

Analysis of occupational health and safety management systems implementation in serving COVID-19 patients at the Tanjungpura University Hospital, Pontianak

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Abstract

Purpose: This study analyzes the implementation of the Occupational Health and Safety Management System in serving COVID-19 patients at the Tanjungpura University Hospital, Pontianak. **Methods:** This type of research is a qualitative descriptive study using a case study approach. The research location is Tanjungpura University Hospital, Pontianak. There were 10 informants in the study. Data was collected using in-depth interviews and field observations. **Results:** Implementation of the occupational safety and health management system program in protecting health workers who serve COVID-19 patients at the Tanjungpura University Hospital such as disinfecting, making cubical rooms, preparing special doffing and donning rooms, distributing PPE according to standards, providing vitamins and drinks or nutritious food and conducting special PCR examinations on health workers has been carried out well. **Conclusion:** Implementing occupational health and safety management at the Tanjungpura University Hospital's plan to protect health workers when serving COVID-19 patients refers to the K3RS guidelines. However, this has not been fully realized, and other fields mostly carry out the implementation.

Keywords: COVID-19; hospital; occupational health and safety management system; protection of health workers

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INTRODUCTION

In the last two decades, the world has witnessed many outbreaks of infectious diseases, and the rate of outbreaks is speedy. The speedy COVID-19 transmission in some parts of the world and the ability to reduce the rate of decline in other countries have put many sectors

facing significant challenges in fighting the COVID-19 pandemic and protecting safety and health in the workplace. When other workplaces are closed, the hospital is never empty of activity. The ILO 2020 mentions tools to prevent and control the spread of psychosocial, ergonomics, and work-related safety and

health risks in this pandemic. It was declared by the ILO in June 2019 that “safe and healthy working conditions are the basis of decent work”; ensuring safety and health in the workplace is critical to pandemic management and the ability to return to work [1].

When millions of people are in the “stage lockdown” in their homes to avoid the COVID-19 virus, many health workers who continue to carry out their duties and responsibilities require comparable security [2].

Currently, the public services most in the spotlight are hospitals appointed by the government as referrals for COVID-19 patients. Decree No. 370/Dinkes/2020 concerning the designation of a referral hospital for handling infectious diseases emerging particular explains that to support the services of the four leading referral hospitals, according to the Decree of the Minister of Health, especially in epidemic conditions, it is necessary to establish a supporting referral hospital as the second layer of services health services for patients with certain emerging infectious diseases, one of which is the Tanjungpura University Hospital, Pontianak [3]. This hospital is considered to have the capacity and ability to care for patients with certain emerging infectious diseases in isolation rooms. In addition, the Tanjungpura University Hospital also has a swab test laboratory with the real-time Polymerase Chain Reaction COVID-19 (PCR) method.

On October 17, 2020, Kompas media, it was reported that there was a nurse in the ICU room at the Tanjungpura University Hospital, Pontianak, who died confirmed due to COVID-19 (Kompas, 2020)—from the inspections carried out on All health workers received results from ER health workers and health workers who were confirmed positive for COVID-19 [4]. This shows the weak protection of health workers, which should be an obligation for hospital management, especially hospital work health and safety, in fulfilling the rights of health workers, especially in protecting their lives.

Implementing occupational safety and health management in hospitals is very important for health workers because they are human resources that determine the continuity of the process of providing hospital services. Therefore, hospitals' roles and responsibilities are needed to fulfill the rights of health workers as the front line in dealing with the spread of COVID-19.

Based on the description above, the problem is focused on analyzing the implementation of the hospital's health and safety management system in serving COVID-19 patients in the Tanjungpura University Hospital, Pontianak. The sub-problem is how the implementation and steps of the occupational safety and health management system protect health workers

in the ER and ICU rooms that serve COVID-19 patients at the Tanjungpura University Hospital, Pontianak.

METHODS

This type of research is a qualitative descriptive study with a case study method or approach that aims to analyze the implementation of the Occupational Health and Safety Management System in Serving COVID-19 Patients at the Tanjungpura University Hospital, Pontianak, which includes the implementation of an occupational health and safety management system in protecting workers. In the ER and ICU rooms that serve COVID-19 patients. The study was conducted at the Tanjungpura University Hospital, Pontianak; the time used by researchers to carry out the research was approximately 3 weeks and started after Ethical Approval was published at the end of April.

This study used a purposive sampling technique to take research subjects as respondents, so the subjects in this study amounted to 10 people. This study uses primary and secondary data: checklist/observation sheets, interview guides, cameras, handphones for recorders, ballpoint pens, and books. This study uses data collection techniques through direct observation. Data collection was carried out using observation, interviews, and documentation techniques. The conceptual framework processes the data collected through observation, interviews, and documentation. The objectives of the further research are clarified, processed in the form of interview transcripts, and analyzed, interpreted, and interpreted the results of the analysis, which finally formulated a conclusion related to the data analysis according to the standard determined as a reference.

The credibility test with extended observations and triangulation is a data validity technique that can be implemented in this study. The Ethics Commission of Gadjah Mada University approved this research on April 21, 2021, with letter number KE/FK/0360/EC/2021.

RESULTS

At the Tanjungpura University Hospital, to protect health workers, the Hospital Occupational Safety and Health (HOSH) Team disinfects all rooms in the hospital. Then, it makes cubical rooms for nurse stations for nurses, doctors, and other health workers. Still, there is no information about when or when the disinfection will occur. In addition, providing a complete PPE is the HOSH Team's main task according to the Occupational Safety and Health guidelines at Tanjungpura University Hospital.

Currently, the PPE distributed to the ER and ICU rooms is sufficient and does not experience shortages like in 2020, where the use of masks and hand scoops must be limited. From the monitoring results, all health workers in the ER and ICU use their PPE as needed, such as masks, hand scoops, nurse caps, and gowns. The PPE currently used in the emergency room and ICU follows the ministry's standards, which are not using a hazmat but rather a gown, then using a medical mask if you don't take aerosol action, using a handscoon when taking action, and using a nurse cap and face shield when entering the ER isolation room.

Observing the use and removal of PPE in the ER and ICU rooms was carried out in a room that had been prepared. The doffing and donning rooms and procedures for use and removal were also in this room.

In addition, based on interviews with informants regarding the provision of vitamins and additional food or drinks, the HOSH Team also carried out the HOSH Team to health workers, especially in the ER and ICU rooms, in addition to the facilities and infrastructure that have been prepared and carried out by the HOSH Team.

Another protection for health workers in carrying out their duties is being given protection during working hours. From the results of interviews with informants during the pandemic, the Tanjungpura University Hospital enforced the working hours of health workers in the ER, and ICU rooms did not change; there were only additional personnel due to the addition of isolation rooms in the ER. Working hours are still the same as before the pandemic, working three shifts (morning, afternoon, evening) with a range of 7 hours in the morning and evening and 10 hours at night.

Furthermore, the HOSH team is responsible for providing training and guidance to protect health workers who serve COVID-19 patients. However, the results of interviews with informants stated that the IPC team carried out training and guidance, such as cough etiquette, use and release of PPE, and use of PPE based on the level and procedures that will be carried out, as well as monitoring of hand washing.

Tanjungpura University Hospital has not implemented the OHS culture by conducting OSH socialization in the hospital to patients and introducing patients and hospital visitors. Not all health workers know about OSH culture. So far, the available information, either in the form of posters or banners about patient safety or the health of health workers, is still being worked out by the IPC Team; this is not in line with the program from the Indonesian Ministry of Health.

Implementation of the HOSH program in protecting health workers from dealing with COVID-19 patients, including carrying out further health checks such as periodic RT-PCR examinations, is also needed by these health workers to be handled further if there are health workers who are confirmed positive based on the results of interviews. The informants found that at the Tanjungpura University Hospital, the RT-PCR examination was carried out for the first time when there were health workers who tested positive for COVID-19 and died from the results of the mass PCR swabs. Many health workers, doctors, nurses, midwives, health analysts, and others were confirmed positive, including the ER and ICU rooms. The informant also revealed that when it was confirmed positive, the subsequent treatment was self-isolation with a place provided by the hospital, then the provision of medicine and food packages.

During the research at the Tanjungpura University Hospital, Pontianak, in implementing the K3RS plan, it was found that in the implementation of the planned program that was made in 2019, there was an occupational safety and health program where the HOSH Team implemented the safety program and the occupational health program mainly was carried out by the Team. The IPC and the results of interviews with several informants show that so far, the IPC has been more involved in carrying out protection programs for health workers. In addition to the implementation of the HOSH program in serving COVID-19 patients at the Tanjungpura University Hospital, Pontianak, from the results of field observations, there was no written report on the HOSH Team, both the planning that had been carried out and the results or reports of health workers who were confirmed positive for COVID-19. According to the informant, this is because someone has already worked on the IPC Team, which will then be reported to the Head of Nursing, the Head of Administration, and the hospital's Director.

DISCUSSION

Based on the theory of occupational safety and health in hospitals, there are potential hazards that can occur in hospitals, including biological hazards caused by viruses, bacteria, parasites, and others. Currently, almost all hospitals in Indonesia are experiencing this danger caused by the COVID-19 Virus, which can threaten the safety and health of workers, especially health workers; this is a demand for the K3RS Team in each hospital to protect health workers in creating working conditions that are safe and healthy. One of them is at the Tanjungpura University Hospital, Pontianak; in protecting health workers, the HOSH has

made efforts such as disinfecting, making cubical rooms, preparing special doffing and donning rooms, distributing PPE according to standards, providing vitamins and drinks or nutritious foods that have been carried out well.

Hospitals provide safe, functional, supportive facilities for workers, staff, patients, families, and visitors. Physical, medical, and other equipment facilities must be managed effectively (Decree of the Director General of Health Efforts at the Ministry of Health of the Republic of Indonesia Number: HK.02.04/I/2790/11 about protecting health workers so that the implementation of HOSH can run optimally [5].

According to the Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/413/2020, the protection of health workers is to enforce appropriate working hours and ensure that health workers get adequate rest time [6]. So far, the arrangement of working hours for health workers, especially in the ER and ICU rooms, has remained the same; there has been no change either before COVID-19 or after COVID-19, with the setting of working hours for morning and afternoon shifts for 7 hours and night shifts for 10 hours. Working days are limited to only 4 days followed by a holiday, and for management to use five working days followed by a holiday.

The division of shift work is regulated in articles 77 to 85 of UU No. 13 of 2003 concerning Manpower. According to UU no. as of 13 of 2003, the applicable working hours are 7 hours in 1 day and 40 hours in 1 week for workers with six working days. As for workers with five working days in 1 week, their obligation to work is 8 hours in 1 day and 40 hours in 1 week. However, the above working time provisions do not apply to specific business sectors or occupations, for example, work in the mining sector, 24-hour services such as Hospitals, Firefighters, Call Centers, etc. Working hours in this job reach 8 to 12 hours of work in 1 day [7].

Education and counseling/training on occupational health and assisting hospital human resources in physical and mental self-adjustment. The HOSH team must show and explain to each worker the conditions and hazards that can arise in the workplace, ways of working, and a safe attitude in carrying out their work (UU No. 1 of 1970) by the Decree of the Minister of Health of the Republic of Indonesia No. 1087 of 2010, which states that hospitals need to provide general information on hospitals and facilities or facilities related to occupational safety and health, information on unique risks and hazards in the workplace, work SOPs, equipment SOPs, SOPs on the use of protective equipment themselves, and their obligations and OSH

orientation in the workplace [8]. Providing guidance, training, physical security, and psychosocial support is very much needed in protecting health workers in serving COVID-19 patients, as is the case with research conducted by Waleleng (2020) on the relationship between health promotion and occupational safety with COVID-19 prevention measures in employees [9]. A hospital whose research results show that OHS training, communication, and supervision of OHS have an essential role in efforts to prevent COVID-19 in North Sulawesi Province, and the factor that plays the most role in taking preventive measures for COVID-19 is OHS communication. However, at the Tanjungpura University Hospital, guidance and training as long as health workers serve COVID-19 patients are provided entirely by the IPC Team, so the function of the OHS Team in providing education or counseling has not been seen.

In carrying out work safety and security procedures for health workers who serve COVID-19 patients, apart from facilities and infrastructure, standard operating procedures are also needed, and every health worker expects them to carry out their work based on the SOPs. Tanjungpura University Hospital already has fire extinguishers and instructions regarding work safety in the ER and ICU rooms. Evacuation routes are also available, then occupational health SOPs related to the protection of health workers in serving COVID-19 patients, such as SOPs for releasing and using PPE, SOPs for the flow of receiving COVID-19 patients, how to wash hands are also available, only those who disseminate occupational health SOPs are not the OHS Team but the IPC Team. So that health workers in the ER and ICU are more aware of the implementation of the IPC Team in protecting health workers than the K3RS Team. This arrangement is by the Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number 08 of 2010 concerning personal protective equipment, which states that the leadership of a workplace and workers who have worked for a long time are required to provide written information and install SOPs for the use of PPE in the workplace [10]. However, providing information is not by the existing functions.

This study has certain limitations, including: 1) A health worker once rejected the researcher during an interview because the health worker was afraid of being wrong in answering the questions given. So, the researchers discussed again with the head of the room to re-informed consent to other health workers in the room; 2) Informants often feel hesitant or afraid to answer the questions given because the interview process is recorded and documented; 3) In conducting

observations and interviews, researchers obtained a time limit by the room party due to the density of services to be carried out by the informants; 4) Although this research was conducted with limited research capabilities, the suggestions/inputs from supervisors were constructive, making this valuable research for implementation.

CONCLUSION

Based on the results of research and discussion of the entire analysis of the implementation of the Occupational Health and Safety Management system in serving COVID-19 patients at the Tanjungpura University Hospital, conclusions can be drawn from the implementation of the Occupational Health and Safety Management system in protecting health workers who serve COVID-19 patients. Nineteen of the principles of commitment and policy and program planning have not been effectively carried out in the implementation of the Hospital Occupational Health and Safety Management system to protect health workers who serve patients; it is carried out based on global Hospital Occupational Safety and Health guidelines, the application of personal protective equipment and regulations from the minister such as carrying out disinfection, making cubical rooms, preparing special rooms for doffing and donning giving vitamins and drinks or nutritious food, and special health checks such as RT-PCR examinations.

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