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COOPERATION OF HEALTH CARE UNITS WITH UNIFORMED FORMATIONS IN THE AREA OF PUBLIC SECURITY

Abstract

The therapeutic activity consists in providing health services understood as undertaking actions that are aimed at preserving, saving, restoring or improving health and other medical activities resulting from the treatment process. Therefore, the preparation of medical entities, which is a precedence of an accurate determination of the nature of a potential threat, will allow for efficient actions to be taken in the event of a threat to public safety. A decisive factor for efficient action is the cooperation of the State Medical Emergency System with the uniformed formations, i.e. organizational units of the State Fire Service, Police and Border Guard. All undertaken actions should take into account the principles of logistics, which in turn should ensure that each affected individual receives the necessary medical assistance within the scope of their expectations related to the injuries they have suffered. In order to provide assistance to as many individuals as possible in the shortest possible time, it is necessary to optimise the flow of material resources.

Key words

safety, public safety, threat to public safety, health care, treatment entity

Introduction

The fundamental praxeological concept is action understood as any behavior aimed at a specific goal. The first science dealing with the fundamentals of human action was philosophy. Scientists sought answers to the question of what laws govern human destiny. They tried to determine the goals that serve human action and the factors that drive them to behave in a way that would lead to achieving these goals. The goal of an action is a state of affairs that, being valuable to the acting person in some respect, determines the direction and structure of his or her action. The precise determination of the goal of action, despite its usefulness, is not always fully possible, which is due to the type of hierarchy of goals: time, depending on the interval in which we consider the action, and the significance for the acting individual of the various goals that determine this action¹. Practical directives for an efficient action are specific guidelines that aim to improve this process. They take the form of recommendations in the field of maximizing the efficiency of action or cautions in the field of avoiding inefficiency.

Therefore, the preparation of medical entities, which follows an accurate determination of the nature of the potential threat, will allow efficient action to be taken in the event of a threat to public safety. This problem, from the point of view of social expectations, is extremely important, and from the scientific point of view requires resolution in the field of improving solutions for

the organization of assistance to people in a state of sudden health threat in conditions of a threat to public safety. In addition, it is necessary to emphasize the topicality of the subject matter undertaken and its importance for the development of theory in this field and the practice of applied solutions in this area, since the paradox in the development of mankind is expressed in the fact that, despite the progress of civilization and the increase in both the productive forces of man and the ability to cope with difficult situations, the number of phenomena that disorganize people's lives on all levels is increasing.

A decisive factor in this action is the cooperation with the Medical Emergency System of the organizational units of the State Fire Service and fire protection belonging to the national rescue and firefighting system, organizational units of the Police and Border Guard, as well as entities authorized to perform mountain, water and mining rescue, and organizational units of the Maritime Search and Rescue Service.

Methodological and methodological assumptions

A prerequisite for conducting any scientific research is, among other things, to define the purpose of the research and the research problem. Thus, the purpose of the article is to present the aspects of conducting the improvement to solutions for the organization of assistance to people in a state of sudden health threat in conditions of threat to public

¹ W. Kieżun, *Podstawy organizacji i zarządzania*, Książka i Wiedza, Warszawa 1977, p. 39; *Nauki o bezpieczeństwie. Wybrane problemy badań*, A. Czupryński, B. Wiśniewski, J. Zboina (eds), CNBOP, Józefów 2017, p. 21.

safety and the ability to rapidly expand the health care system in terms of logistics and organization. The goal defined in this way influenced the formulation of the problem in the form of determining the functional areas necessary to improve the operation of medical entities in terms of the efficiency in situations of public safety threat. With a view to achieving the goal and solving the research problem, theoretical research methods were applied.

Directive of efficient action

Practical directives for efficient operation are specific guidelines aimed at improving that operation. They take the form of recommendations in the field of maximizing the efficiency of operation or cautions in the field of avoiding inefficiency. There are many types of practical directives characterized by varying degrees of generality. Depending on the classification criteria adopted, for example, based on their internal structure, we divide directives into simple and complex, and taking into account, in turn, their linguistic stylization, we distinguish positive directives (recommendations) and negative directives (cautions).

A key directive both for efficient action and in the context of the subject of the research is the organization of action. In the literature we can find many types

of organizational cycle, from the traditional to the systemic action cycle. In all of them there are three phases: the action preparation phase, the implementation phase and the control phase. Bearing in mind that the more complex the activities leading to the achievement of the set goal, the more precise their organization must be, both in theory and practice there is a constant search for forms, ways and methods to achieve the desired goals.

J. Zieleniewski distinguishes five stages of organized action². He includes among the first three: stating the goal, planning and acquiring the resources necessary to carry out the plan. T. Kotarbinski refers to these three stages as preparation, i.e., preparation of activities. The next two stages are implementation of the plan and control.

Determining the goal is the first step in achieving it. Among other things, its selection must be based on a diagnosis that includes past and present situations, as well as forecasts for future actions. In the planning phase, i.e., organizing the course of action, there is an analysis of the internal and external conditions of action and the determination of the means and ways necessary to achieve the goal. This phase also includes the development of an action plan³. The next phase – acquiring the resources necessary to implement the plan – involves a number of undertakings leading to the

² More: J. Zieleniewski, *Organizacja zespołów ludzkich. Wstęp do teorii organizacji i kierowania*, PWN, Warszawa 1982, p. 307–330; *Wyzwania, szanse, zagrożenia i ryzyko dla bezpieczeństwa narodowego RP o charakterze wewnętrznym*, R. Jakubczak, B. Wiśniewski (eds), WSPol, Szczytno 2016, p. 24.

³ A good plan should be fulfill many praxeological postulates, i.e.: purposeful – lead to the achievement of a goal; doable, i.e. possible to perform; consistent (internally consistent) and practical (containing elements that influence each other and do not interfere with each other, and earlier acts are intended to prepare further ones); operative (communicative and easy to translate into practical action); rational – served on reliable knowledge; way – enabling correction during implementation; optimally closed (not too thin and general); time-definite; complete, i.e. a comprehensive one (source: Czermiński A, Grzybowski M, Ficoń K., *Podstawy organizacji i zarządzania...*, p. 90).

organization of the structure of future action, which in due course will be able to start implementing the assumptions contained in the action plan, leading to the achievement of the goal. The implementation phase involves applying the means of action in a specific sequence in the manner envisaged in the plan. The result of the actions taken in this phase should be the achievement of the final goal. Controlling, the final phase of the organized action cycle, involves comparing the actual state with the assumed state. It is therefore the process of ensuring that the actions taken are in line with the intended assumptions.

The organized cycle is of key practical importance, most of all, in the organization of complex undertakings, during which in order to achieve the goal it is necessary to synchronize, within a certain time period, the forces and resources involved, as it takes place during the operation of medical entities in the conditions of a threat to public safety.

The remaining directives of efficient action were put into opposite pairs due to the fact that the essence of efficient action comes down to finding the optimal solution, i.e. the best one in a given situation. When applying opposing pairs of directives for efficient action, it is always necessary to make an assessment of which guideline wins, and determine the specific course of action lying between the two extremes. The following opposing pairs of directives are distinguished:

- specialization and universalization;

- activation of action and minimization of intervention;
- procrastination and anticipation;
- maintaining a certain level of resources and making full use of resources;
- concentration of forces and securing all courses of action⁴.

A guideline that is a synthesis of all directives is the integration of activities that involve the integration of component activities into a whole most useful for achieving the established goal and the maintenance of this whole⁵.

Safety in a condition of a sudden health threat – organization of the system

With the aim to fulfill the state's task of providing assistance to any person in a condition of a sudden health threat, the State Emergency Medical Service system (hereinafter: system) was established by the Act of September 8, 2006⁶. Within the system, the tasks are performed by the competent government administration bodies, the so-called system units and medical dispensaries.

The government administration bodies responsible for carrying out the system's tasks are the minister in charge of health and the voivode. The minister is responsible for supervising the system in the country. The voivode, in turn, is responsible for planning, organizing, coordinating and supervising the system within the voivodeship.

⁴ More: W. Kieżun, *Sprawne zarządzanie organizacją...*, p. 23–25; *Współczesne postrzeganie bezpieczeństwa*, K. Jąłośnyński, B. Wiśniewski, T. Wojtuszek (eds), WSA, Bielsko-Biała 2007, p. 41.

⁵ A. Mazurkiewicz, *Sprawność działania – interpretation...*, p. 56.

⁶ Act of 8 September 2006 on State Medical Emergency (i.e. Journal of Laws of 2021, item 2053, as amended).

The functioning of the system in the voivodeship area is based on the voivodeship action plan drawn up by the voivode. The plan includes, among other things: the number and distribution of system units on the voivodeship area, areas of operation⁷ and operational regions⁸, the method of cooperation with public administration bodies and system units to ensure efficient and effective rescue of life and health, regardless of the course of voivodeship borders, and the method of cooperation of system units with units cooperating with the system, with particular emphasis on the method of notification, alarming and dispatching of units, organization of rescue operations at the scene of the incident, analysis of rescue operations and organization of joint exercises. In addition, the plan includes a description of the structure of the emergency notification system in order for telecommunications entrepreneurs to set up the necessary telecommunications links to ensure the possibility of the necessary redirection of calls from the emergency notification center to the appropriate organizational units of the police, the State Fire Service and the dispatcher of medical rescue teams.

The units cooperating with the system include: organizational units of the State Fire Service and fire protection belonging to the national rescue and

firefighting system, organizational units of the Police and Border Guard and subordinate to the Minister of National Defense, entities authorized to perform mountain, water and mining rescue, and organizational units of the Maritime Search and Rescue Service. In addition, the system is cooperated by other organizations and social organizations, which have in their statutory tasks or statutes the obligation to provide assistance to people in a state of emergency, but they must obtain an entry in the register of units cooperating with the system.

The moment the emergency call is received or the medical dispatcher is notified of an incident, the medical action begins. The first link in the health care system that undertakes rescue operations at the scene of an incident⁹ are the units of the State Medical Emergency (SME) system, which include medical rescue teams¹⁰, including air rescue teams. The system also includes hospital emergency departments. The system's units are cooperated with trauma centers and organizational units of hospitals that specialize in providing health services necessary for emergency medical care, which are included in the system's action plan.

Medical rescue teams undertake actions towards the injured during the rescue operation in the form of medical rescue activities understood as health

⁷ Area of operation, i.e. the area of operation of the medical rescue team, defined in a way that ensures the implementation of the parameters of travel times, within which the team will be dispatched to the scene of the incident in the first place (Article 3 point 13 of the Act of 8 September 2006 on State Medical Emergency).

⁸ Operational area, i.e. the area of operation of the medical dispatch center specified in the voivodeship system action plan (Article 3 point 14 of the Act of 8 September 2006 on State Medical Emergency).

⁹ The place of the incident, i.e. the place where the event causing the condition of sudden health threat occurred and the area to which its effects extend (Article 3 point 5 of the Act of 8 September 2006 on State Medical Emergency).

¹⁰ Medical emergency team, i.e. a unit of the system, undertaking medical rescue operations in out-of-hospital conditions, meeting the requirements set out in the Act (Article 3 point 10 of the Act of 8 September 2006 on State Medical Emergency).

care services provided by the system unit in an out-of-hospital setting, in order to save people in a condition of sudden health threat¹¹. Medical rescue activities are provided by medical rescue teams within the framework of the type of medical activity in accordance with the type of activity performed by the dispatcher of the unit, which includes this medical rescue team. Medical rescue teams are divided into specialized teams and basic teams. A specialized team consists of at least three people authorized to perform medical rescue activities, including a system physician, who is also the team leader, and a system nurse or paramedic. A basic team consists of at least two people authorized to perform medical emergency activities, including a system nurse or paramedic. The manager of such a team may be a person appointed by the dispatcher of the unit, who is a paramedic or system nurse with at least 5,000 hours of experience in providing health services in an emergency rescue team or hospital emergency department in the last past 5 years. Moreover, an air rescue team consists of at least three people, including a commercial pilot, a system physician and a paramedic or system nurse.

The head of the medical action is the head of the medical rescue team. If more than one team is directed to the scene, the medical action manager is appointed by the medical dispatcher from among the managers of the teams dispatched to the incident. The main tasks of the medical action manager include:

- in the absence of entities of the national rescue and firefighting system at the scene of the incident – to verify the conditions at the place of the incident in terms of the risks present at the scene,
- coordinating the activities carried out by those performing medical rescue operations and providing qualified first aid,
- cooperation with the medical dispatcher in determining the direction of transport of people a condition of a sudden health threat,
- depending on the nature of the incident – cooperation with the manager of rescue operations, coordinator of medical security of a mass event, manager of anti-terrorist operations. It should be stressed that in the case of incidents in which firefighting, chemical, ecological or technical rescue operations are also carried out, the manager of the rescue operation within the meaning of the provisions of the Act of August 24, 1991 on fire protection is responsible for directing, and the manager of the medical operation coordinates medical rescue operations and assists the manager of the rescue operation. An analogous situation occurs in the event of terrorist incidents, during which the medical action leader coordinates medical rescue activities and assists the anti-terrorist action leader.

After providing emergency medical treatment, the emergency rescue team shall transport this person in a condition of a sudden health threat to the nearest hospital emergency department in terms of time to reach or to a hospital designated by the medical dispatcher or the voivodeship coordinator of emergency

¹¹ Article 3 point 4 of the Act of 8 September 2006 on State Medical Emergency.

medical services. If a person in a state of medical emergency is diagnosed with a condition that requires transport from the scene of an incident directly to a hospital with a trauma center or pediatric trauma center, or to a hospital organizational unit that specializes in providing health services necessary for emergency medical care, or if so decided by the head of the medical rescue team, then the person in a state of medical emergency shall be transported directly to such a hospital.

The hospital emergency department, trauma center, pediatric trauma center and the organizational unit of the hospital specialized in the provision of health care services necessary for emergency medical care are obliged to provide immediate health care services to a trauma patient¹², pediatric trauma patient¹³ or person in a condition of sudden health threat¹⁴. If necessary, the hospital is obliged to provide immediate sanitary transport of the patient or person in a state of medical emergency to the nearest treatment facility of the medical entity that provides health care services in the appropriate scope.

A hospital emergency department is an organizational unit of a hospital within the meaning of the regulations

on therapeutic activity, which is obliged to provide health care services to persons in a state of health threat¹⁵. On the other hand, a trauma center and a pediatric trauma center are functionally separate parts of a hospital in which a hospital emergency department operates, in which, in turn, specialized departments are interconnected in terms of organization and scope of tasks in such a way as to allow rapid diagnosis and treatment of a trauma patient or a pediatric trauma patient¹⁶.

At the trauma centre, health care services consisting of admission, comprehensive diagnosis and multispecialty treatment of a trauma patient for the treatment of severe, multiple or multi-organ injuries are provided by a team of physicians with a specialist title. The trauma center shall secure a population of not less than 1 million residents, living in an area that allows a person to reach the trauma center from the scene of an incident within 1.5 hours. In addition, it must ensure the operation of specialized surgical wards and diagnostic laboratories within its structure¹⁷, as well as provide access to a laboratory and imaging diagnostic laboratory open 24 hours a day and health services

¹² Trauma patient, i.e. a person in a state of sudden health threat caused by an external factor, which results in severe, multiple or multi-organ injuries (Article 3(12) of the Act of 8 September 2006 on State Medical Emergency).

¹³ Child trauma patient, i.e. a person under the age of 18 in a state of sudden health threat caused by the action of an external factor, which results in severe, multiple or multi-organ injuries (Article 3 point 12a of the Act of 8 September 2006 on State Medical Emergency).

¹⁴ A state of sudden health threat is a state of sudden or expected in a short time appearance of symptoms of deterioration of health, the direct consequence of which may be serious damage to body functions or bodily injury or loss of life, requiring immediate medical rescue and treatment (Article 3 point 8 the Act of 8 September 2006 on State Medical Emergency).

¹⁵ Article 3 point 9 of the Act of 8 September 2006 on State Medical Emergency.

¹⁶ *Ibid.*, Art. 3 points 11 and 11a.

¹⁷ Such as: anesthesiology and intensive care ward, operating block, diagnostic and treatment endoscopy laboratory, open 24 hours a day, wards, in particular: general surgery or multi-organ injuries, orthopedics and traumatology of the musculoskeletal system, neurosurgery or general surgery with a neurotraumatology profile, vascular surgery or general surgery with the profile of vascular surgery.

provided by a physician with a specialty title in cardiac or thoracic surgery. The trauma centre should also have an airstrip or heliport for an emergency helicopter located at such a distance that it is possible to receive a trauma patient without engaging specialized means of sanitary transport. Having provided health services, the trauma patient is referred to another department of the hospital where the trauma center is located, or to an inpatient facility of another medical entity for continued treatment or rehabilitation.

A key role in the provision of medical services is played by the logistics of operations. The provision of logistical facilities consists in organizing forces and resources as quickly as possible, so that the injured person receives help in the shortest possible time, to the fullest extent, using the available diagnostic and treatment capabilities and high quality of services provided. In order to achieve the intended goals, it is necessary to have so-called logistical resources in the form of resources: human, material, financial and informational. The implementation of tasks resulting from the provision of medical services to the injured is subject, from a logistical point of view, to five basic principles¹⁸:

- the principle of staging, which comes down to the separation of treatment activities into several stages, depending on the health indications for the implementation of the relevant treatment procedures. According to this principle, the injured person should

receive an appropriate treatment process as soon as possible, based on the appropriate medical facility,

- the principle of using successive levels of treatment, which consists of providing necessary and sufficient medical assistance for the moment at each stage of treatment. Immediately at the scene of an incident these are the emergency medical measures necessary to stabilize the condition of the injured person and transfer them for transport. Further medical provision takes place in an inpatient health care facility, where, after further diagnostic and treatment procedures are implemented in the ED, the injured person is referred to further stages of treatment. Each subsequent stage of medical management is characterized by an increase in the possibilities of action tailored to the needs of the injured person,
- the principle of unity of the treatment-evacuation process, according to which each injured person should be covered by an uninterrupted process of treatment, beginning with actions at the scene of the accident through transport until receiving assistance in an inpatient health care facility,
- the principle of synchronization of medical activities based primarily on the effective flow of information regarding the possibility of providing assistance to the injured person. At the scene, the injured person is subjected to a process of medical segregation and prioritization for certain

¹⁸ See: F. Mroczko, *Zarządzanie kryzysowe w sytuacjach zagrożeń niemilitarnych. Zarys problemów regionu dolnośląskiego*, Walbrzyska WSZIP, Marketing, Walbrzych 2012; Wiśniewski B., *System bezpieczeństwa państwa. Konteksty teoretyczne i praktyczne*, WSPol, Szczytno 2013; *Zarządzanie kryzysowe. Teoria, praktyka, konteksty, badania*, J. Stawnicka, B. Wiśniewski, R. Socha (eds), WSPol., Szczytno 2011.

actions. He is then qualified for the appropriate type of transport, which should be preceded by determining a place where he or she can receive medical assistance appropriate to their condition,

- the principle of relativity, which involves determining the scope of assistance for the patient at each stage of his or her treatment. In planning the treatment process, it is necessary to determine the time needed to provide medical services, the total number of people waiting for further treatment, and to prioritize these activities.

All actions taken by healthcare providers should take into account the principles of logistics, which in turn should ensure that every casualty receives the necessary medical assistance within the scope of his or her expectations resulting from the injuries suffered. In order to provide assistance to as many patients as possible in the shortest possible time, it is necessary to optimise the flow of material resources such as medicines, dressing materials and food. Although few people pay attention to the importance to this in a state of heightened alertness, one should not forget the financial aspect of the entire medical operation, which always involves increased financial outlay due to the increased consumption of all material resources and the need for increased staffing. However, at every stage of the operation, it is important to remember to minimise the costs associated with the tasks performed, which are often performed under specific or even extreme conditions¹⁹.

Summary

Medical activity consists in providing health services understood as undertaking actions aiming at preserving, saving, restoring or improving health and other medical activities resulting from the treatment process. The rules for its performance are set out in the Act of 15 April 2011 on therapeutic activity. There are two types of therapeutic activity: stationary and round-the-clock health care services and outpatient health care services. The former require the patient to be at the place of treatment for 24 hours and are divided into hospital and non-hospital services. Outpatient health services, on the other hand, are primary or specialist health care and therapeutic rehabilitation services, which may be provided in premises, in appropriately equipped vehicles or at place of patient's whereabouts. Whereas, entities carrying out therapeutic activity are divided into: therapeutic entities (e.g. independent public health care institutions) and entities carrying out therapeutic activity in the form of professional practice (running a single-person business by doctors, nurses and physiotherapists in the form of individual practice).

Aiming to fulfil the state's task of providing assistance to any person in a condition of a sudden health threat, the State Emergency Medical Service system was established in 2006. When an emergency call is received or an incident is notified by a medical dispatcher, the medical action begins. The first link in the health care system to undertake rescue operations at the scene

¹⁹ Ibid.

of an incident are the units of the State Medical Emergency system, which include medical rescue teams. Hospital emergency departments are also part of the system. Trauma centres and organisational units of hospitals, specialised in the provision of health services necessary for medical rescue, which are included in the system's action plan, cooperate with the system units.

Emergency rescue teams take action towards the injured during the emergency in the form of medical rescue activities. For mass events, medical segregation, i.e. the process of determining the order in which healthcare services are to be provided in hospital emergency departments and in medical rescue teams, carried out with regard to people in the condition of a sudden health threat, taking into account the state of health of these individuals, plays a key role. After the initial medical segregation and provision of medical rescue activities, the medical rescue team transports persons in the condition of medical emergency to the nearest, in terms of time to reach, hospital emergency department or to the hospital indicated by the medical dispatcher or the voivodeship medical rescue coordinator. Arriving at the ED, the casualty is subjected to secondary medical segregation and further medical procedures are then implemented.

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