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# Analysis of Management Responses of RSI Kendal to Deal with the Covid-19 Pandemic in 2021

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#### **Abstract**

**Background:** The high number of positive cases of Covid-19 in Indonesia has made the Government of Indonesia stipulate it as a national non-natural disaster. Various obstacles related to hospital services emerged due to a significant increase in patients at the same time. Given these constraints, there needs to be a hospital management response to maintain health services at the hospital to continue to run well.

**Objective:** The purpose of this study is to get an overview of the response of hospital management in dealing with the Covid-19 pandemic in 2021 through the rapid hospital readiness for Covid-19 instrument recommended by WHO. **Methods:** This research is qualitative research with a phenomenological approach. Data collection was carried out through interviews with five main informants and 17 triangulation informants, as well as through observation.

**Results**: showed that from the assessment of the 12 components of rapid hospital readiness for covid-19, it was found that components could not be implemented optimally, namely leadership and incident management systems (86%), administrative, financial and business continuity (87%), patient management (88%), proper identification and diagnosis (83%), PPI (94%) and the lowest is occupational health, mental health and psychosocial support (40%).

**Conclution:** The management response of Kendal Hospital in dealing with the 2021 Covid-19 pandemic has been good, the lack of implementation of the rapid hospital readiness instrument for Covid-19 is technical.

Key words: Hospital, Covid-19, Rapid Hospital Readiness

#### **BACKGROUND**

Covid-19 disease causes a high morbidity and mortality rate in Indonesia, according to data from the Commission for handling covid-19 recorded: the beginning of the coronavirus entering Indonesia in March 2020 the number of confirmed positive covid-19 was 1,528 people, increased in December 2020 to 743,198 people and continued to increase in July 2021 to 2,911,733 people (Covid-19, 2020). Health services for people with covid-19 are provided at health care facilities, including hospitals.

The occurrence of a significant surge in patients at the same time has overwhelmed hospitals in providing health services. Most hospitals in Indonesia are considered unprepared in dealing with the covid-19 pandemic, this is due to the large number of health workers who are sick and even died as a result of contracting the covid-19 virus. The amount of data as of 20 January 2023 is 2,087 health workers died fighting covid-19. This results in a limited number of health workers who can provide services, not only that, limited medical and non-medical logistics and medical devices in the form of PPE to avoid transmission are also problems experienced by most hospitals (Hamid, 2020).

RSI (Islamic Hospital) Kendal is a covid-19 referral hospital in Kendal Regency, experiencing various changes due to the increasing number of patients due to the covid-19 pandemic, so there are several problems such as: the limited number of staff serving patients because in the period April 2021 - July 2021 as many as 140 employees were exposed to Covid-19 which consisted of various elements of both medical personnel, medical and non-medical support, limited amount of PPE, the number of covid-19 patients, and the number of Covid-19 patients.

who came to RSI Kendal exceeded the capacity of the covid-19 isolation room, and the hospital experienced limited supporting equipment such as: HFNC, mobile x-ray and ventilator. Therefore, the researcher wants to conduct research on analysing the management response of RSI Kendal in facing the covid-19 pandemic in 2021, with the aim of getting an overview of the management response process of RSI Kendal in facing the covid-19 pandemic in 2021, whose changes are happening so quickly through the rapid hospital readiness for covid-19 instrument as a benchmark for developing future strategies.

#### **METHODE**

This research is a qualitative study with a phenomenological approach method that focuses on the experience of hospital management and staff in using the rapid hospital readiness for covid-19 instrument (Sugiyono, 2011). The subjects of this study were 22 people consisting of: 1) Five main informants, namely: Director, Chair of the covid-19 task force, HR Manager, Service Manager and Nursing Manager. 2) Triangulation informants, namely: 1) One duty doctor, one nurse and one midwife who are on duty in the emergency room. 2) One duty doctor, one nurse and one midwife on duty in the covid-19 outpatient room. 4) One duty doctor, one nurse and one midwife on duty in the ICU room. 5) Five covid-19 patients

Data collection was carried out through indepth interview and observation methods. The research instrument used was indepth interview data collection carried out based on in-depth interview guidelines consisting of several questions related to the research, while data collection through observation was carried out based on the rapid hospital readiness for covid-19 checklist recommended by WHO contained in the attachment to the Decree of the Director General of Health Services Number HK.02.02/I/4405/2020 concerning Guidelines for Monitoring Evaluation of Hospital Readiness during the Covid-19 Pandemic. Data collection techniques using two techniques, namely:

#### **Participatory Observation**

Participatory techniques to obtain materials or data by observing and listening directly to what is done in their activities. Observations were carried out on 5-20 January 2022, with a duration of 8 hours (per shift, following the morning and afternoon shifts).

#### **In-depth Interview**

Data collection by conducting open conversations or questions and answers to obtain information / data holistically and clearly from informants using questions that have been prepared by researchers. Interviews were conducted in January-March 2022.

Checking the validity of data (trustworthiness) is carried out with the aim of producing data that can be accounted for. One of the data validity techniques used is triangulation, in this study using source triangulation and technical triangulation. Source triangulation is done by checking data obtained from various sources, data obtained from participatory observation and in-depth interviews with informants. Triangulation techniques were carried out by comparing the data from participatory observation with the results of in-depth interviews with what the

triangulated informants said in public with what was said privately (Harahap, 2020). The data analysis technique used is qualitative analysis.

#### **RESULT**

The rapid hospital readiness for covid-19 instrument is used to assess the readiness of hospitals in facing the covid-19 pandemic and as a system of strengthening the health service system by maintaining the quality of health services, minimising the risk of infection to hospital staff, patients and visitors, and ensuring continuity of essential services. This instrument consists of 12 assessment components (Firmansyah, 2020). Based on the results of secondary data through observation, the following results were

**Table 1.** Observation Results Using the Rapid Hospital Readiness Checklist for Covid-19 at RSI Kendal in 2021

No	Komponen	Jumlah item indikator	Skor	Keterangan
1	Leadership and incident management system	7	6	Not fully functional
2	Communication and coordinations	6	6	Fullly functional
3	Supervision and information management	6	6	Fully funcional
4	Risk communication and community engagement	4	4	Fully funcional
5	Administrative, financial and business continuity	8	7	Not fully functional
6	Human Resources	6	6	fully functional
7	Surge capacity	5	5	fully functional
8	Continuity of service support is important	6	6	Berfungsi penuh
9	Patient management	4	3,5	Not fully functional
10	Occupational health, mental health and psychosocial support	5	2	Not fully functional
11	Correct identification and diagnosis	6	5	Not fully functional
12	Infection Prevention and Control	16	15	Not fully functional

source: Dat Primer, 2023

As table 1 shows, it is known that not every component of the rapid hospital readiness for covid-19 assessment is fully functional. There are six components that are not fully functional, namely: the components of leadership and incident management systems, administrative, financial and business continuity, patient management, PPI and those with the lowest scores are the components of occupational health, mental health and psychosocial support. This is because there are recommendations that cannot be fulfilled by RSI Kendal. Secondary data obtained based on interviews conducted with key informants and triangulation informants, obtained the following results:

#### **Component 1 (Leadership and Incident Management System)**

Based on the results of interviews with the Director of RSI Kendal, it was found that out of 7 sub-components of the assessment, RSI Kendal has fulfilled 5 sub-components of the assessment. RSI Kendal appoints leaders and representatives who are assigned to provide appropriate input in decision making through RSI Kendal Director Decree Number 445/0689.1/RSI/2020. RSI Kendal has guidelines and documents related to covid-19 risk management that can be used by hospital staff in the form of: SPO Number 067/004/PPI/2020 on How to Wear Personal Protective Equipment in the Airborne/Droplet Isolation Room, SPO Number 067/005/PPI/2020 on How to Wear PPE Glasses (goggles), SPO Number 067/408/PPI/2018 on How to Wear PPE High Efficiency Mask (N-95), SPO Number 067/410/PPI/2018 concerning How to Wear an Apron, SPO Number 067/416/PPI/2018 concerning the Use of Personal Protective Equipment (PPE) in isolation rooms, SPO Number 067/060/PPI/2020 concerning Transer Covid-19 Patients to Pinere (isolation room). There are two components that have not been fulfilled by RSI Kendal,

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namely not having a covid-19 emergency response plan and not having a business continuity plan tested through simulation exercises for covid-19.

#### **Component 2 (Coordination and Communication)**

RSI Kendal has established a system of coordination and communication both internally and externally. Internal communication carried out by RSI Kendal is by implementing internal communication programmes and SPOs for hospital staff and visitors. External coordination and communication has been carried out at RSI Kendal, the covid-19 Task Force carries out coordination and communication with the Ministry of Health, Health Office and other authorised agencies.

#### **Component 3 (Monitoring and Information Management)**

RSI Kendal has fulfilled all sub-components of the supervision and information management assessment, as evidenced by: Every staff at RSI Kendal has been provided with information regarding the operational definition of covid-19 cases, starting from suspected cases, probable cases, confirmed cases, close contacts, travellers, discarded, completed isolation and death. Information in terms of reporting has also been owned by RSI Kendal in the form of notification of the discovery of covid-19 cases which is reported daily to the Kendal District Health Office by filling in surveillance to SIRS online. RSI also has protocols regarding data collection and validation of covid-19 data.

#### **Component 4 (Risk Communication and Community Involvement)**

Risk communication techniques have been outlined in written regulations in the form of standard operating procedures related to PPI, such as rules for washing hands, wearing masks, coughing and sneezing etiquette, etc. which are then socialised through leaflets, MMT and social media.

#### **Component 5 (Administrative, Financial and Business Continuity)**

Each sub-component has been fulfilled by RSI Kendal, however there is still one component that cannot be fulfilled by RSI Kendal, namely RSI Kendal does not yet have a service fee exemption system for covid-19 patients, such as: laboratory tests for diagnosis and management of confirmed covid-19 positive cases.

#### **Component 6 (Human Resources)**

RSI Kendal has made various efforts to prepare staff with adequate capabilities by preparing a budget used for improving staff competence and safety. Competency improvement is carried out through internal training activities (in house training) with materials such as: how to wash hands, how to use PPE at levels 1,2,3 and 4, how to disinfect equipment, how to transfer covid-19 patients. Clinical governance training is also provided in the form of screening covid-19 patients in the emergency room. In relation to adequate staff safety efforts, RSI Kendal provides a recruitment budget.

#### **Component 7 (Surge Capacity)**

RSI Kendal has carried out strategies to deal with surges, adding human resources in the form of contract employees, ensuring equipment and logistics are fulfilled by collaborating with other hospitals and the Kendal District Health Office. RSI Kendal has increased the number of beds and improved the competency of critical areas.

#### **Component 8 (Continuity of Essential Service Support)**

Each of these sub-components has been fulfilled by RSI Kendal, by carrying out identification and prioritisation of essential service support, identification of backup resources to optimally maintain essential services through long-term development plans including the addition of mortuaries, body bags, laundry services, sanitation, local hygiene and water. Implement an inventory system, stock reserves and hospital maintenance.

#### **Component 9 (Patient Management)**

Not all service delivery staff who are triangulated informants know and understand written policies or rules related to covid-19 services, such as: receiving patients and transferring them within the hospital to isolation areas or rooms, other diagnostic and therapeutic support services and transport services for pre- and post-hospital referrals including transferring patients from home care.

#### Component 10 (Occupational Health, Mental Health and Psychosocial Health)

Not all staff have received training to provide medical care to people with suspected or confirmed covid-19 and have never been provided with training. psychological first aid training, and being aware of when to seek support services.

#### **Component 11 (Appropriate Identification and Diagnosis)**

There is one sub-component assessment that has not been met by RSI Kendal, namely: there is no communication and monitoring system that enables, timely reporting and alerting of suspected covid-19 cases in any area of the hospital, including facility entry points and patient arrival and reception areas.

#### **Component 12 (Infection Prevention and Control)**

There are two sub-components that have not been fulfilled by RSI Kendal, namely several triangulation informants stated that the PPE owned by the hospital is inadequate and not easily accessible to all staff, and two informants stated that at the entrance to inpatient services, including in the isolation room service, screening checks do not cover all visitors, because at certain hours visitors are free to enter and exit the inpatient service without a screening process.

#### **DISCUSSION**

Covid-19 is an infectious disease caused by a type of coronavirus, transmission from person to person occurs through droplets from the nose or mouth that come out when a person infected with covid-19 coughs, sneezes or talks (Isbaniah, 2020) The situation in Indonesia until 24 December 2022 recorded a total of 4,254,443 confirmed positive cases of covid-19, with 143,766 deaths (CFR 3.4%) (Kemenkes RI, 2021). According to some research results, the covid-19 pandemic has a significant impact on health services in hospitals. According to the results of Ian's research in 2021, it was stated that in the United States almost half of the hospitals operated at more than 85% capacity during the peak of the pandemic between August 2020 and April 2021, many hospitals were unable to maintain their standard of care due to an increase in the ratio of patients that was not proportional to the number of staff (Ian J, 2021).

The hospital response management process in this study is studied based on disaster management, which is a series of activities carried out in the context of prevention, mitigation, preparedness, emergency response and recovery efforts related to disaster events (Sudibyakto, 2011). In addition to monitoring hospital readiness in the face of the co-19 pandemic, in this research using the rapid hospital readiness for covid-19 checklist instrument (Bhattarai, 2020). The covid-19 non-natural disaster management process at RSI Kendal consists of two stages, namely: a. Ex-ante (before a disaster occurs), consisting of the process of:

#### **Disaster mitigation**

Based on the results of the study, it is known that throughout 2021 RSI Kendal as the third-line Covid-19 referral hospital has received 723 Covid-19 patients. A total of 613 people were treated in the covid-19 isolation room and 110 people were treated in the covid-19 special ICU room. Throughout 2021, each month RSI Kendal receives an average of 50-70 COVID-19 patients. Possible threats that can occur in this disaster are covid-19 transmission in the hospital environment (nosocomial infection), lack of human resources, lack of personal protective equipment (PPE) and the possibility of not running other essential services at RSI Kendal. The efforts made by RSI Kendal to deal with these threats are:

#### **Infection Prevention and Control (PPI)**

There are two sub-components of the assessment that have not been implemented optimally by RSI Kendal. Based on the results of the study, it is known that the management of RSI Kendal has made and established various internal regulations related to the handling of covid-19 patients, including: SPO Number 067/408/PPI/2018 on How to Wear High Efficiency Mask PPE (N-95), SPO Number 067/410/PPI/2018 on How to Wear Apron, SPO Number 067/416/PPI/2018 on the Use of Personal Protective Equipment (PPE) in isolation rooms. RSI Kendal has collaborated with MSMEs for the manufacture of aprons (personal protective clothing), besides that the management has also prepared additional sources of funds from institutions such as LAZIZ, PMI, PSC and collaborated with other hospitals and the Health Office regarding the addition of equipment (including PPE) and logistics, so it can be explained that actually the management of RSI Kendal is ready to overcome the constraints of PPE shortages (Prayitno, 2021).

Procurement of facilities and infrastructure that support the process of preventing Covid-19 transmission

Procurement of facilities and infrastructure is assessed based on the seventh component, namely surge capacity. Based on the results of the study, it can be analysed that. RSI Kendal management has made efforts to fulfil facilities and infrastructure by adding logistics equipment in the form of a supply chain of essential medicines, diagnostics (including laboratory reagents, personal protective equipment, and test kits) and supplies for clinical care, therapeutic interventions and clinical management. RSI Kendal management has also endeavoured to increase the number of isolation rooms to fulfil the needs of covid-19 patient services. In addition, RSI Kendal has also rearranged the adequacy of treatment rooms, prepared facilities / facilities and infrastructure including test swabs, PCR, reagents, laboratories, essential medicines, PPI equipment such as handrubs and sinks for washing hands in several strategic places.

Hospitals can implement strategies to deal with patient surge during the covid-19 pandemic, as for strategies that can be applied include: fulfilling human resource shortages, ensuring the availability of equipment and supplies, running the system well, and preparing structures quickly to provide space for the invasion of large volumes of patients during surge events (Subardi, 2022).

#### Improved HR capabilities in dealing with disaster threats

The improvement of HR capabilities is assessed through the tenth component. Not all health workers receive training to provide medical services to patients with suspected or confirmed covid-19. What is often forgotten when there is a natural or non-natural disaster is psychological health for patients and health care providers, high workloads, spikes in the number of patients in a short time, and high mortality rates make patients and health workers feel various mental health disorders. According to health workers need mental health and psychosocial support, because the data obtained showed that as many as 37.5% of health workers felt burdened in carrying out their duties during the pandemic (Matla, 2020). The summary of the research results also shows that only 64.3% of health workers get social support from family or friends, so mental health and psychosocial services will also support the health and safety of health workers (Gumilar, 2021).

#### Prevention, is an effort to eliminate or reduce the possibility of a threat

A possible threat is the surge of patients that occurs in a short period of time. Some preventive measures that can be implemented include:

#### **Human Resources**

The management of RSI Kendal has provided protection for human resources from the dangers of covid-19 virus transmission by preparing a budget that is used to improve staff competence and safety. Protection is also provided by setting special criteria for health workers on duty in the covid-19 zone, as regulated by (PB IDI, 2020) in the Guidelines for Doctor Protection Standards in the Covid-19 Era which stipulates that the qualifications / special criteria referred to are < 45 years old to avoid shift work intolerance, not being pregnant or young pregnant, not having comorbidities and not breastfeeding (Guidelines for Doctor Protection Standards in The Covid-19 Era, 2020). The staff component is very important, hospitals need to expand the capacity of health resources, such as: adequate number of staff, beds, medical supplies and PPE (Grimm, 2020).

# Preparedness, is the preparation of a plan to act when a disaster occurs. Preparedness can generally be measured through:

#### Communication

According to (WHO, 2020) accurate communication and timely coordination are needed in terms of ensuring informed risk analysis in decision making. Based on the coordination and communication component, which is the second component, RSI Kendal has built an external and internal communication system. External communication is established with the Central Java Provincial Health Office, Kendal District Health Office, patient families and the community. Internal communication is carried out by establishing communication between service providers, patients with patients, superiors with staff and staff with staff using social media media such as WA and webinars. In terms of leadership, what is done by the management of RSI Kendal is also considered good, because the communication system is already in place. Following the chain of command is to outline the authority, communication and responsibility between positions in the hospital (Hassan, 2021). According to research conducted by Zhong who found the fact that there are four functions that must be performed to evaluate hospital readiness, namely: internal communication, external coordination and communication, supervision and hospital information management (S. Zhong, 2013). Intensive internal communication is key to handling the situation. Successful leaders communicate with their staff through a combination of online and offline meetings (Pandit, 2020).

#### **Coordination development**

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The supervision and information management built by RSI Kendal has been built well, the reporting system to the Ministry of Health and the Kendal District Health Office can be carried out easily and orderly. This is inversely proportional to the results of the study which stated that all hospitals studied, namely 7 hospitals in East Java Province and one hospital in Bali, stated that they had to complete the checklist manually. So far there has been no coordination with the Ministry of Health to upload supporting evidence. There are several obstacles in filling out the form, such as [not being able to upload] hardcopy physical evidence of documents or attendance lists that must be reported." (Dhamanti, 2022).

#### Post-ante (after a disaster has occurred), consisting of the process of: Emergency response

Emergency response is an effort made to reduce the danger of a disaster. This emergency response is implemented through the components of identification and proper diagnosis. The various standards set by RSI Kendal, which are based on patient safety, are expected to ensure safety from receipt, specimen collection to disposal in the laboratory. This is in accordance with the results of research by Arda Yunita and Wiku Bakti Bawono (2022) that the component of identification and proper diagnosis is one of the supporting parts of surge capacity. Identification of a fast and precise diagnosis will help patients with covid-19 immediately get treatment in the isolation room and reduce the risk of COVID-19.

The risk of transmission to other patients and health workers, because they have different service protocols from general patients. In addition, proper identification and diagnosis can reduce the risk of severe clinical symptoms, even death.

# Rehabilitation and Reconstruction Rehabilitation

Based on the components of risk communication and community involvement, the following changes were made: RSI Kendal establishes standard operating procedures that must be adhered to by RSI Kendal employees, patients and visitors to RSI Kendal Hospitals must apply 3M principles, risk communication is carried out in accordance with the development of the covid-19 situation by a spokesperson appointed through the Decree of the Director of RSI Kendal Number 180/0005/2020 concerning the Appointment of Public Relations / Spokesperson Regarding the Handling of Covid-19 at RSI Kendal. The clearer and more accurate information about covid-19 will help to overcome and stop the potential transmission of covid-19 (Gumilar, 2021).

The definition of reconstruction is a permanent repair. The reconstruction effort undertaken by RSI Kendal is to implement the financial and business administration continuity component, including: having legal procedures for administration and financial mechanisms for covid-19 management, having policies to improve hospital staff by setting criteria, policies for providing extra food and multivitamins to increase endurance, policies for providing protection and treatment for staff exposed to covid-19, identifying expansion of inpatient, outpatient and intensive care unit capacity (Carolina, 2021).

#### **CONCLUTION**

The management response process of RSI Kendal in facing the covid-19 pandemic is to implement the rapid hospital readiness for covid-19 instrument. The management response of RSI Kendal in facing the covid-19 pandemic in 2021 is good, most of the components of the rapid hospital readiness for covid-19 assessment have been implemented well at RSI Kendal, has various policies that support covid-19 service activities, have good internal and external communication, use PPE and good HR management. Things that have not been implemented well are technical in nature.

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