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ORGANISATION OF ACTIONS OF THE NATIONAL GUARD OF UKRAINE DURING QUARANTINE MEASURES IN THE EMERGENCY ZONE

The article examines the impact of artificial intelligence on modern warfare. In the context of rapid technological progress and the increasing dependence of the armed forces on new technologies, artificial intelligence is becoming an important tool in strategic planning and tactical operations. The study covers various aspects of its application, including process automation, processing and analysis of large amounts of data, as well as its impact on real-time decision-making.

The article also considers ethical and legal issues arising from using artificial intelligence in military conflicts, including responsibility for actions taken based on algorithmic decisions. The article ends with conclusions about the future use of artificial intelligence in armed conflicts, as well as recommendations for further research in this area.

Keywords: artificial intelligence, process automation, data processing, data analysis, algorithmic solutions, armed conflicts, international humanitarian law, ethical norms, cyber operations.

Statement of the problem. The growing threat of infectious diseases in Ukraine requires securing effective coordination of all state efforts and resources in the event of epidemics. Globalization and changing climate conditions create a favorable background for the spread of contagious agents, which poses a serious national security challenge.

The National Guard of Ukraine (NGU), being one of the key elements of the security system, plays an important role in responding to emergencies, specifically those caused by infectious disease outbreaks. However, the issues of organizing and engaging the NGU's forces and means for quarantine measures need further empirical research.

Analysis of recent research and publications. The events of recent years have demonstrated the growing role of law enforcement agencies, in particular the National Guard of Ukraine, in addressing emergencies related to the spread of infections. Research by scholars (O. Lavnichenko, S. Hodlevskyi, O. Onoprienko, K. Sporyshev, V. Yevsieiev, etc.) has made a significant contribution to understanding the factors that influence the deployment of the NGU's forces and means during pandemics and epizootics. However, some important aspects of quarantine enforcement in the emergency areas state remain under-explored.

The lack of scientific studies in this field creates certain limitations for the effective engagement of the National Guard forces and means to perform quarantine-related tasks. The above determines the necessity of conducting a comprehensive analysis of the factors affecting the operation of the National Guard in such an environment.

The purpose of the article is to provide a thorough analysis of all the factors that define the effectiveness of the National Guard of Ukraine's activities in ensuring quarantine measures in emergency areas. The authors also seek to examine the experience of deploying the National Guard during these situations.

Summary of the main material. The following documents constitute the legal basis for the activities of the National Guard:

– the Constitution of Ukraine, which sets out the general principles of organizing public administration, human and civil rights, and freedoms;

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- the Law of Ukraine "On the National Guard of Ukraine", which defines the legislative status, tasks, functions, and powers of the National Guard;
- the Laws of Ukraine "On Defense of Ukraine", "On Military Service", "On Law Enforcement Activity", which contain additional provisions regulating certain aspects of the National Guard's functioning;
- by-laws: resolutions of the Cabinet of Ministers of Ukraine, orders of the Ministry of Internal Affairs of Ukraine, and other normative documents detailing the procedures and organization of the National Guard;
- international treaties on human rights, international humanitarian law, and other relevant spheres that have been ratified by Ukraine.

A state of emergency is a special legal regime that is imposed in Ukraine when there appear threats to the national security, life, and health of citizens. This regime allows the government to react quickly to extreme situations and restore public safety.

The purpose of declaring a state of emergency is to restore the normal functioning of the country, protect the rights and freedoms of individuals, and eliminate the causes that led to the crisis.

The decision to declare a special legal regime – a state of emergency – on the whole national territory or in certain regions is made by the Verkhovna Rada of Ukraine. That important document is immediately submitted to the President of Ukraine. The President may also issue a decree on imposing a state of emergency, which requires further approval by the Parliament.

The following steps may be taken to overcome crisis situations arising during a state of emergency:

- restriction of the freedom of movement: establishing a special entry and exit procedure, as well as limiting the movement of vehicles;
- security enhancement: increasing the number of law enforcement officers on the streets, strengthening control over public places and critical infrastructure objects;
- prohibition of mass gatherings: canceling concerts, sporting competitions, and other events that involve large numbers of people;
- epidemiological measures: introducing quarantine, reducing contacts between people, and mandatory isolation of patients;
- mobilization of resources: the use of public and private assets to deal with the consequences of an emergency, in particular, to provide the population with food and medicine.

The society must be informed about the declaration of a state of emergency through the media no later than six hours before it begins. The maximum term of such a regime is 30 days for the entire country and up to 60 days for separate regions.

The Minister of Internal Affairs approves the number of military units required to implement quarantine measures and determines the amount of arms and equipment. As a rule, military bases are deployed in certain settlements and perform designated duties there. However, in case of emergency, upon coordination with the Commander of the NGU, the Minister may decide to engage members of the National Guard to carry out specific duties in other regions.

Thus, the legal principles for the deployment of the National Guard during epidemics are established by a set of regulatory acts of various levels. They range from the laws of Ukraine to internal directives, all of which specify the subordination of units, their powers, and the procedure for interaction with other agencies. Strict adherence to these norms guarantees the legitimacy and effectiveness of the guards' actions.

A special operational headquarters is set up to effectively manage the units in the event of an emergency. It consists of a number of highly qualified specialists:

- the commander of the military task force leads all operations;
- chief of staff is responsible for planning and coordination of actions;
- deputy commander for logistics provides the necessary facilities;
- an epidemiologist controls the sanitary and epidemiological situation;
- the head of communications ensures reliable connection;
- other officers responsible for personnel and logistics support.

The commander of the military task force reports to both the head of the commission on epidemiological security and the senior operational leader.

When assessing the task, the unit commander (military task force chief) must clearly understand:

- the goal set by the senior command and the concept of operations;
- concrete tasks to be performed, their scope, and timing;

– expected outcomes and resources required to achieve them.

While assessing the situation, the commander analyzes the following factors:

– the extent of the epidemic and the number of cases, the scale of the disease spread and the territory, and the quantity of people infected;

– the crime rate, the criminal situation in the area of the operation;

– amount and type of objects to be taken under control;

– placement of military personnel;

– available assets, the number of military personnel, their experience in quarantine measures, supply of material and technical means, communications, transport, and medicines, as well as the ability to maintain constant control and effectively fulfill the assigned duties;

– cooperation with other military units of the NGU, Ministry of Internal Affairs (MIA), Security Service of Ukraine (SBU), Ministry of Health (MOH), and State Emergency Service of Ukraine (SES), as well as defining their roles and responsibilities;

– terrain features, public attitudes towards quarantine, meteorological conditions, and their impact on task performance.

It is clear that no commander can accomplish all the objectives in a short time on their own. That is why the headquarters has a crucial role in planning and assigning responsibilities. The headquarters, as the main command and control body of the troops, acts in accordance with the vision of the commander and the directives of the higher staff.

The headquarters should be ready to provide detailed figures for the following:

– the required number of servicemen for quarantine operations;

– logistics support for the divisions;

– technical condition and equipment needs;

– planning and holding marches;

– organizing the delivery of material resources to the operation area.

After analyzing the situation and taking into account the proposals of the staff, the commander decides to engage personnel in missions in the quarantine zone.

Once the decision is received and approved by the commander, the military unit headquarters begins to develop action plans for the lockdown area. This process is led by the chief of staff and involves officers of the staff, training units, and support services.

Planning can be divided into two main types:

– general planning, covering the organization of internal life and combat readiness of the unit for a certain period of time;

– special planning, which is developed to solve specific issues or particular activities and can be adjusted if necessary.

General action planning in the epidemic district is done in advance. The unit commander also decides in advance on a possible area of operations, which is reflected in the contingency plan. That plan is developed jointly with other stakeholders based on instructions from the senior commander and approved by him/her.

When designing action programs in an epidemic threat zone, it is especially relevant to use a deductive approach. This method involves moving from the general to the specific, i.e., from the ultimate goal to specific tasks.

The key principles of deductive planning are listed below.

1. Each planning stage is aimed at achieving the goal. All efforts and assets are concentrated on delivering the full and accurate implementation of the assigned tasks.

2. The planning is carried out according to the top-down approach: from the senior leadership to the executives.

It creates a clear plan structure and facilitates coordination of efforts.

The deductive method provides for a strict framework but does not limit the creative potential of commanders and staff officers. It rather encourages them to take initiative and be independent. Every control level can put forward additional tasks, develop alternative scenarios, and make suggestions for improving the plan.

Planning of service and combat activities in an epidemiologically dangerous district involves several successive steps.

Step 1 – the commander, based on the situation assessment and orders received, makes a decision on the deployment of personnel. This decision should reflect both the operational setting and the requirements of sanitary and epidemiological safety.

Step 2 – the chief of staff develops the plan in detail, verifying the compliance of all documents with the decision of the commander. Special attention is paid to the timing, coordination of actions, and quality of the document.

Step 3 – the commander's final resolution is formalized by an order. Separate directives may be issued for prompt amendments or additional tasks.

Thus, the effectiveness of the actions of the commander and staff of a military formation directly impacts the efficiency of fulfilling assigned duties in the context of an epidemiological threat. The organization of their work can be based on two main approaches – parallel and sequential planning. The choice of a particular technique depends on time constraints and the expected level.

During the preparation of any operation, the commander must ensure clear and coordinated work of all units. For this purpose, it is necessary to:

- carefully schedule and agree upon the exact time and order of moving units to the positions from which they will begin to perform their tasks;
- develop a detailed plan of action to be followed by each unit, depending on their role in the operation, with special attention to interaction among the units, and definition of their areas of responsibility and mutual support procedures;
- set an effective exchange of information with local authorities and the people;
- establish a reliable communication system between all campaign participants;
- install a unified signaling system for mutual recognition, warning, and signal management;
- develop several possible case scenarios and define the actions of the units for each of them;
- establish a system of control over the fulfillment of objectives by each division;
- create reserves of forces and means to act in unforeseen situations.

Effective quarantine measures in the epidemic zone involve close cooperation between various agencies. The main stakeholders in this process include:

- sanatoriums, hospitals, train stations, etc., that can be turned into observatories and are important in providing security and controlling access to the territories they cover;
- state administrations on different levels, the Ministry of Internal Affairs, the Ministry of Defense bodies, the Security Service of Ukraine, and civil defense headquarters that coordinate operations on the ground and ensure information support and supply the necessary resources;
- units of the National Guard, the Armed Forces, the National Police, and civil defense that participate in patrolling, facility protection, and monitoring compliance with quarantine rules.

It is necessary to provide units with everything they need so they can successfully perform their missions under extreme conditions. The commander organizes a comprehensive process that includes combat, logistical, and technical support.

The integrated organization of logistics and technical provision includes:

- getting the rear services ready to perform assigned tasks;
- determining the optimal routes and deployment locations for rear units;
- construction of roads suitable for supply and evacuation;
- efficient use of vehicles;
- coordination of the activities of logistics and technical teams;
- rational allocation of local resources and building an effective logistics management system.

Troop control represents the focused efforts of commanders, staff, and services to maintain the combat readiness of units and divisions, prepare them for action, and lead them during the execution of assigned tasks.

Troop control involves the following:

- continuous gathering, studying, and summarizing information about the strategic setting;
- making (refining) a decision;
- assigning tasks to subordinates;
- planning of the set objectives;
- organizing and maintaining cooperation;

- arranging and implementing measures to improve the combat readiness of armed forces, conducting educational work, and ensuring its comprehensive support;
- organizing the command system, direct supervision of the units' training;
- monitoring that the units and divisions fulfill their tasks and providing them with aid.

A commander's decision is the basis of administration. The commander is fully responsible for the leadership of subordinate troops and their successful accomplishment of combat missions.

The control of the troops must be resilient, continuous, operational, and covert. A management system is created to achieve that, and it consists of:

- command agency;
- operational center;
- automated control and communication equipment.

The organization of the units' control in the epidemic region has great importance. The following command and control system seems appropriate based on the experience of the National Guard's engagement in quarantine measures in the epidemic area. In order to ensure continuous unit management and gather operational and epidemiological information, a round-the-clock duty should be arranged at the headquarters of the military task force (MTF), with three persons appointed: a representative of senior command, an MTF officer on duty, and an assistant to the MTF officer on duty.

The MTF officer on duty must: precisely know the areas (points, lines) of service of military detachments, the type and number of objects guarded by the base units, the epidemiological situation, ways of communication with subordinate units, sentries, and freestanding military detachments; generalize data about citizens who were detained by military patrols and tried to leave the quarantine region, keep records of orders and reports from the senior commander and monitor their implementation; maintain statutory order through the duty officers of the base (units).

The assistant to the MTF officer on duty is obliged to: be aware of the situation in the units; keep a work map, a combat log; go to formations (units) to carry out the resolutions of the MTF commander or specify sudden changes in the operational environment, if necessary.

The on-duty MTF officer and the deputy constantly collect and analyze incoming information. Experience shows that data can come from the medical staff, unit commanders, and military detachment heads.

The chief of staff summarizes all the information, which is used to draw conclusions and make suggestions that are submitted to the commander to update their decision.

Daily interaction between the MTF and the medical headquarters is established to gather data on the changes in the epidemiological situation. It can be done both at meetings and during personal contact. The results of the day are summarized, the tasks to be completed by the troops are clarified, as well as the ways to accomplish them, and the regime restrictions that the military must apply to citizens.

The MTF has to work especially closely with the MIA. The head of the MIA of Ukraine and the MTF personally updates and distributes the instructions received from the medical headquarters between the MIA services and the troops.

The staff of the MIA of Ukraine and the MTF staff exchange information on a daily basis. They coordinate actions on the scope of missions performed by troops and MIA bodies with a full calculation of forces and means for more efficient use of personnel.

The headquarters also needs to constantly supervise the service of personnel and the execution of separate orders and directives.

The inspection results should be recorded in a special register. The staff chief must summarize the positive and negative aspects and bring them to the unit commanders' attention in a timely manner. The drawbacks that can dramatically affect the task performance of military detachments are removed immediately.

The following documents are processed in the course of fulfilling the duties within the MTF:

- work map;
- combat log;
- epidemiological conditions log;
- register of the results of monitoring the combat service.

Other documents are also kept by the commander's order.

Communication is an important element of troop control. It must be continuous, covert, and enable reliable command and control of divisions and military detachments. Communication is the process of information exchange.

The communication system is a set of communication signal nodes for various functions that are deployed according to a single plan to provide control. It is composed of:

- division communication node;
- unit communication node;
- communication lines;
- communications pool and automated control system;
- equipment support arrangements;
- communication management system.

The core elements of the communication hubs of the National Guard units deployed to secure quarantine measures are listed below:

- telephone exchange;
- radio relay station;
- helipad.

Communication is organized on the basis of the order of the division commander. The decision of the higher headquarters regarding communication with consideration of the presence and actual condition of communication means is also taken into account.

When carrying out combat missions, communications are planned by the division's chief of staff and directly managed by the head of communications. He/she develops and drafts a communication plan, which contains:

- graphic section;
- scheme of radio communication network organization;
- explanatory note.

Communication with the units located at a considerable distance from the MTF headquarters (60 kilometers or more) is particularly difficult. Organizing communication with them requires a large amount of radio equipment that would ensure stable communication around the clock, by their tactical and technical characteristics. The National Guard does not have enough of these devices.

Given these constraints, it is recommended that the MTF headquarters employ medium-power stations with a highly sensitive receiver and the units use low-power stations to ensure radio communication at a distance of 40–50 km. That way, there will be a stable connection with the units twenty-four hours a day.

Communication at a distance of 25–30 km is maintained with VHF transceivers. Power amplifiers or an intermediate station can be used to provide communication.

By mutual agreement with the commanders of local garrisons, their telephone switches are used to ensure stable telephone connections between the MTF and the units' headquarters. These switches have access to the civilian telephone network, and field communication lines lead to them from the National Guard posts. Two relay stations must be used where that is not possible.

Therefore, the organization of all forms of support for the preparation of the forces and means and coordination should be focused on the efficient execution of the assigned tasks. The commander determines the main issues of cooperation, comprehensive provision, arrangement of forces and means in the course of decision-making. These matters are further updated when developing the planning documents and organizing the fulfillment of specified duties.

Conclusions

Effective models for the use of the National Guard of Ukraine forces to maintain the state of emergency in areas of epidemiological danger have been developed. Particular attention is paid to optimizing the combat order in order to rationally allocate forces and means, minimize the risk of infection of personnel, and prevent further spread of the infection.

Future empirical research in this direction may include the following topics:

- improvement of the regulatory framework: analyzing and adapting existing laws and policies to respond more effectively to epidemiological threats, in particular with regard to the deployment of units of the National Guard of Ukraine;
- development of the personnel training system: creating specialized training programs for members of the National Guard about operations under emergency conditions, in particular during epidemics;

- simulation and prognosis: developing and using mathematical models to predict the progress of the epidemic situation and optimize the efforts of the National Guard of Ukraine;
- explore the information support system that can be designed to provide timely alerts to the public about threats and safety measures during the epidemic, using modern information technologies.

The above-mentioned priorities will help to increase the readiness and effectiveness of the National Guard of Ukraine in responding to emergencies caused by epidemic threats. They will also ensure the security of citizens.

References

1. *Zakon Ukrainy "Pro Natsionalnu hvardii Ukrainy" № 876-VII* [Law of Ukraine about the National Guard of Ukraine activity no. 876-VII]. (2014, March 13). Retrieved from: <http://surl.li/qqja> (accessed 17 January 2025) [in Ukrainian].
2. *Zakon Ukrainy "Pro pravovyi rehym nadzvychainoho stanu" № 1550-III* [Law of Ukraine about the legal regime of the state of emergency no. 1550-III]. (2000, March 16). Retrieved from: <https://surl.li/gbxmzp> (accessed 22 January 2025) [in Ukrainian].
3. *Zakon Ukrainy "Pro zakhyst naseleennia vid infektsiinykh khvorob" № 1645-III* [Law of Ukraine about the protection of the population from infectious diseases activity no. 165-III]. (2000, April 6). Retrieved from: <https://surl.li/ccptpjun> (accessed 12 January 2025) [in Ukrainian].
4. *Zakon Ukrainy "Kodeks tsyvilnoho zakhystu Ukrainy" № 5403-VI* [Law of Ukraine The Code of civil protection of Ukraine activity no. 5403-VI]. (2012, October 2). Retrieved from: <https://surl.li/gdkrhh> (accessed 4 February 2025) [in Ukrainian].
5. *Postanova Kabinetu Ministriv Ukrainy "Pro zatverdzhennia Polozhennia pro yedynu derzhavnu systemu tsyvilnoho zakhystu" № 11* [Resolution of the Cabinet of Ministers of Ukraine "On the approval of the Regulation on the unified state system of civil protection" activity no. 11]. (2014, January 9). Retrieved from: <https://surl.li/uxlddz> (accessed 1 February 2025) [in Ukrainian].
6. *Nakaz Ministerstva vnutrishnikh sprav "Pro zatverdzhennia Polozhennia pro shtab z likvidatsii naslidkiv nadzvychaynoi sytuatsii ta Vydiv operatyvno-tekhnichnoi i zvitnoi dokumentatsii shtabu z likvidatsii naslidkiv nadzvychaynoi sytuatsii" № 1406* [Order on the approval of the "Regulations on the headquarters for the liquidation of the consequences of an emergency situation and Types of operational and technical and reporting documentation of the headquarters for the liquidation of the consequences of an emergency situation" activity no. 1406]. (2014, December 26). Retrieved from: <https://surl.li/qocwze> (accessed 21 January 2025) [in Ukrainian].
7. Sholudko V. H., Yesaulov M. Yu., Vakulenko O. V., Hurskyi T. H., Fomin M. M. (2023). *Orhanizatsiia viiskovoho zviazku* [Organization of military communications]. Lviv : Skif [in Ukrainian].

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ОРГАНІЗАЦІЯ ДІЙ ПІДРОЗДІЛІВ НАЦІОНАЛЬНОЇ ГВАРДІЇ УКРАЇНИ ПІД ЧАС КАРАНТИННИХ ЗАХОДІВ У ЗОНІ НАДЗВИЧАЙНОЇ СИТУАЦІЇ

Проведене дослідження дало змогу комплексно вивчити проблему залучення сил і засобів Національної гвардії України до забезпечення карантинних заходів в умовах надзвичайного стану. Здійснено системний огляд наукових статей, навчальних видань, а також законодавчих актів, що регламентують діяльність Національної гвардії України у таких ситуаціях.

Перший крок полягав у визначенні правового підґрунтя діяльності Національної гвардії України під час виконання завдань із забезпечення карантинних заходів у зоні надзвичайної ситуації.

Проаналізовано положення Конституції України, законів України "Про Національну гвардію України", "Про правовий режим надзвичайного стану", інші нормативно-правові акти, що регулюють діяльність Національної гвардії України і визначають її повноваження в умовах надзвичайного стану. Особливу увагу приділено аналізу положень щодо участі Національної гвардії у забезпеченні громадського порядку, боротьбі з епідеміями, а також ліквідації наслідків надзвичайних ситуацій.

Розглянуто основні функції, які можуть виконувати підрозділи Національної гвардії України у разі епідемії: охорона громадського порядку і забезпечення безпеки громадян; здійснення контролю за дотриманням правил карантину (обмеження на пересування, відвідування громадських місць, проведення масових заходів тощо); ліквідація наслідків надзвичайної ситуації (евакуація населення, забезпечення життєдіяльності критичної інфраструктури, надання допомоги постраждалим тощо). Для забезпечення ефективного виконання завдань щодо боротьби з епідемією розглянуто взаємодію з іншими силовими структурами: Національною поліцією, Державною службою з надзвичайних ситуацій, Міністерством охорони здоров'я.

Важливим аспектом дослідження став аналіз плану дій і системи управління Національної гвардії України у карантинному районі. Визначено основні етапи дій, які виконує штаб військової частини у карантинному районі: підготовка до виконання завдань, розгортання сил і засобів, виконання завдань із забезпечення карантинних заходів, ліквідація наслідків надзвичайної ситуації тощо. Уточнено систему управління, що забезпечує безперебійне та якісне керування всіма процесами щодо несення служби в зоні надзвичайної ситуації. Особливу увагу приділено питанням організації зв'язку, координації дій з іншими структурами, забезпечення особового складу тощо. Проаналізовано систему зв'язку з основними її складниками, що забезпечить безперебійну і швидку передачу потрібної інформації. Розглянуто питання використання сучасних інформаційно-комунікаційних технологій для ефективного управління силами й засобами Національної гвардії в умовах надзвичайного стану.

Проведений аналіз дав можливість визначити основні напрями дослідження і сформулювати гіпотези для подальшого емпіричного дослідження. Подальше емпіричне дослідження цих гіпотез сприятиме більш глибокому розумінню проблеми залучення Національної гвардії України до забезпечення карантинних заходів в умовах надзвичайного стану, а також дасть змогу розробити практичні рекомендації щодо підвищення ефективності її діяльності в подібних ситуаціях.

Ключові слова: *Національна гвардія України, епідемія, карантинні заходи, громадська безпека, район надзвичайного стану, емпіричне дослідження, інформаційно-комунікаційних технології, система управління, безпека громадян.*

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