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A PLAN FOR DEALING WITH THE OCCURRENCE AND SPREAD OF INFECTIOUS DISEASES CAUSED BY THE CORONAVIRUS AND THE ROLE OF THE OCCUPATIONAL MEDICINE SERVICE

Ivona Milenković^{1,2}

The plan for the application of preventive measures against occurrence and spread of infectious diseases is valid for all workplaces and in the work environment of the organization and is implemented in order to prevent epidemics of infectious diseases and eliminate risks to safe and healthy work of employees. The aim of this paper was to point out the importance of the existence of a plan for the implementation of preventive measures against occurrence of infectious diseases and the role of the occupational medicine service in the implementation of this plan. The results of the paper present the experiences in the implementation of preventive measures in the event of an epidemic of infectious diseases caused by the coronavirus and the method of treatment of patients with this disease. The views and activities of the occupational medicine service in the case of work ability assessment in persons after a previous illness and declaring the disease caused by the coronavirus an occupational disease were presented. It was concluded that it is extremely important to act according to the established plan. *Acta Medica Medianae* 2023; 62(3):42-46.

Key words: infectious disease, ability to work, COVID-19, occupational disease

Contact: Ivona Milenković

17 Sindjelićeva St., 11000 Belgrade, Serbia E-mail: ivonamilenkovic94@gmail.com

Introduction

Work organizations should prepare a plan for dealing with natural disasters and other major disasters in emergency situations. The health service has an extremely important role in the event of danger in the case of infectious diseases and the implementation of preventive measures aimed at preventing the outbreak of an epidemic (1).

Preventive measures are implemented on the basis of the plan of application of measures that is valid for all workplaces in the organization's working environment. Preventive measures are applied to prevent the occurrence and spread of infectious diseases and to eliminate risks for the safe and healthy work of employees and persons who find themselves in the working environment. This plan is an integral part of the Act on risk assessment, which is adopted in accordance with

the law and regulations in the field of occupational safety and health (2, 3).

The plan for the implementation of measures must contain:

- 1. preventive measures and activities to prevent the outbreak of infectious diseases,
- 2. responsibility for the implementation and control of the implementation of preventive measures and activities, and
- 3. measures and activities for handling in the event of an outbreak of an infectious disease.

The following participate in the implementation of these measures:

- 1. organization,
- 2. person for safety and health at work,
- 3. employees, and
- 4. managers of the organization.

Prevention measures can be general or special. All employees must be regularly informed by written instructions and instructions with all relevant information, procedures and obligations regarding the protection of health and safety from infectious diseases (4, 5). Employees are obliged, without exception or improvisation, to comply with the measures that have been ordered.

The aim of the work

To point out the importance of developing a plan for dealing with natural disasters and other major disasters and emergency situations and the role of the health service, occupational medicine

¹University of Niš, Faculty of Medicine, doctoral studies, Niš, Serbia

²General Hospital Pančevo, Pančevo, Serbia

service and persons safety and health at work in the event of an infectious disease.

Material and methods

The subject of the work is the health institution of the Community Health Centre team, which actively participated in the implementation of measures to prevent the occurrence and spread of the infectious disease caused by the coronavirus, in the detection and treatment of sick persons and in the evaluation of the work capacity of persons who have suffered from the disease (6).

As part of the work methodology, legal regulations from this area were used (Statute of Work Organization, Law on OSH, Rulebook on Preventive Measures for Safe and Healthy Work to Prevent the Occurrence and Spread of Epidemics of Infectious Diseases, Act on Risk Assessment, etc.).

Results

The health institution implemented preventive measures and activities aimed at preventing the epidemic of infectious diseases caused by the coronavirus, performed clinical examinations and treated the sick.

Recommendations for preventing the transmission of the coronavirus infection.

Health workers have the right to dignified work, which includes dignity, equality, fair income and safe working conditions. In the context of the COVID-19 pandemic, together with the right to a safe working environment, health workers have duties and responsibilities regarding the protection of safety and health at work in accordance with international labor standards (7), as well as to follow WHO recommendations for patient safety (8). They include:

- adherence to established occupational health and safety procedures, avoiding exposing oneself or others to safety and health risks and participating in OSH training organized by the employer;
- using existing protocols for patient assessment, triage and care;
- •rapid implementation of established reporting procedures in the field of public health regarding potential and confirmed cases;
- caring for patients with respect and compassion, while ensuring their dignity and maintaining confidentiality;
- providing or repeating accurate information in the field of infection prevention and control and public health to patients and the public;
- proper dressing, use, removal and disposal of PPE;
- monitoring yourself for signs and symptoms of COVID-19 and reporting any unprotected exposure to SARS-CoV-2, whether at

work or outside, to the person for contact and information in the field of occupational health or the occupational health service and voluntary quarantine;

- consulting the occupational health service if they notice signs of excessive stress or mental health problems that may require support; and
- informing the immediate superior of any situation where they have reasonable justification to believe that it represents an immediate and serious danger to life or health.

Results of clinical examinations of patients The Community Health Center in Vlasotince employs 210 workers, of which 153 are in primary health care, 14 are in dentistry and about 50 workers are financed from the local self-government budget. According to the structure of employees, there are 35 doctors and 5 dentists, and another 18 doctors on the project, 120 nurses and about 40 non-medical staff.

The Vlasotince Health Center provides health care for the population of this municipality, which includes about 30,000 inhabitants.

The first patient was reported in March 2020 and by December 2020, 258 cases were confirmed positive for the tested PSR material.

The COVID clinic was opened on March 18, 2020 and from the beginning, it has been working continuously. Twenty samplers (nurses, laboratory technicians and sanitary inspectors) were trained. Testing began on April 7, 2020. After taking the samples, they were packed and taken to the Institute of Public Health in Leskovac, from where they were transported to the laboratories. All doctors participated in the running of the clinic, several doctors worked in shifts, which depended on the number of patients who came for examination.

The work was organized so that after the examination of the patient in the COVID outpatient clinic, blood was taken for the laboratory according to the doctor's instructions and referred to Ro imaging, where positive patients and patients with suspicion of COVID-19 virus infection had access from the outside to the Ro service, so that the entrance to the central building was reduced to a minimum, all for the sake of enabling the rest of the staff to work smoothly with patients who did not have respiratory problems.

Patients with a more severe clinical picture were referred to the COVID hospital in Leskovac and kept there for treatment. The patients were driven by the COVID driver or the entire emergency service team depending on the case. The director and head nurse of the Community Health Center were in charge of the COVID clinic.

Pediatrics worked as a COVID clinic because there was a possibility of separating sick and healthy children, so children up to the age of 18 were examined and admitted to pediatrics and, if necessary, referred to the laboratory in the COVID clinic. The COVID clinic is located in a separate building in the Health Center and it is possible that the roads from the green to the red zone do not interfere. A space for interventions for COVID patients has been organized, as well as a special space for taking swabs for PCR testing. There is good cooperation with ZZJZ as well as with RFZO in Leskovac. Each patient was monitored from the onset of the first symptoms until the end of the treatment and return home.

Discussion

The assessment of work ability is a very delicate job for an occupational medicine specialist given that COVID-19 is an infectious disease that the health service has not encountered until now and that there are many unknowns regarding the onset of the disease itself, the course of the disease as well as the complications that might occur after the end of the disease.

When assessing work ability, it is important to wait for the patient's complete healing and rehabilitation. During the assessment of working capacity, the occupational medicine specialist encounters the following types of assessment:

when establishing an employment relationship (issuance of employment certificate);

during periodic and targeted inspections of persons working at workplaces with special working conditions;

in the event of disease complications (respiratory system, cardiovascular system, neurological system, hematopoietic system, etc.);

when processing the requests of the sick for obtaining pension and disability insurance;

when changing a workplace within the same company if the new workplace differs from the previous one and qualifies as a workplace with increased risk;

when working in conditions of extreme physical exertion (sports activities, military service, etc.); or

at the request of the court for the assessment of working capacity, etc.

When evaluating work capacity, a medical specialist must know well the psychophysical condition of a person who has suffered from an infectious disease, the state of function of

damaged systems and organs after the disease, as well as the requirements of the workplace, and then harmonize all of that.

A special problem is the requirement to recognize this disease in professionals in the acute phase. The World Health Organization has proposed that in case of infection with COVID-19 due to exposure at work, this disease should be recognized as an occupational disease, so the right to compensation, treatment and rehabilitation that applies to any occupational disease should be respected.

In our opinion, this recommendation should be accepted in the future list of occupational diseases when it comes to health personnel who fall ill with this disease during work, for employees of the police, employees of homes for the elderly and similar professions.

In other industries, it can hardly be said that employers are responsible for the occurrence of this disease among employees due to the lack of an effective vaccine, lack of other protective means, non-compliance with regulations, indiscipline and the like. It will be a big challenge for the occupational medicine service in the future if a new list of occupational diseases is created. It may happen that such cases are also the subject of forensic medical expertise. Until now, in our country, this disease has not been recognized as an occupational disease in any case.

Conclusion

The organization should draw up a plan for the implementation of measures for dealing with the occurrence of an infectious disease, which must necessarily contain preventive measures and activities to prevent the occurrence of an epidemic, responsibilities for the implementation of this plan and measures in the event of an epidemic of an infectious disease. The participation of the health service plays a significant role in the development of this plan and its implementation.

The occupational medicine service should be involved in the development of criteria for assessing the work ability of employees who have suffered from an illness, as well as criteria for recognizing this illness as an occupational illness.

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PLAN ZA POSTUPANJE U SLUČAJU POJAVE I ŠIRENJA ZARAZNE BOLESTI IZAZVANE KORONA VIRUSOM I ULOGA SLUŽBE MEDICINE RADA

Ivona Milenković^{1,2}

¹Univerzitet u Nišu, Medicinski fakultet, student doktorskih studija, Niš, Srbija ²Opšta bolnica Pančevo, Pančevo, Srbija

Kontakt: Ivona Milenković

Sinđelićeva 17, 11000, Beograd, Srbija E-mail: ivonamilenkovic94@gmail.com

Plan primene preventivnih mera za sprečavanje pojave i širenja zaraznih bolesti važi za sva radna mesta, kao i u radnoj okolini organizacije, a sprovodi se u cilju sprečavanja epidemije zaraznih bolesti i otklanjanja pojave rizika, kako bi se ostvarili bezbedni i zdravi uslovi za rad zaposlenih lica. Ovaj plan je sastavni deo Akta o proceni rizika, koji se donosi saglasno sa rizikom i propisima iz oblasti bezbednosti i zdravlja.

- Cilj rada bio je da se ukaže na značaj postojanja plana primene preventivnih mera za sprečavanje zaraznih bolesti, kao i na ulogu službe medicine rada u realizaciji ovog plana.
- U delu rada posvećenom rezultatima istraživanja prikazana su iskustva u sprovođenju preventivnih mera prilikom pojave epidemije zarazne bolesti izazvane virusom korona i način tretmana obolelih.
- U diskusiji su izneti stavovi i aktivnosti službe medicine rada u slučaju ocenjivanja radne sposobnosti osoba posle preležane bolesti.
- U zaključku je konstatovano da je od izuzetnog značaja napraviti plan za postupanje u slučaju pojave i širenja zarazne bolesti izazvane virusom korona. Takođe, ukazano je na ulogu službe medicine rada u tretmanu osoba koje su preležale bolest. *Acta Medica Medianae 2023;62(3):42-46.*

Ključne reči: zarazna bolest, radna sposobnost, COVID-19, profesionalno oboljenje

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