Analysis Of The Preparedness Of The Royal Prima Marelan Hospital In Facing The Spike In COVID-19 Cases

Herbert Wau¹, Vania Amanda Tambunan², Elisabet Tampubolon³, Johannes Bastira Ginting⁴*

¹ Student Master of Public Health, Study Program Faculty of Medicine, Dentistry and Health Sciences ^{2,3,4} Lecturer Master of Public Health, Study Program Faculty of Medicine, Dentistry and Health Sciences Universitas Prima Indonesia Medan, North Sumatera, Indonesia * Corresponding author:

Email:johannesbastiraginting@unprimdn.ac.id

Abstract.

The number of cases of COVID-19 in various countries has led to soaring needs in the health care system and has resulted in overcrowding of hospitals, so that when the wider community has to stay at home to take care of themselves, the opposite happens to health workers who work, they still have to serving COVID-19 patients. This study aims to analyze the preparedness model carried out by the Medan Marelan Hospital in the face of the COVID-19 spike. This study used a cross sectional study design. The population in this study were all employees of the Royal Prima Marelan Hospital Medan with a total of 113 people, the sample was taken using quota sampling, where at the Royal Prima Marelan Hospital there were as many as 60 people, the data analysis used Univariate, Bivariate and Multivariate. The independent variables that have an effect in this study are the attitude of preparedness variable, management planning and management evaluation, and the variables that have no effect in this study are the knowledge of Covid-19 variable, management implementation, and management follow-up. The independent variable in this study that has the most influence on hospital preparedness in dealing with the COVID-19 spike is the management evaluation variable.

Keywords: Attitude of Preparedness, Knowledge of Covid-19, Management Service, COVID - 19 Preparation.

I. INTRODUCTION

An acute respiratory illness caused by the coronavirus disease emerged in China at the end of 2019. This disease continues to spread very quickly to all corners of the world. The disease has been declared a worldwide public health emergency by the World Health Organization (WHO) [1]. Corona virus-2 (SARS-CoV-2) is the causative agent of the global COVID-19 pandemic with an increasing mortality rate. This has received global attention by the World Health Organization (WHO) and declared the disease an emergency. The occurrence of this infectious disease initially appeared in the city of Wuhan, Hubei Province, China on December 8, 2019, where this disease had symptoms similar to pneumonia in a group of patients [1]. The WHO officially declared COVID-19 infection a pandemic on March 11, 2020. The WHO also provided a risk assessment that classifies COVID-19 as a "very high risk" global pandemic. WHO released the first situation report on the COVID-19 pandemic on January 20, 2020 which showed the results of 282 laboratory confirmed cases and 6 deaths globally which increased very rapidly at 21,294,845 confirmed cases and there were 761,779 deaths as of August 16, 2020 [1]. In Indonesia, the total cases of this disease have reached 650 thousand with nearly 100 thousand active cases. This causes Indonesia to be included in the category with the most cases in Southeast Asia with a total of 19,390 deaths. At least 100 doctors have died, which makes the death rate for health workers in Indonesia one of the highest in the world. [2]. Health infrastructure in Indonesia is still not sufficient to meet the increasing demand for health services. Based on data from the Ministry of Health website accessed on March 7, 2021, Indonesia has 2,925 hospitals with an existing bed capacity of around 388,106. Where the ratio obtained from hospital beds to the existing population is 1.49 beds for every 1,000 residents.

This ratio is known to be a low number when compared to other countries, such as Malaysia (1.9 per 1,000 population), Thailand (2.1 per 1000 population), and Vietnam (2.6 per 1,000 population). At the beginning of the pandemic, there were only 3 hospitals in Jakarta that were ready to be designated as referral hospitals for Covid patients, then after that the government prepared more additional referral hospitals, namely police hospitals, military hospitals and state-owned hospitals. Covid emergency hospital which used to be an athlete building. Meanwhile, in other cities with high numbers of COVID-19 cases, emergency Covid hospitals were also built by utilizing sports arenas, government buildings and hotels [3]. The number of cases of COVID-19 in various countries has led to an increase in the need for the health care system and

has resulted in overcrowding of hospitals, so that when the wider community has to stay at home to take care of themselves, the opposite happens to health workers who work, they still have to serve patients. COVID-19. It was informed that in some countries, medical personnel such as doctors, they work with inadequate protection and are very at risk of contracting the COVID-19 virus. This anxiety causes health workers to continue to be monitored, because if health workers are infected with COVID-19, they can also spread the virus to inpatients, colleagues and even their own family members. Due to the increasing number of cases of this disease among health workers, it could result in the health care system collapsing and would exacerbate the pandemic conditions further, because if health workers collapse it will become increasingly difficult to manage this disease [4]. Some things that must be optimized are the staff of health workers, goods, and space for COVID-19 cases. Medical staff such as (emergency department, infection control, nurses and support staff) items such as PPE (N95 masks, gloves, face shields, clothing) and devices such as (monitors, ventilators, CRRT, ECMO) [5].

The President of Indonesia declared the decision to implement Large-Scale Social Restrictions (PSBB) in various cities and provinces. The government also emphasizes to stay at home for all Indonesian citizens. The government imposed a lockdown initially in Jakarta and West Java in March 2020, but the capital canceled the plan due to refusal from the central government and the Jabodetabek transportation service [6]. The World Health Organization (WHO) states the treatment of the International Health Regulations (IHR) in 2007 used to detect, prevent and respond to public health emergencies [7]. During this pandemic, the demand for medical care has greatly increased, thus potentially reaching the maximum capacity of hospitals. To prepare for this, a crisis-appropriate management is needed, which includes the reconstruction of the medical team and the relocation of medical supplies, such as personal protective equipment (PPE) and ventilators [5]. The Indonesian government has implemented many policies and steps to overcome this pandemic problem. One of the policies as an early sign that will break the chain of transmission of this disease, which must be implemented is to implement the Social Distancing movement, because this step requires people to maintain a safe distance from others with a minimum distance of 2 meters, then not attending mass gatherings, not making contact directly with other people. But in reality, on a day-to-day basis these steps are not properly addressed and adhered to by the community, this causes the number of COVID-19 cases to continue to increase, health services in Indonesia and health human resources who handle cases of the COVID-19 pandemic This is also not enough, while cases due to the COVID-19 virus continue to soar [8]. This corona virus disease caused by corona virus 2 (SARS cov 2) which is a severe acute respiratory syndrome, has not only spread to china but has been in more than 20 countries [9].

The condition of COVID-19 in North Sumatra continues to increase, this can be seen from the Bed Occupancy Rate (BOR) of North Sumatra on August 27, 2021, where the city of Medan is ranked 2nd with a BOR of 52%. From the data per district/city obtained from the city of Medan, Medan is ranked 1st with the number of confirmed positive COVID-19 as many as 42,974 people, the recovery rate as many as 32,878 people, the number who died as many as 799 people, and the confirmed positive active as many as 9,385. person. In accelerating the handling of COVID-19 in North Sumatra, one of the activities carried out is Disaster Emergency Preparedness and Disaster Emergency Response, one of which is to prepare hospitals, both COVID-19 referral hospitals and non-referral hospitals to take precautions against transmission of COVID-19. ('North Sumatra', no date) It is said that the effectiveness of masks for controlling the transmission of COVID-19 is still a matter of debate. Therefore, current research is being carried out to evaluate whether surgical masks are effective in filtering the COVID-19 virus [10]. Preparedness analysis methods in hospitals are widely applied in dealing with Covid-19, one of which is Partial Least Square (PLS) which is divided into 2 models, namely the inner model used for regression and the outer model used for validity and regression, and in this study The model used is the outer model. Based on the data obtained by the researchers, the researchers obtained the following data: Data for health workers at the Royal Prima Marelan Hospital, namely general practitioners and specialists (45), midwives (25, nurses (43), the total health workers were 113 people, the use of PPE during January-September namely Kn 95 Mask (1000/month, 9,000 usage), Handscoon (2,000/month, then 18,000 use from January-September), Goggle (1,000/month, 9,000 use), Isolation ventilator (2), CPAP (2), Face shield (0), N95 masks (0), so the total use

of PPE is 36,002. For data on Covid patients entering the hospital, the data results are up and down, namely January (77), February (66), March (91), April (151), May (215), June (88), July (265), August (233), September 01-September 28 (41) so that a total of 1,186 patients were obtained. the results were 981 patients, the most of which were in May, which was 200 patients. For data on Covid patients who died in the hospital, there were 49 patients, where the most patients died in August as many as 24 patients. Based on the above background, the researchers wanted to see about the preparedness model of the Royal Prima Marelan Hospital Medan in dealing with the surge in Covid-19 cases.

II. METHODS

Research design

This study used a cross sectional study design.

Research Location and Time

RSU Royal Prima Marelan is one of the Type C Private Hospitals in the city of Medan. This hospital is located at Jalan Marelan Raya Pasar II No. 187, Rengas Pulau, Marelan, Medan City, North Sumatra. RSU Royal Prima Marelan has several facilities such as Ambulance, Laboratory, Emergency Room, Inpatient Installation and Outpatient Installation, surgical installation and other supporting medical facilities. The operating hours of RSU Royal Prima Marelan are every Monday to Sunday for 24 hours. This research was carried out since the author conducted a preliminary survey in February 2021 until March 2021 then data collection and research until April 2021 and then continued with a results seminar.

Population and Research Sample

The population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions [11]. The population in this study were all active nurses who worked at RSU Royal Prima Marelan totaling 113 people. The sample is part of the population that is the source of data in the study, where the population is part of the number of characteristics possessed by the population [11]. To determine the research sample is to determine the area (magnitude) of the population or the number of members of the population. The number of sample respondents used in this study amounted to 60 respondents.

METHOD OF COLLECTING DATA

Data Collection Type & Technique

The type of data used in this study is primary data taken directly from respondents and secondary data from hospitals. Collecting data in this study using a questionnaire designed through an e-questionnaire and secondary data taken from the hospital.

Research Instruments

The instrument of this research is research by interviewing, listening, observing, and the researcher also has to interact directly with the head of health at the hospital by asking questions in the form of a questionnaire. The measuring tools used in this interview are note papers regarding questions and voice recording aids as a support for interviews using cellphones.

Data analysis

1. Univariate Analysis

Analysis of the data to see univariately using SPSS by looking at the frequency and median characteristics of respondents and the results of the questionnaire.

2. Bivariate Analysis Test Analysis

Data analysis to find correlation or influence between two or more variables studied using partial validation test.

3. Multivariate Analysis

Multivariate data analysis using Structural Equation Modeling-Partial Least Square (SEM-PLS) method with Boots-trap parameter estimation method to see and design the appropriate model.

RESEARCH PROCEDURE

Quantitative Research Procedure

This research procedure was carried out in 3 stages, namely:

1. Preparation Stage

At the preparatory stage needed in this research is to prepare a questionnaire sheet, a checklist sheet containing questions about knowledge by a medical group at the Royal Prima Marelan Hospital. In addition, things that need to be prepared are conducting a preliminary study, setting a schedule for research activities, and preparing the equipment needed for the documentation section.

2. Stages of Quantitative Research Implementation

At the implementation stage carried out are:

a. Determine the research subjects, namely nurses, midwives, specialist doctors, management, drivers and security guards at the Royal Prima Marelan Hospital.

b. The researcher asks for permission to apply to be a respondent

c. Collecting basic data by conducting interviews with respondents using a sheet filled out by several questionnaires.

- d. Make observations to fill out the checklist sheet.
- e. Researchers perform data processing and data analysis of the data that has been collected.
- f. Taking documentation as evidence that the research has been carried out.
- 3. Stage of Evaluation of Implementation Results

At the evaluation stage, the data processing of quantitative research results is carried out. Observing if there are errors in the data obtained at the research implementation stage and then used for qualitative research.

Qualitative Research Procedure

This research procedure was carried out in 3 stages, namely:

1. Preparation Stage

After analyzing the data from quantitative research, then proceed with qualitative research. At the preparatory stage needed in this research is to prepare interviews containing questions about knowledge by a medical group at the Royal Prima Marelan Hospital. Establish a schedule of research activities, and prepare documentation equipment.

- 2. Qualitative Implementation Stage
 - At the qualitative implementation stage carried out are:
 - a. Determine the object by looking at the quantitative results.
 - b. Determine the informants, namely the main informants and triangulation informants.
 - c. Permit with informants to collect data by conducting interviews.
 - d. Collecting data by interviewing and preparing documentation equipment.
 - e. Perform data processing and analysis of the data that has been collected.
 - f. Collect documentation.
- 3. Stage of Evaluation of Implementation Results

At the evaluation stage, the data processing of qualitative research results is carried out. Observing if there are errors in the data obtained at the stage of research implementation.

Data Analysis Technique

1. Collecting

Collect data from checklist sheets and questionnaires.

2. Checking

This is done by checking the completeness of filling out the checklist and questionnaire sheets with the aim that the data is processed correctly so that data processing gives valid and reliable results, and avoids bias.

3. Coding

In this step, the authors coded the variables studied, the respondent's name was changed to a number.

4. Entering

Data entry, namely the answers from each respondent which are still in code form, are entered into the computer program used by the researcher, namely SPSS.

5. Data Processing

All data that has been inputted into a computer application will be processed as needed. After processing the data as described above, the next step is to perform data analysis.

6. Univariate Analysis

Analysis of the data to see univariately using SPSS by looking at the frequency and median characteristics of respondents and the results of the questionnaire.

- Bivariate Analysis Test Analysis
 Data analysis to find correlation or influence between two or more variables studied using partial validation test.
- 8. Multivariate Analysis

Multivariate data analysis using Structural Equation Modeling-Partial Least Square (SEM-PLS) method with Boots-trap parameter estimation method to see and design the appropriate model.

Qualitative Data Analysis Techniques

Data analysis is the process of systematically searching and compiling data obtained from interviews, field notes, and documentation, to obtain understandable conclusions. In qualitative research, data analysis is more focused during the field process along with data collection [11].

The steps of the data analysis process are as follows:

1. Data Collection

Researchers collect data from various sources including relevant books, information and information in the form of opinions, responses, and views obtained from informants. Collecting data through indepth interview techniques, observation, and documentation. Data collected by researchers is data that can support research conducted by researchers.

2. Data Reduction

Data reduction means summarizing, selecting, the main things, focusing on the important things. The reduced data will provide a clearer picture, and make it easier for researchers to collect further data, and look for it when needed [11]. In this study, data reduction is used to summarize, take the main and important data, make categorizations, based on lowercase letters, numbers and symbols.

3. Data Display

The presentation of this research data is in the form of a brief description. In qualitative research, data presentation can be done in the form of brief descriptions, charts, relationships between categories, flowcharts, and so on. In general, to present data in qualitative research is a narrative text. Presentation of data, it can make it easier to understand what is happening. In data presentation, uppercase, lowercase letters, and numbers are arranged in order so that the structure is easy to understand [11]. In this study, data presentation was carried out using the LISLER software.

4. Conclusion Drawing/Verification

The initial conclusions put forward are still temporary, and will change if no strong evidence is found to support the next stage of data collection. If the conclusions raised at an early stage are supported by valid and consistent evidence, then the conclusions put forward are credible conclusions [11]. The process for obtaining evidence is data verification carried out during the time of the study by reviewing the data at the time of the study.

Drawing conclusions and verification is an effort to interpret the data presented by observing patterns of regularity, explanation, configuration, and cause-effect relationships. Drawing conclusions and verification are always carried out by reviewing the presentation of data and notes in the field.

Quantitative and Qualitative Data Analysis

The analysis was carried out by comparing the quantitative data with qualitative data [11]. The data analysis carried out includes an interview description containing questions about knowledge by a medical group at the Royal Prima Marelan Hospital.

III. **RESULT AND DISCUSSION**

Research Results with Oualitative Methods

From the results of univariate research, based on age, 49 people were found in the 22-31 age category, and 11 people in the 32-39 age category. Based on occupation found 53% nurses, 22% midwives, 17% doctors, specialists, 5% management, 1% drivers, 1% security guards.

Validity and Reliability Test

a. Validity test

Variable	Att	C-19	FuSM	MSI	Know	MSP	MSE
Att	1.000						
C-19	0.189	1.000					
FuSM	-0.075	-0.073	1.000				
MSI	0.069	0.038	0.088	1.000			
Know	0.631	0.005	-0.063	-0.054	1.000		
MSP	0.009	0.626	0.083	-0.037	-0.004	1.000	
MSE	0.271	0.221	0.169	0.191	0.147	0.060	1.000

Table 1.1. Validity Test Results

Note:

Att = Attitude of Preparedness, C-19 = Covid – 19 Preparation, FoSM = Follow Up Service Management, MSI = Management Service Implementation, Know = Knowledge of Preparedness, MSP = Management Service Planning, MSE = Management Service Evaluation.

Based on Table 1.1 above, it can be seen that the correlation value (bold number) of each variable with the variable itself has the greatest value when compared to the correlation value with other variables. So based on the results of Table 1.1 it can be concluded that this study has met the discriminant validity test. b. Reliability Test

Table 1.2. Reliability Test Results (Composite Reliability Value of Each Variable)

	2
Variable	Value Composite Reliability
Attitude of Preparedness	1.000
Covid – 19 Preparation	1.000
Knowledge of Preparedness	1.000
Management Service Implementation	1.000
Management Service Planning	1.000
Management Service Evaluation	1.000
Follow Up of Manajemen Service	1.000

Based on Table 1.2, it can be seen that each variable in this study has a composite reliability value above 0.7. Therefore, it can be concluded that this research has met the reliability test or can be said to be reliable.

BIVARIATE TEST RESULTS

The Effect of Knowledge About COVID-19 on Hospital Preparedness in Facing the Spike of COVID-19

Following are the results of the bivariate test for the variable influence of knowledge about COVID-19 on hospital preparedness in the face of the COVID-19 surge.

Table 1.3	. The Effect of Knowledge About COVID-19 on Hospital Preparedness
	in Facing the Spike of COVID-19

Variable	Mean ± SD	P Value
Knowledge of Preparedness	$13,14 \pm 1,608$	0,076

Source: Primary Data Processed 2022

From the results of the bivariate test, we can see that the mean and standard deviation are $13.14 \pm$ 1.608, with a p value of 0.076 which means a p value > 0.05 which states that in dealing with the surge in COVID-19 patients, there is no effect of knowledge about COVID-19 on Hospital Preparedness.

The Influence of Attitudes About COVID-19 on Hospital Preparedness in Facing the Spike of COVID-19

The following are the results of the bivariate test for the variable influence of Attitude about COVID-19 on Hospital preparedness in the face of the COVID-19 surge.

Table 1.4. The Effect of Attitudes About COVID-19 on Hospital Preparedness

	in Facing the Spike of COVID-	19
Variable	Mean ± SD	P Value
Attitude of Preparedness	$8,02 \pm 1,550$	0,020

Source: Primary Data Processed 2022

From the results of the bivariate test, we can see that the mean and standard deviation are 8.02 ± 1.550 , with a p-value of 0.020 which means a p-value <0.05 which states that there is an influence of attitudes about COVID-19 on hospital preparedness in dealing with the COVID-19 surge.

The Influence of Management Service Planning About COVID-19 on Hospital Preparedness in Facing the Spike of COVID-19

Following are the results of the bivariate test for the variables of the influence of management service planning on COVID-19 on hospital preparedness in the face of the COVID-19 surge.

Table 1.5. The Effect of Management Service Planning on COVID-19 on Hospital

Preparedness in Facing the Spike of COVID-19

Variabel	Mean ± SD	P Value
Management Service Planning	$7,42 \pm 1,929$	0,041

Source: Primary Data Processed 2022

The Effect of Management Service Implementation Regarding COVID-19 on Hospital Preparedness in Facing the Spike of COVID-19

The following are the results of the bivariate test for the variables of the influence of the management service implementation on COVID-19 on hospital preparedness in the face of the COVID-19 surge.

Table 1.6. The Effect of Management Service Implementation Regarding COVID-19 on Hospital

Preparedness in Facing the Spike of COVID-19

Variable	Mean ± SD	P Value
Management Service Implementation	$10,62 \pm 0,546$	0,825

Source: Primary Data Processed 2022

From the results of the bivariate test, we can see that the mean and standard deviation are 10.62 ± 0.546 , with a p value of 0.825 which means a p value > 0.05 which means that there is no effect on the implementation of hospital management services regarding COVID-19 on hospital preparedness in the face of the COVID-19 surge.

The Effect of Management Service Evaluation About COVID-19 on Hospital Preparedness in Facing the Spike of COVID-19

The following are the results of the bivariate test for the variables of the influence of management service evaluation of COVID-19 on hospital preparedness in the face of the COVID-19 surge.

 Table 1.7. Effect of Management Service Evaluation of COVID-19 on Hospital Preparedness

in Facing the Spike of COVID-19

Variabel	Mean ± SD	P Value
Management Service Evaluation	$4,\!40\pm0,\!888$	0,000

Source: Primary Data Processed 2022

From the results of the bivariate test, we can see that the mean and standard deviation are 4.40 ± 0.888 , with a p value of 0.000 which means a p value < 0.05 which states that there is an effect of evaluating hospital management services on COVID-19 on Hospital preparedness in the face of the COVID-19 surge.

The Effect of Follow-Up Management Services About COVID-19 on Hospital Preparedness in Facing the Spike of COVID-19

Following are the results of the bivariate test for the variables of the effect of follow-up management services on COVID-19 on hospital preparedness in the face of the COVID-19 surge.

Table 1.8. Effect of Follow-up Management Services Regarding COVID-19 on Hospital Preparedness in Facing the Spike of COVID-19

Variabel	Mean ± SD	P Value
Follow-up Management Services	$4,69 \pm 0,465$	0,057

Source: Primary Data Processed 2022

From the results of the bivariate test, we can see that the mean and standard deviation are 4.69 ± 0.465 , with a p value of 0.057 which means a p value > 0.05 which states that there is no effect of follow-up management services regarding COVID-19 on Hospital preparedness in the face of the COVID-19 surge.

Multivariate Test Results

Multiple logistic regression test used is a logistic regression test with predictive modeling. Predictive modeling aims to obtain a model consisting of several independent variables that are considered the best to predict the dependent event. Multivariate analysis begins with bivariate analysis of each independent variable with the dependent variable. If the results of the bivariate analysis show a p-value (sig.) 0.05, the research variables can be included in the multivariate analysis modeling. On the other hand, if the results of the bivariate analysis show a p-value (sig.) > 0.05, then the variable cannot be included in the multivariate modeling. Based on the results of the bivariate test with the partial validation test method, the variables that enter into the modeling for multivariate analysis are the attitude variable, management planning and management evaluation because the p value <0.05.

Table 1.9. Results of Logistics Regression Test Analysis

Variable	В	Sig	OR	95%/CI
Attitude of Preparedness	,304	0,143	1,355	0,902 - 2,036
Management Service Planning	,342	0,089	1,407	0,949 - 2,088
Management Service Evaluation	1,948	0,000	7,016	3,283 - 14,995

Source: Primary Data Processed 2022

Based on the results of the Bivariate test, it is known that the variables of attitude, management planning and management evaluation can be included in multivariate analysis because the probability value in bivariate <0.05 so that these variables can be continued into multivariate analysis.From the results of the multivariate test using multiple logistic regression, it was found that the three independent variables, namely the Attitude of Preparedness variable, Management Service Planning and Management Service Evaluation, the most dominant influence on hospital preparedness in dealing with the COVID-19 spike was the Management Service Evaluation variable because it was found that the p value < 0.05, the OR value on the Management Service Evaluation variable is 7.016 with 95% CI 3.283 - 14.995 means that Management Service Evaluation has a 7.016 times chance of hospital preparedness in the face of a COVID-19 surge.

Table 1.10. Model Summary

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	63.676 ^a	.372	.557

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

The value of R square is 0.5570, meaning that the model variables X_1 , X_2 , X_3 , X_4 , X_5 and X_6 can affect Y is 55.7%, and the remaining 44.3% is not examined in this study.

DISCUSSION

The Relationship of Knowledge About Covid-19 Prevention with Preparedness in Facing Problems

From the results of the study, we can see that the mean and standard deviation are 13.14 ± 1.608 , with a p value of 0.076 which means a p value > 0.05 which states that there is no effect of knowledge about

COVID-19 on hospital preparedness in dealing with the COVID-19 surge.Knowledge is part of the domain of health behavior that plays an important role in the formation of a person's actions or behavior. Knowledge is defined as a fact obtained from observations of events that occur.Knowledge related to COVID-19 is very important for preparedness to prevent COVID-19 during a pandemic. Transmission of COVID-19 occurs through droplets so that transmission is so fast. According to Lawrence Green's theory, behavior is determined by three factors, namely predisposing factors, driving factors, and reinforcing factors. Knowledge is one of the predisposing factors that influence a person's behavior. Individuals who already know certain information, tend to be more able to determine and make the right decisions.Thus, individuals who have sufficient information about COVID-19 will be better able to determine the appropriate behavior in dealing with COVID-19 as the results have shown in this study.

This research is in line with research conducted by Zhong, which shows that the Chinese community as the initial place for the discovery of the Corona Virus also has good and positive knowledge and behavior [12]. This is also related to the experience of the Chinese people in preparing for the SARS outbreak in 2000. The results of another study conducted on the people of Wonosobo Regency, stated that the level of knowledge and behavior of the community in a good category can be a basic ability and positive strength for the Wonosobo Regency government. for handling and preparedness programs in dealing with the COVID-19 problem [13]. Knowledge of the disease will affect a person's attitude and this will be the start for getting health education, knowing the causes and sources of disease transmission, increasing the possibility that people will become more aware of the spread of infectious diseases, and preventive measures to slow down transmission [14]. Knowledge is a cognitive domain that is very influential in shaping one's actions. Acceptance of new behavior will be more lasting if it is based on knowledge, while the behavior will not last long without being based on knowledge. This is in accordance with Zoung et al's research explaining that the COVID-19 knowledge score (OR 0.9 p-value < 0.001) means that a high knowledge score has a significant relationship with not going to crowded places and an attitude of agreeing that COVID-19 can controlled about 90.8%. Research by Zang, et al explained that knowledge with an OR of 1.41 (95% CI 1.12-1.77) means that the higher the knowledge, the higher the confidence in defeating COVID-19.

The Relationship of Attitudes About Covid-19 Prevention with Readiness in Facing Problems From the results of the study, we can see that the mean and standard deviation are 8.02 ± 1.550 , with a p-value of 0.020 which means a p-value <0.05 which states that there is an influence of attitudes about COVID-19 on hospital preparedness in dealing with COVID-19 surge. Attitude is defined as a person's response to a stimulus. Attitude will form an interest in doing something. This interest is a function of attitude towards behavior where attitude is a belief in the consequences and results obtained after behaving. It is this attitude towards behavior that forms the intention so that later it will make a person to behave accordingly. For example, if someone believes that using a mask when leaving the house can protect themselves from COVID-19, then an intention will be formed so that someone will use a mask when leaving the house. Attitudes are formed by three aspects, namely: (1) Cognitive, meaning how to think through attitudes; (2) Emotional, meaning feelings related to attitudes; and (3) Behavior, meaning action on attitude.

The attitude that is formed will determine how to see the situation and act on the situation or object. A person will behave according to his attitude in dealing with situations/conditions only if he has personal experience or has knowledge of it. As the results of research conducted by Dewi, which stated that the attitude and preventive measures for Covid-19 at PT Tirta Sukses Perkasa Airmadidi, North Sulawesi, showed that there was a relationship between the two variables. Attitude is still a closed response and is a syndrome that involves factors of opinion, thoughts, feelings, concerns and other mental symptoms of a person towards an existing object. Attitude is still an individual's readiness to take real action [15]. This is in line with research conducted by Koem ZAR, which states that there is a significant relationship between student attitudes and clean and healthy living behavior in students of SD Inpres Sukur. Clean and healthy living behaviors are included in COVID-19 prevention behaviors such as washing hands with soap and running water [16].

The Relationship between Covid 19 Management Service Planning Regarding Covid Prevention and Readiness in Facing Problems

From the results of the study, we can see that the mean and standard deviation are 7.42 ± 1.929 , with a p value of 0.041 which means a p value < 0.05 which states that there is an effect of management service planning on COVID-19 on hospital preparedness in dealing with the COVID-19 surge.Planning (planning), the planning function is a function of how to manage existing resources to achieve the desired goals. The smoothness and success of an activity process so that it can achieve its goals effectively and efficiently, among others, is determined by the existence of careful planning, proper organization as a harmonious system and managed by competent and dedicated implementers. management which as a whole cannot be separated from other functions and its role is felt to be very important. The planning function is a function of how a carefully crafted series of steps the company wants to follow in order to succeed.

Planning is the most important process of all management functions because without planning other management functions will not be able to run. [17]. The outbreak of the covid 19 virus pandemic that occurred when it was a global pandemic that had been determined by the World Health Organization or WHO. The emergence of the COVID-19 pandemic has paralyzed all community activities from all walks of life, from the education sector, the economy and so on. This covid 19 virus pandemic cannot be controlled easily due to the spread of the virus which spreads very quickly so that a very precise planning management is needed both from the government and from the community to overcome and prevent the spread of Vovid 19. Like the research conducted by Peggy, which is in the program Health services and Covid 19 prevention at Yatim Mandiri Kedaton Bandar Lampung management function activities begin with planning health service activities, organizing in every activity, coordinating health service activities and supervising every activity [18].

The Relationship between the Management Service Implementation about Covid-19 Regarding Covid Prevention and Readiness in Facing Problems

From the results of the study, we can see that the mean and standard deviation are 10.62 ± 0.546 , with a p value of 0.825 which means a p value > 0.05 which states that there is no effect of hospital management implementation services regarding COVID-19 on Hospital preparedness in the face of the COVID-19 surge.Implementation is to move the organization so that it runs according to the respective division of labor and to mobilize all existing resources within the organization so that the work or activities carried out can run according to plan and can achieve goals. The implementation of covid-19 management is a series of management activities where after planning the next step is the implementation of management where at this stage the implementation of what has been planned in terms of preventing Covid-19 is carried out.

Implementation is the overall effort, method, technique, and method to encourage organizational members to be willing and sincere to work as well as possible in order to achieve organizational goals efficiently, effectively and economically. According to Bambang Suwarno, an efficient implementation process and the realization of the chosen strategy must include effective control. The assessment, monitoring and supervision of strategy implementation is a logical conclusion from the process carried out in strategy management [17]. The implementation in this case is in terms of preventing covid 19 to be able to carry out the tasks of programs well in terms of preventing covid 19. The implementation of activities determined by the planning and organizing elements so that the goals can be achieved.

The Relationship between Evaluation of Management Service Evaluation about Covid-19 Prevention and Readiness in Facing Problems

From the results of the study, we can see that the mean and standard deviation are 4.40 ± 0.888 , with a p value of 0.000 which means a p value < 0.05 which states that there is an effect of management Service evaluation of COVID-19 on hospital preparedness in dealing with the COVID-19 surge. The success of a program can be seen from what is planned with what is done, whether the results obtained are in accordance with the results of the planning carried out. To be able to obtain the implementation of plans that are in accordance with what is planned, management must prepare a program, namely monitoring, monitoring is intended to obtain facts, data and information about program implementation, whether the process of implementing activities is carried out according to what has been planned.

Furthermore, according to Nurdiansyah, the findings of the monitoring results are information for the evaluation process so that the results are whether the program that has been determined and implemented obtains appropriate results or not [19].Evaluation of hospital readiness during the Covid-19 pandemic is a routine activity carried out periodically by the Ministry of Health, Provincial Health Offices, District/City Health Offices, relevant stakeholders, and hospitals. These activities are carried out as a representation of the licensing agency and are part of the guidance and supervision activities in accordance with the provisions of the legislation. Evaluations are carried out periodically based on a self-assessment filled in by the hospital, which can be done online or offline taking into account the capabilities and conditions of the development of Covid-19 [20].

The Relationship between Follow-up Management Services about Covid-19 regarding Covid-19 prevention and readiness to face problems

From the results of the study, we can see that the mean and standard deviation are 4.69 ± 0.465 , with a p value of 0.057 which means a p value > 0.05 which states that there is no effect of follow-up on hospital management services regarding Covid-19 on hospital preparedness in the face of the Covid-19 surge.Other research on the purpose of follow-up where the follow-up of Covid-19, conference calls to facilitate discussion between breathing, intensive care, physiotherapy and also psychology. Department to design a structured approach, the assessment is carried out virtually with a holistic approach to cover not only medical needs, but also to address psychological needs and physical rehabilitation requirements.

IV. CONCLUSION

From the results of research conducted, the conclusions of this study are as follows:

1. Knowledge about COVID-19 has no effect on hospital preparedness in the face of a surge in COVID-19,

2. Attitudes about COVID-19 affect hospital preparedness in the face of a surge in COVID-19,

3. COVID-19 service management planning affects hospital preparedness in the face of the COVID-19 surge,

4. The implementation of COVID-19 service management has no effect on hospital preparedness in the face of the COVID-19 surge,

5. Evaluation of COVID-19 service management has an effect on hospital preparedness in dealing with the COVID-19 surge.

6. Follow-up management of COVID-19 services has no effect on hospital preparedness in the face of the COVID-19 surge.

7. The independent variable in this study that has the most influence on hospital preparedness in dealing with the COVID-19 spike is the management evaluation variable.

REFERENCES

- [1] Muralidar S, Ambi SV, Sekaran S, Krishnan UM. The emergence of COVID-19 as a global pandemic: Understanding the epidemiology, immune response and potential therapeutic targets of SARS-CoV-2. *Journal: Biochimie.* 2020 Dec; 179:85-100. doi: 10.1016/j.biochi.2020.09.018.
- [2] Ophinni, Y., Hasibuan, A. S., Widhani, A. and Maria, S. (2021) 'COVID-19 Vaccines: Current Status and Implication for Use in Indonesia', *Indonesia Journal International Medicine*, 52(4), pp. 388–412.
- [3] Mahendradhata, Y., Andayani, N. L. P. E., Hasri, E. T., Arifi, M. D., Siahaan, R. G. M., Solikha, D. A. and Ali, P. B. (2021) 'The Capacity of the Indonesian Healthcare System to Respond to COVID-19', *Frontiers in Public Health*, 9(July), pp. 1–9. doi: 10.3389/fpubh.2021.649819.
- [4] Barranco, R. and Ventura, F. (2020) 'Covid-19 and infection in health-care workers: An emerging problem', *The Medico-legal Journal*, 88(2), pp. 65–66. doi: 10.1177/0025817220923694.
- [5] Kaito, D., Matsumura, K. and Yamamoto, R. (2021) 'Hospital preparedness for covid-19: The known and the known unknown', *Keio Journal of Medicine*, 70(2), pp. 25–34. doi: 10.2302/kjm.2020-0011-OA.
- [6] Setiati, S. and Azwar, M. K. (2020) 'COVID-19 and Indonesia', Acta Medica Indonesiana, 52(1), pp. 84–89.

- [7] Rajeev, V., Saini, A. and Gandhi, S. (2020) 'Capacity-Need Gap in Hospital Resources for Varying Mitigation and Containment Strategies in India in The Face Of COVID-19 Pandemic', Journal Infectious Disease Modelling. 5, pp. 608–621.doi: 10.1016/j.idm.2020.08.011.
- [8] Putri, R. N. (2020) 'Indonesia dalam Menghadapi Pandemi Covid-19', Jurnal Ilmiah Universitas Batanghari Jambi, 20(2), p. 705. doi: 10.33087/jiubj.v20i2.1010.
- [9] Siddiqui, A. A., Alshammary, F., Amin, J., Rathore, H. A., Hassan, I., Ilyas, M. and Alam, M. K. (2020) 'Knowledge and Practice Regarding Prevention Of COVID-19 Among the Saudi Arabian Population', *Journal Work*, 66(4), pp. 767–775. doi: 10.3233/WOR-203223.
- [10] Landi, F., Marzetti, E., Sanguinetti, M., Ciciarello, F., Tritto, M., Benvenuto, F., Bramato, G., Brandi, V., Carfi, A., D'Angelo, E., Fusco, D., Lo Monaco, M. R., Martone, A. M., Pagano, F., Rocchi, S., Rota, E., Russo, A., Salerno, A., Cattani, P., Marchetti, S. and Bernabei, On Behalf of The Gemelli Against Covid-19 Geriatric Team, R. (2021). Should Face Masks Be Worn to Contain the Spread Of COVID-19 In the Postlockdown Phase?, *Journal Transactions of the Royal Society of Tropical Medicine and Hygiene*, 115(1), pp. 74–77. doi: 10.1093/trstmh/traa085.
- [11] Sugiyono. 2017. Metode Penelitian Kuantitatif Kualitatif dan R&B. Bandung: Alfabeta.
- [12] Zhong BL, Luo W, Li HM, Zhang QQ, Liu XG, Li WT, Li Y. (2020). Knowledge, Attitudes, And Practices Towards COVID-19 Among Chinese Residents During the Rapid Rise Period of the COVID-19 Outbreak: A Quick Online Cross-Sectional Survey. *International Journal of Biologal Science*, 16(10):1745-1752. doi:10.7150/ijbs.45221.
- [13] Purnamasari, Ika and Raharyani, Anisa Ell., (2020). Tingkat Pengetahuan Dan Perilaku Masyarakat Kabupaten Wonosobo Tentang COVID -19, *Jurnal Ilmiah Kesehatan*, vol. 10, no. 1, pp. 33-42.
- [14] Al-Hanawi MK, Angawi K, Alshareef N, Qattan AMN, Helmy HZ, Abudawood Y, Alqurashi M, Kattan WM, Kadasah NA, Chirwa GC and Alsharqi O (2020) Knowledge, Attitude and Practice Toward COVID-19 Among the Public in the Kingdom of Saudi Arabia: A Cross-Sectional Study. *Frontier in Public Health*. 8:217.doi: 10.3389/fpubh.2020.00217
- [15] Dewi K. Soeratinoyo, Diana V. D. Doda, Finny Warouw, (2019). Hubungan antara Pengetahuan dan Sikap dengan Tindakan Pencegahan Penyebaran COVID-19 pada Perusahaan Produsen Air Minum Dalam Kemasan. *Jurnal Biomedik*. 2021;13(3)doi: <u>https://doi.org/10.35790/jbm.13.3.2021.00000</u>.
- Koem. Zitty. A. R. (2015). Hubungan Antara Pengetahuan dan Sikap dengan Perilaku Hidup Bersih dan Sehat (PHBS) pada Pelajar di SD Inpres Sukur Kecamatan Airmadidi Kabupaten Minahasa Utara. *Jurnal Pharmacon*. Vol. 4. No. 4. Pharmacy Study Program, Faculty of Mathematic and Science Sam Ratulangi University Manado, North Sulawesi .ISSN 2302-2493
 DOI: <u>https://doi.org/10.35799/pha.4.2015.10219</u>
- [17] Suwarno, Bambang (2022). Manajemen Strategi: Risalah & Teori. 1st Edition. Medan: CV. Andalan Bintang Ghonim.
- [18] Peggy, Palinda (2022) Fungsi Manajemen Dalam Pengelolaan Program Layanan Kesehatan Dan Pencegahan Covid 19 Di Yatim Mandiri Kedaton Bandar Lampung. Undergraduate Thesis, Uin Raden Intan Lampung.
- [19] Nurdiansyah, Haris & Rahman., R., S. (2019). Pengantar manajemen. Yogyakarta: Diandra kreatif
- [20] Kemenkes RI (2020). Keputusan Menteri Kesehatan Republik Indonesia nomor hk.01.07/menkes/328/2020 tentang panduan pencegahan dan pengendalian, 2019 Keputusan Menteri Kesehatan Republik Indonesia Nomor Hk.01.07/Menkes/413/2020 Tentang Pedoman Pencegahan Dan Pengendalian Coronavirus Disease 2019 (Covid-19).