

SHORT COMMUNICATION

HOW THE SARS-COV-2 EPIDEMIC DID IMPACT THE IMPLEMENTATION OF THE CONTRACT FOR THE TREATMENT ENTITY IN THE ASPECT OF THE UNIVERSITY HOSPITAL MANAGEMENT? WHAT HAVE WE LEARNED FROM THIS?

JAK EPIDEMIA SARS-COV-2 WPŁYNEŁA NA REALIZACJĘ KONTRAKTU PODMIOTU LECZNICZEGO W ASPEKTCIE ZARZĄDZANIA SZPITALEM UNIWERSYTECKIM? CZEGO SIĘ Z TEGO NAUCZYLIŚMY?

Przemysław Daroszewski¹, Katarzyna Kaczmarek²

¹Department of Organization and Management in Health Care, University of Medical Sciences, 28 Czerwca 1956 No 135/137, 60-545 Poznań, Poland

²Department of Pathophysiology of Locomotor Organs, University of Medical Sciences 28 Czerwca 1956 No 135/137, 60-545 Poznań, Poland

ABSTRACT

Normality is, in the most general formulation, a statement of not deviating from accepted norms. In this article, the author retrospectively seeks to conduct an assessment, based on an analysis of the decisions, behavior, actions, and use of legally available options by both central and regional level units during the SARS-CoV-2 epidemic. The above actions, in the author's opinion, had a direct impact on citizens' access to medical services, and human beings who are the main recipients of critical infrastructure, which by definition should serve them. What may have had impact the discussed actions on the implementation of contracts by medical services? A critical discussion has been performed.

Keywords: SARS-CoV-2 epidemic, health care, hospital management, medical services

STRESZCZENIE

Normalność to w najbardziej ogólnym ujęciu stwierdzenie o nieodstępowaniu od przyjętych norm. W artykule autor stara się retrospektywnie przeprowadzić ocenę, opartą na analizie decyzji, zachowań, działań i wykorzystania prawnie dostępnych opcji przez jednostki szczebla centralnego i regionalnego w czasie epidemii SARS-CoV-2. Powyższe działania, zdaniem autora, miały bezpośredni wpływ na dostęp obywateli do usług medycznych nie tylko w Polsce ale i na świecie, a głównymi odbiorcami infrastruktury krytycznej, która z założenia powinna mu służyć, jest człowiek. Jaki wpływ mogły mieć omawiane działania na realizację kontraktów przez usługi medyczne? Przeprowadzono krytyczną dyskusję w aspekcie zarządzania szpitalem uniwersyteckiego w Polsce. Zaproponowano zalecenia dotyczące przyszłych działań.

Słowa kluczowe: epidemia SARS-CoV-2, opieka zdrowotna, zarządzanie szpitalem, usługi medyczne

Author responsible for correspondence:

Katarzyna Kaczmarek

Department of Pathophysiology of Locomotor Organs

University of Medical Sciences

28 Czerwca 1956 No 135/147

61-545 Poznań, Poland

Email: kasia@przystan.pl

Date received: 16th September 2023

Date accepted: 21st September 2023

"Critical infrastructure" is a term used in United Europe to refer to resources that are essential to the functioning of society and the economy. In Poland and other United European countries, these resources are associated with the terms of facilities for the production, transmission and distribution of electricity (power generation); for the production, transportation and distribution of gaseous fuels; for the production, transportation and distribution of oil and petroleum products; aimed at telecommunications (electronic communications); water management (drinking water, wastewater, surface water); for food production and distribution; for heating (fuel, district heating plants); health care (hospitals); transportation (roads, railroads, airports, ports); financial institutions (banks); security services (police, military, rescue). In Poland, the legal basis for dealing with critical infrastructure is formed by the Crisis Management Act, which includes a definition according to which critical infrastructure (cit.) ..." should be understood as systems and their functionally related objects, including construction facilities, equipment, installations, services that are key to the security of the state and its citizens and that serve to ensure the efficient functioning of public administration bodies, as well as institutions and businesses"... . At the national level, critical infrastructure protection is coordinated by the Government Security Center. As can be seen from the above summary, one of the elements of critical infrastructure is health care and, consequently, the man for whom this field was created by serving his well-being.

The breakdown of management division in the health service at the beginning of the SARS-CoV-2 epidemic

The unpredictable events, sometimes of a cataclysmic nature, and the SARS-CoV-2 epidemic is one of these, become a challenge for those responsible for critical infrastructure security. Another recurrence of the SARS-CoV-2 epidemic wave in the spring of 2020 caused an increase in legal acts in the nature of laws, regulations, decisions, announcements, or recommendations. The latter, in particular, generated a lot of interest half with surprise. The same as in Poland, this situation appeared in other countries in the world involved in the pandemic effect, especially in the field of health service management [Ares Castro-Conde *et al.* 2021]. According to the Polish language dictionary the "recommendation" means "that which has been recommended to someone", "to advise the performance of something", "to point out the advantages of something or someone". Should such tools be used in a crisis? The Minister of Health reported on an announcement issued by the National Health Service on March 21, 2020, in which: ..."In order to reduce the consumption of stocks of blood and blood products, the Head Office of the National Health Fund recommends a gradual reduction in admissions from March 23 to 29, 2020, and by March 30. Suspend admissions of patients for elective surgical procedures, in particular are large joint endoprostheses, large corrective procedures of the spine, vascular procedures on the abdominal and thoracic aorta, coronary artery bypass grafting, nephrectomy, hysterectomy."... . The above announcement caused considerable confusion among health care providers, especially since the Regional Blood Donation and Hemotherapy Station in Poznań (Poland) had not reported such problems. The flavor of the situation was added by the fact that after about 3 months the Ministry of Health came forward, confirming that these were only recommendations, and that the final decision always remains with the head of the treatment facility. Another communication from the headquarters of the National Health Service dated 24 March 2020 pointed out that teleportation of the patient can be provided, only in situations where the assessment of the health condition and the scope of the necessary activities to be carried

out for the patient, does not require the personal presence of the medical staff. Accordingly, it is not permissible to unjustifiably close places providing services altogether, thereby depriving patients of primary care or outpatient specialized care. The effect of such a course of action became an increase in the number of people presenting to Hospital Emergency Departments and Emergency Rooms, which increased the risk of transmission of COVID 19 infection to medical personnel and patients.

Availability of medical services

Analysis of the availability of medical services during the pandemic period has been and continues to be hampered by the lack of publication by the Ministry of Health and the National Health Service of statistics on the services provided. The available data for 2020 data published by the National Health Fund ended with 2018, there was no published data from 2019, let alone current data from 2020. Compared to the same periods in 2019, the amount of services provided has dropped significantly. In general surgery, it fell by 38% in March, and in April it had already fallen by more than 70%. The same happened in orthopedics, although some hospitals, not conforming to the "recommendations", did not reduce the implementation so much. Cardiology and cardiothoracic surgery saw a smaller decline, although this is more a result of the fact that most hospital admissions in these ranges were related to life saving. If one were to assume that just over 30% were planned benefit hospitalizations, that's the decline these specialties recorded in March 2020. The latest published report "Health and Health Care in 2018," which includes data on the medical workforce, indicates a general deficit in the size of the medical workforce, its uneven distribution and the unfavorable age structure of those performing medical services. It is true that the number of people authorized to practice specific professions is increasing, with the largest increase in 2018, registered in the group of dentists (up 2.4%), physicians (up 2.1%) and laboratory diagnosticians (up almost 2%), but this does not translate into the numbers of medical professionals, where the trend is the opposite [Abrams and Szeffler 2020].

Financing of services

For the first period of the epidemic, hospitals provided services on a "sharply on-call" basis, significantly reducing the delivery of services, sometimes even stopping it. The additional sanitary rigors imposed reduced the hospitals' efficiency in providing services - making it virtually impossible to catch up. Even if all patients who were rescheduled had come forward at once, which was obviously impossible due to the huge number of cancellations by the patients themselves. In the initial period of the epidemic, the percentage of cancellations reached up to 70 in some ranges [Plagg *et al.* 2021]. "Thawing out" of hospitals took a very long time, in some cases, as a consequence of the reduction of contracts by the National Health Fund, the units did not achieve maximum efficiency. Hospitals incurred significant additional costs in terms of personal protective and disinfectant supplies and infrastructure adjustments. Can these values be tempted and estimated? According to preliminary assessments, the costs ranged from 1% to 2% of the value of the contract with the National Health Fund. It can be assumed that the increase in the price of a billing point by 3% as of January 01, 2020 left adequate funds at the disposal of the providers and compensated for the target expenses.

Attempts at a general strategy

Limiting the spread of the epidemic by reducing human contact as much as possible and distancing the number of infections. Delaying the inevitable increase in the number of illnesses in order to prepare the health service to receive large numbers of patients. Holding off until the expected peak of the disease. Launching more centers with Extracorporeal Membrane Oxygenation (ECMO) - Continuous extracorporeal blood oxygenation. Attempts to move queues for patients with other diseases, emergency-only treatment. On the one hand, attempts to separate parts of the resources and create so-called "unified hospitals" with the provision of a separate source and method of financing, should be considered correct, on the other hand, the lack of a clearly defined decision-making center and the lack of regulations and guidelines for the cooperation of the various elements of the system

has resulted in organizational chaos, clearly felt by employees of the system and patients. As a consequence of the failure to define a decision-making center, decisions were issued by everyone who thought they could make them. In addition, hospital managers were absorbed with tasks of information on various topics and by various bodies, disorganizing the organization of the provision of services under the new circumstances, and searching for sources of supply of missing medical devices - primarily personal protective equipment for staff, disinfectants and building internal regulations to adapt the operation of the hospital to the changed reality. It should also be mentioned that there was also no coordinating center for the distribution of personal protective equipment. Such a need was not identified and such a task was not taken on by the Material Reserve Agency, which, by the way, showed a lack of forward thinking by selling off part of the strategic stockpile during the period of the already increasing threat and completely failing to deal with the need to quickly build up the stockpile. As a result, personal protective equipment began to flow in large quantities, even exceeding needs, to single-named hospitals from various sources, while other hospitals could not stock up at all, or had to pay speculative prices. The consequences of the disruption of this distribution are still felt today by medical entities trying to manage excessive quantities of equipment with expiration dates approaching. Powers have not been used to give the Minister of Health the ability to set, by way of a notice, the maximum selling prices for medicines, medical devices foodstuffs for special nutritional purposes, biocidal products, pharmaceutical raw materials, which could have been used in connection with countering COVID-19 or in a situation of threatened unavailability in the territory of the Republic of Poland in connection with COVID-19.

The powers enshrined in Article 20 of the law, amending the Pharmaceutical Law, giving the Minister of Health the right to impose an obligation on pharmaceutical wholesalers, as well as manufacturers and importers of medical devices, to report information to the Integrated Monitoring System for the Circulation of Medicinal Products, as well as on manufacturers and importers of medical devices, reporting on all medicinal products, foodstuffs for special nutritional purposes and medical devices on the market. In the author's opinion, the implementation of these powers would reduce the pathological situation and speculation in the market. It should be noted that the transformation of hospitals and the implementation of the above-mentioned obligations were introduced on the basis of the orders of the governors, with reference to Article 11. paragraph 1. of the Law of March 2, 2020 on special solutions related to the prevention, prevention and combating of COVID-19, other infectious diseases and crisis situations caused by them, which is not an appropriate legal basis in light of the competence of the governors (who indicate the entities, e.g., hospitals, transport providers and can also indicate doctors). The Minister of Health (or the Chief Sanitary Inspector) should decide on the aforementioned changes according to the special law.

In an epidemiological emergency, the pattern of overriding government bodies should be preserved. Despite the fact that the Governor is the government's representative in the field, every decision of the Governor should be reflected in normative acts. At present, none of the existing and newly issued acts contains the authority for the governor to issue instructions to halt elective admissions and surgical procedures. The provincial governor cannot step into the competence of the Minister of Health and decide to limit the provision of services in the absence of an act explicitly authorizing him. It should be noted that the provincial epidemic action plans were not updated on an ongoing basis to the current status of the Law of December 5, 2008 on the Prevention and Control of Infections and Infectious Diseases in Humans and the Special Law of March 2, 2020 on Special Arrangements for the Prevention, Prevention and Control of COVID-19, Other Infectious Diseases and Emergencies Caused by Them. The plans do not add the pathogen SARS-CoV2, do not include new responsibilities for referring physicians and new algorithms for referring and notifying suspected, infected, sick patients. The plans appear to be of limited use, as they do not always indicate with sufficient precision the health care resources that can be used. It is not enough to indicate the name of the entity (e.g., the name of the hospital) and its address it is necessary to indicate specific organizational units (or part of them) with assigned resources, and above all to establish procedures for cooperation.

Brief suggestions and recommendations for future action

Taking care of the credibility, consistency, as well as effectiveness of public health communication, without this the public will not be willing to follow the indications. Proper social, organizational and legal preparation for future epidemics and other health threats. The establishment of a single monitoring and coordinating center that will constantly-regardless of epidemics or threats that occur-work on analysis and coordination of key areas of health care. It should be independent of the National Health Fund. A clear way of financing the maintenance of preparedness and the activities carried out, as well as compensation for lost opportunities for the execution of contracts by medical entities. Verification and updating of health care security and crisis management plans prepared by governors. Develop alternatives depending on, among other things, the type of threat and its extent. Verifying the list of critical areas for public health and developing specific solutions for them (oncology, cardiology, pediatrics, immunization, neurology, etc.). Revise regulations on strategic stockpiles, maintenance of stockpiles in medical entities, business entities, as well as special production and distribution. Training and practical exercises for managers of health care entities and medical personnel, as well as institutions of organizations involved in combating threats. Building an information system , monitoring critical health care resources. Development of procedures (algorithms) for dealing with patients with suspected individual clinical conditions. Harmonize the internal procedures of medical entities with those of public institutions and the state apparatus. Intensive development of information systems and increasing their stability (e-prescription, e-documentation, etc.). Strengthening the primary health care sector with regard to human and technical resources and supporting the coordination between the different levels of health care providers help to avoid overcrowded hospitals, while protecting patients and health care workers during large-scale health emergencies [Ebrahimi Rigi *et al.* 2023].

REFERENCES

- Abrams, E.M., Szeffler, S.J.** (2020) ‘*COVID-19 and the impact of social determinants of health.*’ *Lancet Respir Med.* 8(7), pp. 659–661.
- Ares Castro-Conde, B., López Mouriño, V.M., Sanz Falque, I., López Castro, J.** (2021) ‘*COVID 19 and the new challenges in health management: The pilot experience of the Internal Medicine Department of a Regional hospital.*’ *J Healthc Qual Res.* 36(1), pp. 54-55.
- Ebrahimi Rigi, Z., Namjoo, Z., Jabarpour, M., Ahmadinejad, M., Ahmadipour, M., Mangolian Shahrabaki, P., Dehghan, M.** (2023) ‘*Hospital challenges and managerial approaches to combat COVID-19 outbreak: a qualitative study in southeastern Iran.*’ *BMC Health Serv Res.* 26, 23(1), p. 690.
- Plagg, B., Piccoliori, G., Oschmann, J., Engl, A., Eisendle, K.** (2021) ‘*Primary Health Care and Hospital Management During COVID-19: Lessons from Lombardy.*’ *Risk Manag Healthc Policy.* 24 (14), pp. 3987-3992.

Authors reported no source of funding.

Authors declared no conflict of interest.