Services and the Department

of Defense. They are involved in the strategic planning of organizational, medical, and evacuation activities (Bernhard *et al.* 2004). The prevention and elimination of natural and man-made disasters is the responsibility of several departments directly subordinated to the State President. FEMA is the main agency responsible for emergency medicine. In addition, the organization coordinates the activities of state civil defense agencies, federal departments and agencies (Departments of Energy, Transportation, etc.), and business and public behavior during emergencies (Moroz *et al.* 2018).

Scientific research on emergency management in Ukraine shows that the system is far from perfect. Thus, Terentieva (2010) proposed a comprehensive approach to eliminating emergencies at the regional level. Radish & Terentieva (2009) substantiated the state regulation mechanisms and determined the implementation directions of the research results in the practice of health protection management at the state level. Shostak (2014) investigated the principles of interaction between authorities during the liquidation of emergencies. Finally, Zhukova (2002) considered the possibility of building effective public administration in the sphere of social protection of the population from the consequences of crises.

However, while the issue of prompt response is well covered, there is a lack of literature on strategic management of emergencies in the field of medicine, which forms the novelty of the study and its significance.

Research Methods

General scientific methods of knowledge and special methods, which include analysis, synthesis, induction, and deduction, were used to conduct the study. In particular, analysis is used in studying normative-legal regulation and critically examining foreign literature. In addition, it is a source of proposals to improve the strategy in the field of emergency management. Synthesis of information allows data generalization, highlighting general patterns and trends in health management policies. The inductive method is used to find new forms and functioning mechanisms of all medical system elements in emergencies. Finally, deductive methods are applied to improve authorities' work to solve the key tasks related to emergencies.

Also, the research applies the system analysis method to find relationships between different emergency response processes. The comprehensive method allows us to find differences between different approaches to dealing with medical emergencies.

The proposed directions for improving strategic health policy are based on analogy, modeling, and planning.

Research Findings

Global experience with medical emergency response shows that although disasters are often unpredictable, the harm they cause can be reduced or partially prevented by taking appropriate measures to enhance preparedness. Moreover, the experience of many countries around the world shows that the consequences are minimal in those countries where a modern occupational health emergency response system is in place.

At present, there are different approaches to emergency response in various countries around the world. In some countries, a separate structure has been created – disaster medicine. In others, emergency medical aid in emergencies is provided by the public network of medical health units. At the same time, additional forces and means are mobilized for use in an emergency (Sakr & Wardrope, 2000).

Thus, in the United States, emergency response is provided by the civil defense authorities, the Department of Health, the National Fire Administration, and the Armed Forces medical service. The main agency that has a central role in disasters is the Federal Emergency Management Agency (FEMA), established in 1979, which reports to the President (Boisvert & Moore, 2003). In addition, FEMA provides training, public education, and information on civil defense, tasks in combating terrorism, control over the use of electronic media during emergencies, and interaction with the Armed Forces. Medical care in emergencies in the U.S. is provided through the National Disaster Medicine System.

European countries have also set up appropriate structures. In Sweden, the National Rescue Services Administration was established in 1986, directing residents' rescue work involving medical institutions

and local government. The rescue service is responsible for organizing and training specialists to deal with emergencies, providing the population with all the necessary information on how to act in a crisis (Arnold, 1999). The SAMU (Service Aide Medicale d' Urgence) system created in France in 1956 is considered one of the most effective emergency response systems, which operates on a regional basis within a department. It has about 100 locations. The rapid response team consists of a physician with special training in the ambulance system, a nursing nurse, a driver, and a radio operator. The last two members of the team are men, usually police officers or firefighters, who serve part-time as paramedics (Adnet & Lapostolle, 2005). The German emergency response system combines elements typical of similar systems in the United States and France. Following the Disaster Protection Act (1968), the state provides for a system of various types of assistance. Its tasks include rescuing people and eliminating or reducing the consequences of disasters. The German health care system has almost 500,000 beds; 200 auxiliary hospitals with 1.2 million beds can be deployed. Medical care in natural or man-made disasters is the responsibility of specially trained physicians, but paramedics are allowed to provide appropriate care (Roessler & Zuzan, 2006). Thus, taking into account the experience of foreign countries, it can be concluded that emergency response systems are formed by the interaction

of organizations on population protection from emergencies, the apparatus of executive power, and the Ministry of Health. Coordinated interaction between all authorities allows for working effectively, flexibly, and quickly responding to emergencies. This experience is central to building a strategy for emergency medical management in Ukraine.

In Ukraine, reforming the healthcare system is only at the initial stage because real reforming always represents a significant change in institutions, policies, and the very philosophy of subject-subject and subject-object relations, which we do not observe yet.

In general, healthcare reform aims to change the paradigm of public policy and management, ensuring transition to a society where decisions are made openly, transparently, and democratically, according to laws, rules, regulations, and procedures that meet international standards.

Since strategic planning of medical institutions is a complex and responsible process, its technology involves implementing the following stages.

1. Evaluation of the main performance indicators of the organizational structure of the medical system and its SWOT analysis. A typical example to illustrate the results of the SWOT analysis of a healthcare institution is presented in Table 1.

According to the Unified State Civil Protection System in Ukraine, the main management bodies

Table 1: SWOT-analysis of healthcare management system in emergencies

Strengths	Weakness
Staffing with rapid response medical personnel No queues or delays in dealing with public health issues Satisfactory facilities to address significant health issues Alternative sources of financing from international funds Technical and technological support of medical institutions for prompt interaction with other emergency response agencies	Acute shortage of auxiliary health workers: nurses, paramedics, etc. Lack of new therapeutic and diagnostic equipment and apparatus The inflexibility of the rapid response system does not allow it to act effectively in an emergency. Low level of financing and lack of funds for the organization of mobile hospitals
Opportunities	Threats
Involvement of private sector treatment facilities to address immediate problems Establishment of a unified rapid response system in which medical facilities are a key element Creation of rapid response funds for the deployment of mobile hospitals	Insufficient financing for the state and regional medical care development programs Growth of competition on the part of private medical and diagnostic centers The passive attitude of citizens to their health

Note: Compiled by the authors.

are the Cabinet of Ministers, the State Service for Emergency Situations, and the apparatus of the executive branch. The Ukrainian emergency response system does not include the Ministry of Health, although the number of emergency response patients increases rapidly in the event of an emergency.

As part of the emergency response system, the health system is regulated by the Commission on Techno-Ecological Safety, which is directly subordinated to the State Emergency Service. In a crisis, this body establishes an emergency response team. However, the current organizational structure of the medical system and public administration does not allow medical institutions to work effectively in emergencies. It was confirmed during the sharpening of Covid-19 when people faced a situation where it was impossible to receive treatment within the hospital walls.

The healthcare industry must be integrated with all spheres of the national economy. The global goal of effective strategic management of healthcare institutions is a rapid response to emerging challenges and quality service to the population in everyday situations.

It should be noted that reforming the healthcare industry to improve its level of emergency preparedness requires the following actions:

- ♦ complete transformation of the industry, involving the creation of a qualitatively new management structure (model);
- ♦ change in the system of industry funding and the mechanism for purchasing medicines;
- ♦ review of the network of health care institutions at all levels;
- ♦ changing and streamlining the legal relationship “doctor-patient”;
- ♦ updating clinical protocols in medical practice;
- ♦ introduction of electronic document management and telecommunication
- ♦ means of communication, etc.

The main strategic goals in our country’s health care field are specifically defined and enshrined in the Sustainable Development Goals, adopted by Ukraine in the context of the implementation of the global Sustainable Development Goals approved by the UN Summit on Sustainable Development in 2015.

According to this document, our state pledged to achieve nine main objectives by 2030, in particular: reduce maternal mortality; minimize preventable mortality among children under the age of 5; stop the epidemic of HIV / AIDS and tuberculosis, including through the use of innovative practices and treatments; reduce premature mortality from noncommunicable diseases; reduce premature mortality by a quarter, including through the use of innovative approaches to disease diagnosis.

Unfortunately, there are almost no recommendations in the document on the activities of medical institutions in emergencies, particularly in war conditions, which Ukraine is facing today. Today’s states require the construction of new goals of sustainable development, providing for a rapid response to unpredictable situations by medical institutions, which requires, first and foremost: the most rapid interaction of medical institutions with the management apparatus, as well as developed tactical actions to resolve emergencies of a different nature: medical, man-made, environmental, etc.

Based on the results of the analysis, it is recommended to improve the strategy for medical development in emergencies:

- ♦ To the Cabinet of Ministers of Ukraine to develop and approve the order of interaction of institutional bodies so that the state service for emergencies and the Ministry of Health could quickly respond to an emergency.
- ♦ It is recommended to develop a commission of rapid response to emergencies at the regional level (at the place of emergency), as well as a subordinated staff for liquidation of medical and biological emergencies at all levels of state administration at regional, local, and object levels. This headquarters will collect data on the damage to the population and provide information for the rapid response of medical institutions.
- ♦ To the Ministry of Health of Ukraine, it is recommended to organize a subsystem to ensure the population’s sanitary and epidemiological well-being within the framework of forecasted technogenic, ecological or medical emergencies.
- ♦ To the State Service for Emergency Situations, it is recommended to prepare the possibility of organizing mobile rapid response teams,

the level of disease, and the provision of operational assistance.

DISCUSSION

The question of the formation of the management strategy of medical institutions in emergencies is quite debatable. Thus, some researchers believe that an important component of strategic management is a policy of rapid response to the emergence of various kinds of accidents (Burbela & Kondratov, 2020). When building an effective system of medicine, it is essential to form such relationships between regulatory bodies so that they can quickly interact and exhibit structural flexibility when necessary. All this requires, first of all, additional funding from the state and the creation of funds to control emergencies.

The analysis of foreign experience in combating emergencies allowed to highlight the main principles of organization of effective work of medical institutions and other response services:

- ♦ centralization of management decisions ensures speed and consistency in the provision of emergency medical care;
- ♦ concentration of material, technical, personnel, and scientific potential should be carried out not only at the state level but also at the regional level, which results in maximum efficiency in organizing the entire range of specialized medical care in all regions of the country;
- ♦ consolidation of all links of the service into a unified system will reduce state expenditures and obtain state guarantees of free and accessible emergency medicine services.

Researchers Terentieva (2010) and Shostak (2014) have the same opinion. They believe strategic management is based on an interconnection model between state agencies responsible for emergency response. The authors point out that the response system must have a centralized body but at the same time has enough power to quickly organize work on the site of an emergency, which requires improvement of regional management. In addition, it requires effective permanent response teams and the ability to rapidly expand medical facilities to provide treatment to people affected by an emergency. In such circumstances, the central coordinating functions are performed by the

Headquarters, which should organize the quick work of all necessary authorities and rapid response services. In a pandemic, such a medical system reform is quite extensive, and in the face of threats associated with military action, particularly those of a radiation nature, local response systems must be developed.

CONCLUSION

The strategic management of health care in Ukraine is carried out within the framework of strategic programs, which were drawn up before the pandemic and military actions began. The realities of ordinary life mean that today medicine assumes serious responsibility for preserving public health under pandemic conditions and responding quickly to emergencies associated with military actions. Military actions form the context for unforeseen emergencies in different regions. The current medical system must be responsive, flexible, and have enough resources to handle a large influx of casualties. These are all real situations in which medical institutions and thousands of medical professionals operate, saving lives and keeping people healthy. However, realities show that the emergency response system is often ineffective. It happens through a weak management structure that does not provide consistent, quick interconnected work. It is recommended to introduce into the state management structure a special headquarters of rapid response, which is created locally on the scene of an emergency, which conduct information training for medical institutions and coordinates material, technical and human flows to eliminate the consequences of crises. It will allow the current system to be more receptive and prepared for unforeseen circumstances and the state to show a higher level of organization and responsibility for the population.

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