

Analysis of the Effect an Availability Protecting Equipment Self (PPE), Workload, and Psychological Impact on the Performance a Health Performance Providing Care of Covid-19 Patients in Hospital Royal Prima Medan

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Abstract— While treating covid-19 patients, the availability of PPE, workload and the psychological condition of health workers has an influence on actions care provided. so that the covid-19 pandemic in Indonesia can affect the performance of health workers. the purpose of the study was to analyze the effect of the availability of PPE, the load work, and the psychological impact on the performance of health workers who provide covid-19 patient care at the RSU. royal prima Medan. the research design is cross-sectional. the research sample amounted to 75 people. instrument a study used a questionnaire and the data were analyzed using chi-square. the results of this study indicate that the availability of PPE, workload, and psychological impact on the performance of health workers who provide covid-19 patient care at the RSU. royal prima Medan. the majority of an energy, this health group is women (84%) of the young adult age group (85.3%) with the last education diiii nursing (40%). This nurse the majority have just worked 0-1 years (61.3%) and are not married (76%). Big the effect of the availability of PPE, workload, level of depression, anxiety, and stress on the performance of health workers seen from the or values are 9.33, 42.67, 276.00, 60.38, and 103.50. availability of PPE is the most influential factor on the performance of health workers who provide care for covid-19 patients at RSU. royal prima Medan with exp value (b) = 3,155. then support is needed management in increasing the availability of PPE in hospitals.

Keywords— Personal protective equipment, workload, psychological impact, performance, health workers.

I. INTRODUCTION

Coronavirus Disease 2019 (COVID-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). SARS-CoV-2 is a new type of coronavirus that has never been previously identified in humans. There are at least two types of coronavirus known to cause disease that can cause severe symptoms such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Common signs and symptoms of COVID-19 infection These include symptoms of acute respiratory distress such as fever, cough, and shortness of breath.

The average incubation period is 5-6 days with the longest incubation period being 14 days. In severe cases of COVID-19, it can cause pneumonia, syndrome acute respiratory failure, kidney failure, and even death (Ministry of Health Republic of Indonesia, 2020). As of December 31, 2019, WHO China Country Office reported a case of pneumonia of unknown etiology in Wuhan City, Hubei Province, China. On January 7, 2020, China identified the case as a new type of coronavirus. On January 30, 2020 WHO has declared the incident a Public Health Emergency Concerning the World (KKMMD)/Public Health Emergency of International Concern (PHEIC) and on March 11, 2020, WHO has determined COVID-19 as a pandemic (Ministry of Health of the Republic of Indonesia, 2020).

The increase in the number of cases took place quite quickly and spread to all over the world countries in a short period. Until

July 9, 2020, WHO reported 11,84,226 confirmed cases with 545,481 deaths worldwide world (Case Fatality Rate/CFR 4.6%). Indonesia reports the first case on March 2, 2020. Cases are increasing and spreading rapidly in the entire territory of Indonesia. Until July 9, 2020, Ministry Health reports 70,736 confirmed cases of COVID-19 with 3,417 cases died (CFR 4.8%) (Ministry of Health of the Republic of Indonesia, 2020).

According to SuaraSumut.id (2020), the number of confirmed positive patients COVID-19 in North Sumatra as of September 14, 2020, reached 8,559 people. In where the highest number in the city of Medan 4,951 people, Pematangsiantar 242 people, Binjai 158 people, Deli Serdang Regency 1,101 people and Simalungun 189 people. There were 832 additional positive patients in a week. Patients recovered 5,162 people or an increase of 551 people, died 361 people or 20 people in a week. With that number, then healing was at 60.31%, the death rate was 4.21% and the active COVID-19 rate was 3,004 people.

There are many private hospitals in the city of Medan which have become hospitals that handle patients related to COVID-19, namely RSU. Royal Prima Medan. hospital. Royal Prima Medan is a type B private general hospital that becomes a reference for the whole community, especially the people of Medan City and the people of North Sumatra in general. From April – September 2020 RSU. Royal Prima Medan has treated as many as Covid-19 patients 1173 patients with the following details, namely 28 patients in April, 91 patients in May, 154 patients in June, 295 patients in July, 323 patients in August and 403 patients in September.

According to Farsya (2021), in his research entitled "The Relationship" Availability of Personal Protective Equipment with Satisfaction Level of Health Workers During the COVID-19 Pandemic at TGK CHIK DITIRO SIGLI Hospital" showed 48.0% dissatisfied with the availability of PPE, 22.5% satisfied with availability of PPE, 29.4% are very satisfied with the availability of PPE. Psychological responses experienced by health workers to Infectious disease pandemics are increasing because they are caused by feelings anxious about their health due to the lack of PPE availability such as masks, gloves, and protective gowns and also the spread of the virus to the family they. Therefore, it needs a lot of support from the government to provide PPE assistance and health insurance facilities for both workers health and their families (Fadli, F. 2020).

While treating COVID-19 patients even though they have used PPE, high workload due to an increase in the number of infected patients when pandemic which is often not balanced with the existing human resource capacity,

The risk of contracting various types of diseases, especially the infection itself, is caused by: by the risk of the work environment, work stress, or high body resistance weakened due to increased workload. great workload, especially those who may relate to allegations or cases that confirmed, because of the high risk of infection, loss of control, lack of experience in managing an illness, overwork, fatigue, negative feedback from patients, anxiety about being infected, social stigma felt, significant lifestyle changes, quarantine, and lack of family support, as well as inadequate protection such as the availability of PPE, namely masks, gloves, and protective clothing (Metri, 2021).

Psychological conditions of health workers and the public during the pandemic COVID-19 has not become the main focus of governments in various countries, however Research shows that the majority of people in the world experience symptoms of mild stress and health workers also experience stress due to the burden work, stigma, and fear of being infected (Handayani, R. 2020).

Eleven articles that have been reviewed mention that the condition psychological nurses who provide nursing care to COVID-19 patients include anxiety, fear, depression, fatigue, difficulty sleeping or insomnia, other mental disorders, somatization, irritability, obsessive-compulsive appetite, feeling uncomfortable, helpless, crying, and even thought of committing suicide (Santoso, T. 2020).

Stress and anxiety are reactions to threatening situations and unexpected as in the outbreak of the coronavirus pandemic. The health worker is most vulnerable to it. Stress-related reactions include changes in concentration, irritability, anxiety, insomnia, reduced productivity, and interpersonal conflict, in the next case, they will experience the condition more severe mental illness, separation from family, abnormal situations, increased exposure, fear of COVID-19 transmission, feelings of failure in dealing with poor prognosis, inadequate technical facilities, PPE, tools, and equipment, to help treat patients. Health workers have difficulty maintaining a healthy state of physical and mental risk of experiencing psychological disorders such as depression, anxiety, severe stress, and fatigue (Lilin, R. 2020).

From the description above, it can be seen that the COVID-19 pandemic in Indonesia can influence the performance of health workers. Thing These factors encourage the author to conduct a research entitled "Analysis". Effect of Availability of Personal Protective Equipment (PPE), Workload and Impact Psychological on the performance of health workers who provide care COVID-19 patient at RSU. Royal Prima Medan"

II. LITERATURE REVIEW

2.1. Definition of Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is a device that has the ability to protect someone whose function is to partially isolate or the whole body from potential hazards in the workplace (Menaker, 2010). Barrier guards are now generally referred to as protective equipment (PPD), has been used for many years to protect patients from microorganisms found in officers working in a place health care. For its effectiveness, PPE must be used appropriately (Tietjen, 2004).

2.2 Requirements for Personal Protective Equipment (PPE)

According to Ridley (2004) effective PPE should:

- a. By the dangers faced
- b. Made of materials that will withstand these hazards
- c. Suitable for people who will use it
- d. Does not interfere with the work of the operator on duty
- e. Has a very strong construction
- f. Does not interfere with other PPE that is being used at the same time
- g. Does not leave the risk to the wearer
- h. Provided for free
- i. Given one per person or else it must be cleaned after use
- j. Only used as intended
- k. Keep in good condition
- l. Repaired or replaced if damaged
- m. Stored in an appropriate place when not in use'

2.3 Types of Personal Protective Equipment (PPE)

a. Gloves

Gloves protect hands from infectious materials and protect patients from microorganisms on the hands of staff. This tool is a barrier is the most important physical tool to prevent the spread of infection, but must be changed every patient-to-patient contact to prevent cross-contamination (Tietjen, 2004).

b. Mask

A mask is a tool/equipment that covers part of the face lower. Must be wide enough because it has to cover the nose, mouth, and jaw lower. Thus, it can withstand splashes of liquid / lenders that come out of the nostrils and mouths when staff talk, cough or sneeze.

c. Respirator

A respirator is a special type of mask, attached to the face, more priority is to protect the staff's breathing apparatus. The way it works is to filter the air that is suspected to be polluted by pathogenic microbes originating from the air patients such as Mycobacterium tuberculosis. Widely used in infectious disease treatment room/ward.

d. Eye protection

The purpose of using this tool is to protect the eyes of officers from the possibility of splashing blood or other fluids from the patient (Darmadi, 2008). There are several types of eye protection, namely Google, Face shield, glasses protection (safety glass), and full-face respirators (Full-face respirators). In general, a good google eye protection should ideally have features such as indirect ventilation, clear material, scratch resistance, good seal, anti-adjustable fog and straps, while the face shield ideally should have features in the form of clear, anti-fog, covers all parts and sides of the face and adjustable straps (Covid19, G. Tu. P. P. 2020)

2.4. Factors Affecting Workload

Umansky & Rantamen (2016) stated that what affects workloads include:

- a. Patient-to-nurse ratio, which is the number of patients that must be handled by each nurse.
 - b. Activity type, which is the type of activity carried out by nurses starting from important subjects such as documenting nursing care, additional activities that are not part of the main task such as compiling status patient in place, to additional activities that are part of the basic tasks such as administering medication.
 - c. Time Pressure, which is the ratio of the time required (total time used to do the main task) and the available time should be taken into account.
 - d. Physical expenditure, namely the number, average, and standard of each nurse running while carrying out the task.
- 2.2.4 Types of Work load Prihatini (2008) divides workloads into two basic types, namely: physical work and mental workload. Physical workload includes lifting patients, bathing patients, helping patients to the bathroom, pushing medical equipment, making patient beds, pushing patient stretchers. While the mental workload can be in the form of working shifts or take turns, the complexity of the work (preparing the patient mentally and spiritually) and families, especially for those who will require surgery or are in a state of critically), working with special skills in caring for patients, responsible for healing and must establish communication with patients.

2.5 Impact of Workload

In the nursing profession, itself becomes an inappropriate workload with standards will have an impact such as the appearance of errors in the patient status reporting, work burnout, leaving work that is not completed during work shifts, disruption of workflow, to giving errors medication in patients (McPhee, Dahinten & Havaei, 2017).

2.6 Calculation of Workload

Nursalam (2017) explains that three events can be used to calculate the workload for personnel, among others, as follows:

- a. Work sampling. In the work sampling method, things can be observed: Job specifics include:
 1. What activities are the personnel doing during the hours work
 2. Are personnel activities related to their functions and duties? during working hours
 3. Proportion of working time used for productive activities or not productive

4. The pattern of personnel workloads used with time and working hours schedule

b. Time and motion studies. In this technique, we observe and follow carefully the activities carried out by the person we're watching. Through this technique, the workload will be obtained personnel and quality of work.

c. Daily log or activity recording itself is a form of simple work sampling, namely the recording carried out by the observed personnel. The recording includes activities carried out and the time required to perform these activities. This use depends on the cooperation and honesty of the personnel involved observed.

III. METHODS OF RESEARCH

3.1. The type of research used in this research is research

Quantitative with a cross-sectional approach, namely the independent variable that be the object of research, measured or collected simultaneously or in at the same time. A cross-sectional approach was used because the measurement availability of personal protective equipment (PPE), workload, and psychological impact (independent variable) and the performance of health workers who provide patient care COVID-19 (the dependent variable) was carried out together to see whether or not there is an influence between the two. The purpose of this research determine the effect of the availability of personal protective equipment (PPE), workload, and psychological impact on the performance of health workers who provide treatment of COVID-19 patients at the RSU. Royal Prima Medan.

3.2. Population and Research Sample

Population according to Sugiyono (2013) is a generalization area that consists of objects or subjects that have certain qualities and characteristics set by the researcher to be studied and then withdrawn the conclusion. The population in this study were all health workers (nurses and midwives) in the isolation room at the RSU. Royal Prima Medan totaling 121 people.

According to Sugiyono (2012), the sample is part of the number and characteristics possessed by the population, and samples taken from the population must be truly representative. The sample size is the number of samples to be taken from a population. According to Dahlan, M (2014), the Determination of the sample size in this study calculated using the role of thumb formula, namely: $N = 10-50$ times the number of independent variables studied Because the number of independent variables studied was three, the sample size was 30 up to 150 subjects

3.3. Data Analysis Method

The results of data collection were analyzed using a computer, namely: using the SPSS (Statistical Program for Social Science) program 16.0 for windows. Steps used to answer a formula problem in a study are called data analysis which aims to get a conclusion from the results of the study. Analysis carried out in this study, namely:

1. Univariate analysis

Univariate analysis is an analysis carried out to analyze each variables from research results presented in the form of

distribution narrated frequency (Notoatmodjo, 2012). In this research the univariate analysis is the respondent's characteristics based on gender, age, last education, length of work, and marital status of health workers who provide care COVID-19 patients at the hospital. Royal Prima Medan.

2. Bivariate analysis

Bivariate analysis was carried out on two variables that were suspected or correlated (Notoadmodjo, 2010). The statistical test used is chi-squares. The chi-square test is used to test the hypothesis if in the population consists of two or more classes where the data are in the form of categorical. The basic formula for chi-square is as follows (Sugiyono, 2007).

IV. ANALYZE AND RESULT

4.1. Overview of Research Sites

Hospital. Royal Prima Medan is a private hospital the largest company to become a referral center for all the community, especially the people of Medan City and the people of North Sumatra in general. On 17 May 2011, by the Deputy Minister of Education National RI Mr. Prof. Dr. Fasli Jalal, Ph.D. laying the first stone for the construction of the Royal Prima Hospital in Medan. Then, on February 14, 2013, the Head of the North Sumatra Provincial Health Office has issued a Temporary Operational Permit to Royal Prima Hospital Medan No. 440.442/1641/II/the YEAR 2014. Furthermore, on February 16th 2014 RS. Royal Prima Medan was inaugurated by the Deputy Governor of the Province North Sumatra Mr. Ir. H. Tengku Erry Nuradi, M. Si with Operational License Permanent from the North Sumatra Provincial Health Office signed by Head of the North Sumatra Provincial Health Office, dr. Siti Hatati Surjantini, M. case. hospital. Royal Prima Medan now has more than 500 employees, more than 23 polyclinics and more than 200 partners with specialized services best in Orthopedic, Ophthalmology, Neurology, Internal Medicine, Obstetrics and Gynecology, Cardiac, Lung, Pediatric, ENT – TOS, and Urology and provides room services in the form of delivery rooms, endoscopy rooms, emergency rooms, physiotherapy, Baby Room, NICU, ICU, Class III Inpatient Room, Class Inpatient Room II, Class I Inpatient Room, VIP Inpatient Room, and Inpatient Room VIP.

4.2. Research Result

This study begins with an analysis of the characteristics of the respondents in the research in the form of age, gender, last education, length of work, marital status, availability of PPE, workload, level of anxiety, stress, depression, the performance of health workers, and the workload of health workers.

a. Age

An overview of the distribution of the ages of the health workers who provide treatment of COVID-19 patients at the RSU. Royal Prima Medan as a respondent in this study can be seen in the table below.

TABLE 1. Frequency Distribution of Health Workers Providing Care COVID-19 patient at RSU. Royal Prima Medan by Age\

Age Group	Frequency	Percentage (%)
Young adults (18-30 years)	64	85.3
Middle adult (31-65 years)	11	14.7
Total	75	100.

From the table data above, it can be seen that the majority of respondents in this study, health workers from the age group young adults (18-30 years) as many as 64 people (85.3%) and the remaining 11 people (14.7%) came from the middle adult age group (31-65 years).

b. Gender

An overview of the frequency distribution of health workers who provide treatment of COVID-19 patients at the RSU. Royal Prima Medan by type gender can be seen in the following table. Effect of availability of personal protective equipment (PPE) with performance health workers.

The results of this study prove the research hypothesis that there is an influence availability of personal protective equipment (PPE) with good performance of health workers provide care for COVID-19 patients at the RSU. Royal Prima Medan. On this study shows that there is a tendency that nurses who assess the availability of PPE will increase the performance of health workers this, it can be interpreted that health workers in the isolation room hospital care for COVID-19 patients. Royal Prima is dominant in the availability of PPE available.

Availability of personal protective equipment (PPE) is useful for breaking the cycle transmission of disease and protect patients, health workers, visitors and people who receive health services in hospitals. So that the availability of personal protective equipment (PPE) is a very important supporting factor important for the creation of good performance for health workers who provide care for COVID-19 patients.

The results of the study found the unavailability of an eye and face protection shield in the isolation room for COVID-19 patients. PPE recommendations based on level of protection for PPE handling COVID-19, treatment isolation rooms COVID-19 patients use level III protection of health workers and supporters, namely N95 masks or equivalent, coveralls/gowns, boots/rubber shoes with protective shoes, eye protection, face shield, rubber surgical glove disposable sterile, head cap, apron (WHO, 2020). If there is no personal protective equipment adequate, it can harm first-line healthcare workers (Wu, Chen, & Chan, 2020).

Research from Canada states that the 3 functions of the tool personal protection i.e. for contact prevention measures, for prevention by air, droplets, and general contact, as well as for those who perform or assist with risky aerosol-generating medical procedures high (Lockhart et al, 2020). So that health worker who does examination of COVID-19 patients are required to use protective equipment complete self, to avoid exposure to the COVID-19 virus (WHO, 2020).

There is an effect of the availability of PPE with the performance of health workers who provide care for COVID-19 patients at the RSU. Royal Prima Medan that is Health workers carry out the stages of the nursing process which include: nursing assessment, nursing diagnosis, nursing planning, implementation and evaluation of nursing for each patient treated with wear PPE, so if there is PPE that is not available then there will be a process nursing actions that are not carried out as nursing actions.

4.3. Effect of Workload on the Performance of Health Workers

The results of this study prove the research hypothesis that there is an influence workload with the performance of health workers who provide patient care COVID-19 at the hospital. Royal Prima Medan. In this study, it appears that the tendency that nurses who rate workloads as the light will have good performance, it can be interpreted that the health workers in the isolation of care for COVID-19 patients at RSU. Royal Prima dominant has the burden light work. The results of this study are in line with previous research which stated that workload affects the performance of nurses for COVID-19 patients at the Kendari City Hospital (Hakman, H., Suhadi, S., & Yuniar, N. 2021).

Excessive workload will affect the performance of nurses. The workload that must be carried out by nurses should be evenly distributed. So that it can be avoided having a nurse who has a work load that is too much or too little. However, the workload is evenly distributed, this does not mean that every nurse in the organization has to remain the same workload (Aprilia F, Samsir S, Pramadewi A. 2017). Some aspects related to workload are the number of patients who must be treated, work capacity by appropriate education obtained, the shift used to carry out their duties by the working hours that take place every day (Barahama KF, Katuuk M, Oroh WM..2019).

Research at Aisyiyah Ponorogo General Hospital found the explanation that during the COVID-19 pandemic the workload of health workers increased because many patients were in and out and a lot of work outside of duty should be done by a special nurse for COVID-19, nurses also feel the workload increases on duty because there are many patients but the health is very minimal, health workers who treat COVID-19 patients also find it difficult to carry out activities and regulate the rhythm of breathing in the room isolation due to having to use personal protective equipment for several hours which quite exhausting at work (Rastanty, P.D. 2021). There is an effect of workload on the performance of health workers who provide care for COVID-19 patients at the RSU. Royal Prima Medan.

4.4. The Influence of Psychological Impact on the Performance of Health Workers

The psychological impact analyzed in this study consists of the level of depression, anxiety, and stress. Each of these psychological components analyzed its influence on the performance of health workers who provide COVID-19 patient care.

The results of this study prove the research hypothesis that there is an influence psychological impact on the performance of health workers who provide care COVID-19 patients at the hospital. Royal Prima Medan. There is a relationship that a significant relationship between the level of depression, anxiety, and stress on performance health workers who provide care for COVID-19 patients in hospitals General Royal Prima Medan.

Health workers are at high risk of experiencing mental problems in the form of: mild to severe stress due to various increased pressures and must they face (fear in particular of the increased risk of exposure, infection) and the possibility of infecting their loved ones is also a burden separately (Labrador,

2017). Many health workers must self-isolate from family and loved ones even though they don't have COVID-19. This matter is a difficult decision and can cause a significant psychological burden significant in them (Tsamakis et al., 2020).

Research using survey-based studies on mental health of 1,257 health workers treating COVID-19 patients in 34 hospitals in China, the results were that most of them reported 50% depressive symptoms, anxiety 45%, insomnia 34%, and psychological distress 71.5% (Lai et al. 2020).

In overcoming the mental health problems of health workers, it is necessary to do intervention by forming a medical team in psychological treatment and applying the health belief model for health workers (Cheng et al. 2020). Which is one of the factors that health workers experience anxiety because when treating a positive patient for COVID-19 or doing examination of patients who have symptoms of COVID-19, namely health workers are worried that they will transmit the COVID-19 virus to family. So that the performance of health workers who provide patient care COVID-19 has an effect (Fadli, F., et al. 2020). Health workers not only feel exhausted in terms of physical but also psychological, health workers feel anxious and afraid of contracting COVID-19, afraid of having an impact on the family, and fear of being ostracized by neighbors and society (Rastanty, P.D. 2021).

There is a psychological impact on the performance of health workers who provide care for COVID-19 patients at the RSU. Royal Prima Medan that is psychological response experienced by health workers to pandemic disease This infectious disease is increasing because it is caused by feelings of anxiety about own health and the spread to the family, thus affecting performance of health workers in conducting examinations and in the process of treating COVID-19 patients.

V. CONCLUSION

Based on the research that has been done, there are the conclusion that can be drawn from the results of this study is that there is an influence availability of personal protective equipment (PPE), workload, and psychological impact on the performance of health workers who provide patient care COVID-19 at the hospital. Royal Prima Medan. This can be seen from the following results:

- Characteristics of respondents found that health workers who come from the young adult age group (18-30 years) 85.3%, female as much as 84%, the majority have the last education DIII Nursing as much as 40%, new category working (0-1 years) as much as 61.3%, and unmarried marital status as much as 76%.
- The big influence of the availability of PPE on the performance of the workforce health can be seen from the OR value of 9.33.
- Great influence of workload on power performance health can be seen from the OR value, which is 42.67.
- How big is the effect of depression level on energy performance? health can be seen from the OR value of 276.00. Big the effect of anxiety level on energy performance health can be seen from the OR value of 60.38. and big the effect of stress levels on the performance of health workers can be seen from the OR value is 103.50.

e. Availability of personal protective equipment (PPE) is a variable the most influential on the performance of health workers who provides care for COVID-19 patients at the RSU. Royal Prima Medan with Exp value (B) = 3.155. Therefore, management support is needed to increase the availability of personal protective equipment (PPE) in RSU. Royal Prima Medan

REFERENCES

- [1] Aprilia F, Samsir S, Pramadewi A. 2017. Pengaruh Beban Kerja, stres kerja dan motivasi kerja terhadap kinerja perawat Rumah Sakit Islam Ibnu Sina Pekanbaru. Riau University.
- [2] Arikunto, Suharsimi. (2012). Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta: Rineka Cipta.
- [3] Asmadi. (2008). Teknik Prosedural Keperawatan: Konsep Dan Aplikasi Kebutuhan Dasar Klien. Jakarta: Salemba Medika.
- [4] Azizah, Lilik M. (2011). Keperawatan Lanjut Usia. Yogyakarta: Graha Ilmu.
- [5] Barahama KF, Katuuk M, Oroh WM. 2019. Hubungan beban kerja dengan kepuasan kerja perawat di ruangan perawatan dewasa rsu gmin pancaran kasih manado. Jurnal keperawatan:7(1).
- [6] Cheng, Q., Liang, M., Li, Y., He, L., Guo, J., Fei, D., Zhang, Z. (2020). Correspondence Mental Health Care for medical staff in China during the COVID-19. Lancet, 7, 15-26. [https://doi.org/10.1016/S2215-0366\(20\)30078-X](https://doi.org/10.1016/S2215-0366(20)30078-X)
- [7] Covid-19, G. Tu. P. P. (2020). Standar Alat Perlindungan Diri (APD) untuk Penanganan Covid-19 di Indonesia. Standar Alat Pelindung Diri (APD) Untuk Penanganan Covid-19 Di Indonesia, Revisi 3, 1–42.
- [8] Dahlan, M. (2014). Peneitian Diagnostik. Jakarta: Salemba Medika.
- [9] Darmadi. (2008). Infeksi Nosokomial: Problematika Dan Pengendaliannya. Jakarta: Penerbit Salemba Medika
- [10] Dewi dan Wawan. (2010). Teori dan Pengukuran Pengetahuan, Sikap dan Perilaku Manusia. Yogyakarta: Nuha Medika.
- [11] Dharma, S. (2010). Manajemen Kinerja. Yogyakarta: Pustaka Pelajar.
- [12] Dr. I. Made WS, ed. (2010). Sinopsis Psikiatri: Ilmu Pengetahuan Perilaku Psikiatri Klinis. Jilid 2. Jakarta: Bina Rupa Aksara
- [13] Fadli, F., Safruddin, S., Ahmad, A. S., Sumbara, S., & Baharuddin, R. (2020). Faktor yang Mempengaruhi Kecemasan pada Tenaga Kesehatan Dalam Upaya Pencegahan Covid-19. Jurnal Pendidikan Keperawatan Indonesia, 6(1), 57–65. <https://doi.org/10.17509/jpki.v6i1.24546>
- [14] Farsya. P. (2021). Hubungan Ketersediaan Alat Pelindung Diri Dengan Tingkat Kepuasan Tenaga Kesehatan Selama Pandemi COVID-19 di RSUD TGK CHIK DITIRO SIGLI. Diakses pada 29 Januari 2021 dari https://etd.unsyiah.ac.id/index.php?p=show_detail&id=87594
- [15] Handayani, R. T., Kuntari, S., Darmayanti, A. T., Widiyanto, A., & Atmojo, J. T. (2020). Factors Causing Stress in Health and Community When the Covid19 Pandemic. Jurnal Keperawatan Jiwa, 8(3), 353. <https://doi.org/10.26714/jkj.8.3.2020.353-360>
- [16] Handayani, R. T., Kuntari, S., Darmayanti, A. T., Widiyanto, A., & Atmojo, J. T. (2020). Factors Causing Stress in Health and Community When the Covid19 Pandemic. Jurnal Keperawatan Jiwa, 8(3), 353. <https://doi.org/10.26714/jkj.8.3.2020.353-360>
- [17] Hakman, Suhadi, Nani Yuniar. (2020). Pengaruh Beban Kerja, Stres Kerja, Motivasi Kerja Terhadap Kinerja Perawat Pasien COVID-19. Nursing Care and Health Technology. <http://ojs.nchat.id/index.php/nchat>