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**Research** Articles

# Analysis of Occupational Health and Safety Management of Hospital Employees During a Pandemic: A Case Study of Covid-19 in Employees at Kendal Islamic Hospital

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#### Abstract

**Background:** In 2019, in December to be precise, an acute respiratory disease caused by the corona virus/ COVID-19 (corona virus deiase-19) was discovered. The transmission of COVID-19 to health workers is a very important issue in this pandemic era. In Indonesia, data from the COVID-19 report on July 15 2021, the number of deaths recorded by health workers was 1,292 due to COVID-19. The data found that the spread of COVID-19 has also infected employees at the Kendal Islamic Hospital. Total population of 512 employees, 20% exposed to COVID-19, namely 118 employees, with the highest distribution of cases occurring in medical personnel, namely 14%. **Objective:** Occupational health and safety is an effort and effort to create protection and security from the risk of accidents and hazards, both physical, mental and emotional for workers.

**Methods:** This research is a qualitative research with a single case study design. Data collection using purposive sampling technique was carried out by observation and in-depth interviews. This research data collection was carried out by observing the management of the health and safety of hospital employees during the Pandemic: Case studies of COVID-19 among employees at Kendal Islamic Hospital. Secondary data is used to support and relate to research variables or research problems.

**Results:** The management of COVID-19 at RSI Kendal has basically adapted to regulations set by the government starting from policies/regulations, provision of physical facilities, medical devices, medicines and BMHP as well as in the provision of PPE. However, there are still several obstacles in its implementation, so that many employees are still infected and exposed to COVID-19. This is influenced by many factors, including fatigue, decreased immunity, stress and there are still many officers and employees who are not disciplined with the health program.

**Conclusion:** In general, the management of employee health and safety at Kendal Islamic Hospital during the pandemic has been carried out in accordance with the government's standards for handling COVID-19.

Keywords: Occupational Health and Safety; Employees; Pandemic COVID-19



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#### BACKGROUND

In 2019, precisely in December, an acute respiratory disease caused by the coronavirus/COVID-19 (corona virus desiase-19) was discovered. Although the global Case Fatality Rate (CFR) of COVID-19 is only around 0.3-0.8%, this disease is very dangerous because of its rapid transmission (1) In addition, the symptoms of this disease are quite disturbing such as fever, dry cough, shortness of breath, chest pain, headache, and other minor symptoms (2). To prevent uncontrolled spread, the WHO declared COVID-19 a pandemic on 11 March 2020. This pandemic status has become a worldwide concern to make various efforts to prevent the spread of COVID-19. In general, COVID-19 can be transmitted through the transfer of body fluids such as when coughing, sneezing or when humans have close contact, or contact with objects that have been infected with COVID-19 (3). Transmission of COVID-19 to health workers is a very important issue in this pandemic era. In the United States, the Centre for Disease Control and Prevention (CDC) in April 2020 released a study on the characteristics of health workers affected by COVID-19. From 12 February to 9 April, it was announced that 9,282 (19% of 49,370 reporting occupations) health workers were infected with COVID-19. In Italy, the infection rate among medical staff reached 10%. Spain reported up to 20% infected. In Malaysia the government reported that 5.8% of positive cases were health workers. The mortality of medical and health workers in Indonesia is the highest in Asia, and the top 5 worldwide. in December 2020 alone, there were 52 doctors who were infected. died as a result of COVID-19. While at RSI Kendal the total number of infected was 512, employees, 20% were exposed to covid (4)

Occupational health and safety is an effort and effort to create protection and security from the risk of accidents and hazards both physical, mental and emotional to workers, companies, communities and the environment, and involves various elements and parties (5) OHS risk management is an effort to recognise as well as make efforts to control various risks that threaten the safety of the workforce. In a pandemic situation, it is necessary to adjust various aspects to reduce the risk of virus transmission in hospitals and health facilities.

Kendal Islamic Hospital since starting to open COVID-19 services in June 2020 - May 2021 has treated a total of 612 patients. Who came from various regions in Kendal district. Data found by researchers as a result of preliminary studies informs that the spread of COVID-19 has also infected hospital employees. With a total population of 512 employees, 20% were exposed to COVID-19, namely 118 employees, with the highest distribution of cases occurring in medical personnel, namely 14%. Then non-medical and medical support 6% of these cases occurred in the first spike in COVID-19 cases in June 2020 - March 2021. Meanwhile, in the second spike in COVID-19 cases between May and July 2021, there were 140 employees exposed to COVID-19 with the largest percentage being nurses and doctors. Researchers in this study will discuss the high number of COVID-19 transmission cases in the case study hospital at RSI Kendal, through a COVID-19 case study (6)

### **METHODE**

This research is qualitative research that is presented in an explanatory design. Informants in this study were determined using purposive sampling technique (7). The research subjects were selected based on the consideration that the informants have the competence, knowledge, and credibility to provide the information needed and in the research. The subjects of this study were the main informants and triangulation informants consisting of, director of RSI Kendal, Wadir of Services, RSI Kendal COVID-19 Task Force, K3RSI Kendal, PPI Team RSI Kendal, COVID-19 survivor employees/staff, isolation room nurses, specialist doctors, doctors in charge of patients, Management and HRD RSI Kendal with a total of 13 informants. This research was conducted at RSI Kendal on 25 June - 30 October 2021, with a total of 13 subjects. Qualitative research aims to explore more in-depth information or to get a detailed explanation of a phenomenon or problem. In addition, by using a qualitative design, research can adjust to conditions in the field, the existence of multiple realities and adjustments to existing values (8). the choice of qualitative research type is that researchers want to explore more in-depth information about the Analysis of Occupational Health and Safety Management of hospital employees during the pandemic: COVID-19 Case Study on Employees.

### RESULT

### Leader Policy Variable

Leadership policy is a set of leader actions designed to achieve certain results, which are expected by employees as constituents who become the outline and basis for plans in the implementation of organisational affairs and tasks developed according to the situation and conditions. Kendal Islamic Hospital has issued several policies and regulations as internal rules in the hospital as a reference for handling COVID-19 (9). The regulations used are derived/adopted from the central government which are then passed down to the hospital level. From the results of in-depth interviews, there are several policies issued by the leadership during the COVID-19 pandemic, among others: COVID-19 service guidelines, several SPOs on the prevention and control of COVID-19, policies on the provision of drugs, BMHP, medical equipment and human resources and the formation of a hospital-level COVID-

19 response task force. Some informants said there were still some obstacles in implementing the policy due to frequent changes in regulations at the government level, which affected the level of understanding among employees. However, this does not really affect the performance of the officers. This shows that the policy aspect of the leadership is very influential in the process of implementing COVID-19 handling in hospitals, both now and in the future.

### Variable Implementation of HSE Management during the Pandemic

A good work culture is inseparable from the role of OHS in hospitals through OHS planning, implementation, monitoring and evaluation. Which refers to the ministerial regulation on K3 Management Guidelines in Hospitals and PP No 50 of 2012 concerning K3 management system standards. The implementation of the K3RS program in hospitals includes the development of K3RS policies, acculturation of K3 behaviour, development of guidelines and standard operational procedures (SOPs) and emergency response management (10).

In terms of policy development, RSI Kendal has formed an OHSRS Team along with its job description and has been determined by a director's decision.

Acculturation of OHS behaviour has been implemented before COVID-19. Such as fire prevention training, the use of fire extinguishers, health education through the media and mobile socialisation. For mobile socialisation, it cannot be maximised due to limited human resources.

As a form of emergency response management to the increasing number of COVID-19 transmission cases. Hospital OHS

We have conducted mapping of risk areas which are then continued by determining what policy measures should be implemented. One example is installing barriers in areas at risk of COVID-19 transmission, and disinfecting, checking the temperature at the employee entrance, providing PPE according to its level and increasing hand washing stations in certain areas. The results of field observations of the use of PPE have been carried out according to the level of need, including the location and potential hazards. Starting from the screening / triage room, emergency room, isolation room, IBS, outpatient, inpatient inpatient to support. The obstacles faced by the provision of PPE occurred at the beginning of the pandemic, namely the scarcity of goods and the high price.

## Infection Prevention and Control Variables during the Pandemic

Infection Prevention and Control is an effort to prevent and minimise the occurrence of infections in patients, staff, visitors, and the community around health care facilities (11). From the results of in-depth interviews with informants, it was found that employees/staff of COVID-19 survivors of RSI Kendal know very well what COVID-19 is and how it is transmitted and prevented. As a form of preparedness of the PPI Team during the COVID-19 pandemic at RSI Kendal. Several efforts have been made before contracting the COVID-19 disease, namely by implementing health protocols in accordance with policies issued by WHO, as a preventive measure against the increasing number of COVID-19 patients (12). The use of PPE, one of which is wearing a mask, is mandatory at RSI Kendal as a way to prevent exposure to the COVID-19 virus. The health protocol implemented at Kendal Islamic Hospital is 3M (wearing a mask, washing hands and maintaining distance).

The hospital also provides isolation rooms for COVID-19 patients in which there are negative pressure air conditioning arrangements, anterooms and one room for one patient. Each isolation room is strived to meet the minimum standards of the isolation room, namely even though the air conditioning arrangement does not yet use a hepafilter, at least it is already equipped with the use of exhaust fans and ventilation for air circulation and lighting.

Interviews with informants said that the use of isolation rooms was considered safe, because it was supported by the implementation of strict health protocols. Some obstacles are still encountered by the PPI team in carrying out their duties, such as dishonest patients and patient groups during examinations, so that they pass screening, besides that there is a lack of discipline in wearing PPE both from patients, patient groups and employees themselves, such as wearing only covering the chin, removing masks and placing carelessly not in the trash provided. Things like this are at risk and have the potential to transmit covid to everyone (13).

#### Employee / Health Worker Management Variables during the COVID-19 Pandemic

At the beginning of the COVID-19 pandemic at RSI Kendal, the number of health workers was still balanced and was always evaluated based on the surge in COVID-19 patients. Until the second wave, the health workers owned by RSI Kendal were no longer balanced. Health workers have begun to feel exhausted in dealing with the COVID-19 pandemic because the trend in the number of positive covid cases is increasing day by day and do not know when it will end. So that it has a serious impact on health workers, namely a decrease in physical and mental stability in caring for COVID-19 patients which has an effect on the quality and safety of the services provided. To overcome this problem, it is necessary to establish a work schedule that can reduce the risk of fatigue for health workers and issue stress management policies for employees during a pandemic (14).

In-depth interviews with key informants said that the number of human resources exposed to COVID-19 is a very significant obstacle. So that RSI Kendal had to hold sudden recruitment and ask for some health workers from outside. HR arrangements in the covid room must be with certain recommended criteria and without comorbidities.

Health workers or employees of RSI Kendal in carrying out their work caring for COVID-19 patients in addition to being healthy must also receive protection of the law, K3 and insurance. In addition, they also get COVID-19 service services given directly to health workers as a form of appreciation from the government for their performance, totality and loyalty in caring for COVID-19 patients. This is in accordance and in line with the standards for the protection of health workers during a pandemic (15).

## DISCUSSION

Leadership is a very decisive factor in the success of a hospital organisation. While leadership policy is a set of leader actions designed to achieve certain results, which are expected by employees as constituents who become the outline and basis for plans in carrying out activities. In this case, RSI Kendal already has internal regulations for the management of COVID-19 patients, including guidelines for the service of COVID-19 patients at RSI Kendal, SPO related to the management and prevention of COVID-19 and there are several other policies or regulations such as team decisions or flow related to the management of covid 19 patients, screening, zoning, provision of extra fooding and vitamins and circulars to always comply with the prokes to avoid transmission of COVID-19. For the standard completeness of sarpras and alkes (medical devices), supporting COVID-19 services at RSI Kendal is quite appropriate and refers to regulations from the Ministry of Health except that the COVID ICU room is still not standardised. There are still some obstacles encountered in providing health services for COVID-19 patients at RSI Kendal, namely differences in understanding and perceptions between employees due to frequent changes in government regulations, especially related to the management of COVID-19. However, this does not really affect the performance of officers in providing health services, especially for COVID-19 patients, because there are already internal policies issued by the hospital.

A good work culture cannot be separated from the role of K3 in the hospital through K3 planning, implementation, monitoring and evaluation. Occupational Health and Safety at Kendal Islamic Hospital has long been established since before there was COVID-19. The implementation of the K3RS programme in the hospital includes, among others, the development of K3RS policies, acculturation of K3RS, and the implementation of the K3RS programme. OHSRS behaviour, development of guidelines and standard operating procedures (SOPs) and emergency response management. The health and safety of health workers and other staff in healthcare settings is of utmost importance. It is not only to provide protection to them but also to help prevent the spread of the virus and improve overall health services. Some of the efforts made by K3RS in protecting health workers from the COVID-19 virus include; making barriers, conducting temperature checks at the hospital entrance, providing vitamins, extrafooding for officers/employees in the hospital, and providing PPE according to their level of need. This is in accordance with the Ministry of Health's technical guidelines on hospital services during a pandemic (14).

Infection Prevention and Control, hereinafter abbreviated as PPI, is an effort to prevent and minimise the occurrence of infections in patients, staff, visitors, and the community around health care facilities. The authority of the PPI Team during the COVID-19 pandemic at RSI Kendal is to implement preparedness for COVID-19 at RSI Kendal. Preparedness for COVID-19 is very important considering COVID-19 is an infectious disease whose transmission is very easy and very fast. Carrying out outbreak preparedness and response as well as carrying out infection prevention and control are the duties and authority of PPI. COVID-19 Infection Prevention and Control at RSI Kendal basically adapts to government regulations and is carried out in accordance with the capabilities of the hospital (9). However, in its implementation there are still some obstacles encountered. There are still those who are ignorant and undisciplined in carrying it out so that it becomes a bad impact on health workers and hospital employees. Efforts made to overcome these obstacles, the RSI Kendal PPI team often conducts supervision and socialisation to units about government regulations related to 3M and the correct procedures for using PPE.

When the second wave occurred, the COVID-19 treatment room and health workers owned by RSI Kendal were no longer available. balanced again with the number of COVID-19 patients. Health workers have begun to feel exhausted in dealing with the COVID-19 pandemic because the trend of the number of positive covid cases is increasing day by day and do not know when it will end. So that it has a serious impact on health workers, namely a decrease in physical and mental stability in caring for COVID-19 patients so that it affects the quality and safety of the services provided. In general, work-related fatigue and stress can be managed well with organisational and management support such as the issuance of policies related to stress management, shift arrangements and work duration. This policy is in line with that of RSI Kendal and has been implemented during the COVID-19 pandemic.

## CONCLUTION

The number of human resources exposed to COVID-19 is a very significant obstacle. So that RSI Kendal had to hold a sudden recruitment and ask for some health workers from outside RSI Kendal. Empowerment of human resources in the covid room must be with certain recommended criteria, among others, without comorbidities. Health workers who work in covid isolation rooms must not only be healthy, but must also receive legal protection, K3 and insurance protection. Apart from this, health workers also get services or awards from the government. This is in accordance and in line with the standards for the protection of health workers during a pandemic

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