

Workload Perception and Job Satisfaction of Nurses at COVID-19 National Emergency Hospital Wisma Atlet Kemayoran, Jakarta, Indonesia

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ARTICLE INFO	ABSTRACT
<p>Keywords: COVID-19 national emergency hospital (RSDC WAK), COVID-19, workload perception, job satisfaction, nurse,</p>	<p>The COVID-19 pandemic poses a major challenge to healthcare systems around the world. This is due to an imbalance between workload and the number of patients being treated. Nurses have an important role in determining the patient's recovery rate by providing intensive care management to patients, helping to fulfill the basic needs of patients, and collaborating with other health workers. This study aims to describe the workload perception and job satisfaction of nurses encountering the COVID-19 pandemic at the COVID-19 National Emergency Hospital Wisma Atlet Kemayoran (RSDC WAK), Jakarta, Indonesia. This study uses a descriptive study design. The sample of this study has inclusion criteria for nurses who work for the period January – May of 2022. This data collection uses instruments of nursing characteristics, nursing workload perception, and job satisfaction with Maslow's Hierarchy of Needs. There were 105 samples of nurses chosen by convenience sampling. This study uses univariate (descriptive) statistical tests. The results show that the scale of nurse workload perception was often in the percentage (57.1%) with the most influential indicator being the psychological aspect which not being easy to deal with COVID-19 patients with different characteristics (37.1%) and the physical aspect because of the large amount of work that must be done for patient safety (36.2%). The result of job satisfaction was very satisfactory (57.1%) with the most influential indicator being the attitude of a very good colleague (49.5%) and cooperation between nurses (46.7%). The workload perception and job satisfaction information can be a reference for implementing nursing management strategies that pay attention to health, motivation, and work productivity to maintain the quality of nursing care during a pandemic.</p>

INTRODUCTION

The COVID-19 pandemic has lasted for two years since it was first announced in Wuhan, China in December 2019. Globally, WHO reported 315,345,967 confirmed cases of COVID-19 as of January 13, 2022. Indonesia is the 15th country with the highest total cumulative COVID-19 cases in the world as many as 4,269,740 as of January 15, 2022. The pandemic condition has caused an imbalance in the workload of health workers with the number of patients being treated, so hospitals worldwide are overwhelmed (Baker et al., 2020). A step taken by the Indonesian government in this regard is the opening of the COVID-19 Emergency Handling Hospital (RSDC) Wisma Athlete Kemayoran (WAK) in Central Jakarta based on a letter from the Head of BNPB as Head of the Task

Force for the Acceleration of Handling COVID-19 Number B-134/KA BNPB/ PD.01.01/03/2020 dated March 20, 2020, regarding the implementation of Covid-19 observation and treatment.

Since the opening of the RSDC WAK, the cumulative total of patients who have been treated as of January 15, 2022, is 100,584 patients. RSDC WAK is also a place of isolation for foreign travel actors such as Saudi Arabia, Turkey, Malaysia, The United States of America, The United Arab Emirates, The United Kingdom, Japan, Spain, Kenya, and Taiwan. Hospital care units include Emergency Units (IGD), Intermediate Care Units (IMCU), High Care Units (HCU), Intensive Care Units (ICU), and Inpatients supported by health and non-health workers. Health workers consist of specialist doctors, general practitioners, nurses, pharmacists, nutritionists, and other health workers. As of February 2022, the number of health workers is 2,523 people, and for non-health workers 178 people. Nurses are health workers with the highest number, there are 1,593 nurses compared to other professions (RSDC, 2022).

Nurses are the closest health workers and spend a lot of time with patients to provide intensive care (Liu et al., 2020). The nurse's workload for COVID-19 patients with severe symptoms includes providing high-flow oxygen therapy assistance and ventilators. In addition, to prevent complications in patients by reviewing regularly, ensuring airway patency, performing chest physiotherapy, adjusting positions, helping patients' basic needs, to getting assignments from other professionals such as pharmacists (Liu et al., 2020; Mallhi et al., 2020; Mallhi et al. al., 2020).

Health workers caring for COVID-19 patients have a risk of harm that can affect social well-being (WHO, 2021). As many as 93.2% of nurses at Kwaingga Regional General Hospital experienced dissatisfaction during the COVID-19 pandemic (Taiget et al., 2021). Several studies also stated that the workload, length of time, and high work pressure, as well as the frequency of contact with patients, have an impact on the incidence of stress, fatigue, and low job satisfaction in nurses (Aloisio et al., 2019; Alsulimani et al., 2021; Teo et al., 2021). This study aims to describe the perception of workload and job satisfaction among nurses who handle the COVID-19 pandemic at RSDC WAK.

METHOD

This study used a descriptive survey of nurses who handled the COVID-19 outbreak in RSDC WAK. The study was conducted from January to May 2022. The sample successfully included 105 nurses through consecutive sampling techniques. The questionnaire was used to collect data on nurse characteristics, workload perception, and job satisfaction with Maslow's Hierarchy of Needs. The questionnaire was tested for validity using the content validity index (CVI) with a value of $r_{\text{count table}} \geq r_{\text{table}}$ ($r_{\text{count}} > 0.94$) and reliability using Cronbach's Alpha test with a value ($\alpha > 0.6$). Thus, valid and reliable instruments are used in this study. We used univariate data with a statistical test of frequency distribution. The study protocol and instrument were revised and approved on the 17th of May, 2022 by the Health Research Ethics Committee of RSDC WAK and Sekolah Tinggi Ilmu Kesehatan (STIKES) Ngudia Husada Madura.

RESULTS AND DISCUSSION

Table 1 shows the demographic characteristics of nurses who work to handle the COVID-19 pandemic at the RSDC WAK. Nurse respondents consist of males (53.3%) and females (46.7%). The age range is dominated by 18-40 years or classified as young adults (96.2%) and the majority are unmarried (80%). The highest number of nurse assignments was in the ward unit at 50.5%. The most educational background is a Diploma (3) in Nursing (55.5%), with the most length of work experience between 1-5 years (49.5%) and experience in management has been a primary nurse in the previous workplace (41.9%), and has a Basic Trauma Cardiac Life Support (BTCLS) training certification (41%).

Table 1. The Nurse Characteristics in RSDCWAK January – May 2022 (n=105)

Characteristics	Frequency	Percentages (%)
Gender		
Male	56	53,3
Female	49	46,7
Age (years)		
18 to 40	101	96,2
41 to 65	4	3,8
Marital status		
Unmarried	84	80

Married	18	17,1
Divorced	3	2,9
Service working in		
Ward	53	50,5
Emergency Department	9	8,6
High Care Unit	17	16,2
Intensive Care Unit	26	24,8
Level of education		
Diploma (3) in Nursing	58	55,2
Diploma (4) in Nursing	2	1,9
Bachelor & Profession in Nursing	41	39
Master in Nursing	4	3,8
Years of clinical experience		
< 1	42	40
1 to 5	52	49,5
> 5	11	10,5
Nursing management experience		
Head of room	5	4,8
Head of the team	18	17,1
Primary nurse	44	41,9
Never	38	36,2
Certification of training		
Basic Trauma Cardiac Life Support (BTCLS)	43	41
BTCLS and Advanced Cardiac Life Support (ACLS)	5	4,8
BTCLS and Basic Intensive Care Infection, Prevention, and Control	35	33,3
Others	12	11,4
	10	9,5

According to table 3, the scale for workload nurses based on their perception at the RSDC WAK is often (57.1%), with psychological aspects being the most frequently encountered, namely it is not easy to deal with COVID-19 patients with different characteristics (37.1%) (in table 4). Then, followed by the physical aspect, namely the amount of work that must be done for patient safety (36.2%). Most of the nurses expressed very satisfied job satisfaction (57.1%) (in table 5). The attitude of coworkers who are very good (49.5%) and able to work together among fellow nurses (46.7%) are the most influential indicators of job satisfaction (table 7).

Table 2. The Nurse Workload Perception in RSDCWAK January – May 2022 (n=105)

Questions	Never		Sometimes		Often		Always		
	n	%	n	%	n	%	n	%	
Physical Aspect									
1	I feel that the skills I have are unable to keep up with the difficulty of working in an inpatient during the COVID-19 pandemic.	72	68,6	31	29,5	2	1,9	0	0
2	I feel that I have to do more work for the safety of COVID-19 patients.	9	8,6	27	25,7	38	36,2	31	29,5
3	I experience direct contact between nurses and patients in the COVID-19 inpatient room continuously during working hours.	6	5,7	28	17,1	30	28,6	51	48,6
4	I feel that there is an imbalance in the nursing staff compared to patients during the COVID-19 pandemic.	13	12,4	61	58,1	22	21	9	8,6
5	I have to closely observe COVID-19 patients during working hours.	2	1,9	18	17,1	36	34,3	49	46,7
Psychological Aspect									
6	I find it difficult to make the right decisions during the COVID-19 pandemic.	44	41,9	50	47,6	10	9,5	1	1

7	I feel the high demand from the patient's family for the safety of COVID-19 patients.	23	21,9	41	39	21	20	20	19
8	I feel insecure about a job during the COVID-19 pandemic.	79	75,2	23	21,9	1	1	2	1,9
9	I am responsible for carrying out patient care during the COVID-19 pandemic.	1	1	6	5,7	6	5,7	92	87,6
10	I feel that dealing with COVID-19 patients with different characteristics is not easy.	8	7,6	44	41,9	39	37,1	14	13,3
11	I feel uncomfortable at work during the COVID-19 pandemic.	72	68,6	32	30,5	0	0	1	1
Working Time Aspect									
12	I feel that there are too many additional tasks outside of the main tasks during the COVID-19 pandemic.	60	57,1	37	35,2	6	5,7	2	1,9
13	I feel that I have to work more hours during the COVID-19 pandemic.	56	53,3	40	38,1	3	2,9	6	5,7
14	I felt that I was working outside working hours because of the large number of patients to be treated.	62	59	34	32,4	5	4,8	4	3,8
15	I was unable to complete the main tasks given during the COVID-19 pandemic.	85	81	19	18,1	0	0	1	1
16	I cannot share my time with my family because of the workload that has piled up since the COVID-19 pandemic.	47	44,8	34	32,4	16	15,2	8	7,6

Table 3. Frequency Scale of Nurse Workload Perception in RSDCWAK January – May 2022 (n=105)

Scale	Frequency	Percentages (%)
Never	1	1
Sometimes	43	41
Often	60	57,1
Always	1	1

Table 4. The Influential Indicators of Nurse Workload Perception in RSDCWAK January - May 2022

Indicators	Frequency	Percentages (%)
Psychological aspect		
It's not easy to deal with COVID-19 patients with different characteristics	39	37,1
Physical aspect		
Having a lot of work to be done for patient safety	38	36,2
Observing COVID-19 patients during working hours strictly	36	34,3
Having direct contact with COVID-19 patients continuously during working hours	30	28,6
Feeling the imbalance between nurses and patients during the COVID-19 pandemic	22	21

Table 5. The Nurse Job Satisfaction in RSDCWAK January – May 2022 (n=105)

Questions	Very Dissatisfied		Dissatisfied		Satisfied		Very Satisfied	
	n	%	n	%	n	%	n	%
1 There are additional incentives given by the institution where you work for achievement or extra work that you do.	9	8,6	21	20	59	56,2	16	15,2
2 Adequate tools and equipment to support your work.	3	2,9	15	14,3	60	57,1	27	25,7
3 The availability of supporting facilities such as bathrooms, parking lots, and adequate canteens.	2	1,9	2	1,9	59	56,2	42	40
4 Availability of conducive workspace conditions related to air ventilation, cleanliness, and noise in the institution where you work.	3	2,9	13	12,4	60	57,1	29	27,6
5 There is a guarantee for occupational health/safety at the institution where you work.	9	8,6	11	10,5	59	56,2	26	24,8
6 The relationship between nurses where you work is very good.	1	1	6	5,7	53	50,5	45	42,9
7 You can cooperate with fellow nurses.	1	1	3	2,9	52	49,5	49	46,7
8 The attitude of colleagues towards you is very good.	1	1	1	1	51	48,6	52	49,5
9 The treatment of superiors while you work here is very good.	4	3,8	9	8,6	57	54,3	35	33,3
10 You have the opportunity to get a higher position.	4	3,8	18	17,1	68	64,8	15	14,3
11 The institution where you work allows you to make an achievement.	5	4,8	13	12,4	61	58,1	26	24,8
12 There is a match between the work you do and your educational background.	3	2,9	5	4,8	52	49,5	45	42,9
13 You can use the time to work on the assignments given.	1	1	5	4,8	67	63,8	32	30,5
14 The ability of supervisors where you work to make decisions is very good.	5	4,8	10	9,5	66	62,9	24	22,9
15 You have the freedom to do a method yourself in completing your work.	4	3,8	10	9,5	64	61	27	25,7
16 You have the opportunity to improve employability through additional training or education.	3	2,9	9	8,6	50	47,6	43	41

Table 6. Frequency Scale of Nurse Job Satisfaction in RSDCWAK January – May 2022 (n=105)

Scale	Frequency	Percentages (%)
Dissatisfied	2	1,9
Satisfied	43	41
Very Satisfied	60	57,1

Table 7. The Influential Indicators of Nurse Job Satisfaction in RSDCWAK January – May 2022

Indicators	Frequency	Percentages (%)
The attitude of coworkers is very good	52	49,5
Able to work collaboratively among nurses	49	46,7
The relationship between nurses is very good	45	42,9
Match between work and educational background	45	42,9
Opportunity to get education and training	43	41

Discussion

Workload Perception

The workload is a dynamic set of components of the work process and environment, originating from different sources and both internal and external. Internal sources come from psychological variables that affect psycho-emotional well-being, such as long working hours and interpersonal relationship problems. External sources come from physical variables (radiation, variations in temperature, and atmospheric pressure), chemical variables (solvents and medicines), biological variables (viruses and bacteria), and mechanical variables (situations that cause the risk of work accidents) (Souza, 2020). The study literature from (Souza, 2020) also emphasized three main sources of workload during the pandemic: biological workload associated with exposure risk of SARS-CoV2, psychological workload because of the contact frequency with infected individuals constantly, and organizational issues such as management, technique, and work protocol.

In this study, the most influential indicator of workload perception is the psychological aspect that it is not easy to treat COVID-19 patients with different characteristics (37.1%). According to the previous study, the characteristics of COVID-19 patients at RSDC WAK (n= 46,408) were very varied. Starting from the percentage of females (49.06%) and males (50.4%), age range between 0 - > 50 years, having several comorbidities with the highest percentage, namely hypertension (6.11%) and diabetes mellitus (2.48%). In addition, the symptoms experienced by patients also varied, such as asymptomatic (16.22%), mild symptomatic (76.51%), moderate symptomatic (6.37%), and severe symptomatic (0.91%). Other characteristics such as having received vaccine dose 1 (21.44%), dose 2 (12.7%), and not getting any vaccine at all (65.86%) (Misriani et al., 2022). Thus, the COVID-19 treatment protocol for each patient also varies according to the severity of the disease and has the opportunity to always change according to existing developments (PDPI, PERKI, PAPDI, PERDATIN, & IDAI, 2022). Furthermore, the perception of the workload from the physical aspect was found, namely the amount of work that must be done for patient safety (36.2%). wonsistent research reports that there have been changes in roles and responsibilities resulting from changes in structure and caregivers during the COVID-19 pandemic. In this case, nurses take on additional tasks in addition to nursing care such as phlebotomy, preparing and providing food/drinks, writing medicine prescriptions, giving medicines to patients, doing administrative tasks, to ensuring the cleanliness of the patient care room. Conditions at the RSDC WAK with the limited number of pharmacists also encourage the application of the delegation of pharmaceutical tasks to nurses, especially in the distribution of medical logistics to patients (Ruskar et al., 2021).

In addition, there are other physical aspects indicators such as nurses have to strictly observe COVID-19 patients, experience direct contact with patients continuously during working hours, and feel that the nurses are not balanced with the number of patients (34.3%, 28, 6%, and 21%). This condition is the same as nurse volunteers in Wuhan and Shanghai hospitals who have to work 8-12 hours to overcome the shortage of nurses (Gao et al., 2020). A qualitative study also explained that activities in the COVID-19 isolation ward were entirely carried out by nurses with a three-shift scheme, namely morning (8 hours), afternoon (8 hours), and night (10 hours). The schedule is implemented to minimize exposure to others (Afriani et al., 2022). However, according to a retrospective cohort study, long working hours are one of the highest risk factors that cause health workers to be exposed to COVID-19 (Ran, et al., 2020).

The literature study examines the existence of psychological and physical workloads that have a significant influence on the work of nurses. The success of management during a pandemic is determined by the ability to mitigate the workload and reduce its impact, given the importance of the quantity and quality of nursing in a healthcare institution (Souza, 2020). Due to the variety of educational backgrounds, work and managerial experiences, and competencies, the role of a nursing manager is very important to evaluate the effectiveness of

the placement and the utilization of nursing resources based on professional skills, positions, professional degrees, age, work experience, and competencies (Gao et al., 2020).

Job Satisfaction

Job satisfaction is defined as an employee's internal assessment of his work, work experience, and work situation (Chen, 2020). According to (Halcomb et al., 2018), job satisfaction consists of many components such as working conditions, communication, institutional procedures and regulations, remuneration, promotion/level promotion opportunities, recognition/appreciation, and security and supervision. Job satisfaction has a direct effect on personal life, fulfillment, and self-esteem. In the results of this study, the job satisfaction of nurses was found to be very satisfactory (57.1%). According to (Zhang et al., 2020), high satisfaction among health workers has an impact on increasing two-way satisfaction (health workers and patients), building harmonious relationships between health workers and patients, quality and efficiency of health services, and promoting the implementation of medical reform policies.

The indicators that influence the job satisfaction of nurses at RSDC WAK are the attitude of coworkers is very good (49.5%), able to work together among nurses (46.7%), and the relationship between nurses is very good (42.9%). This result is in line with (Hellín Gil et al., 2022) who explain that relationships with fellow workers and superiors directly provide more job satisfaction for nurses. In other words, nurses' work environment affects their job satisfaction. (Jha et al., 2020) also stated that teamwork and trust in a team ($p=0.000$) had a positive impact on nurse job satisfaction.

Other satisfaction indicators are the suitability of work with educational background (42.9%), and the opportunity to get education and training (41%). According to (Jha et al., 2020), training and development programs ($p=0.026$) have a high positive impact on the job satisfaction of nurses in hospitals, both in the private and public sectors. Health workers who treat COVID-19 patients require sufficient knowledge of personal protective equipment, COVID-19 management, triage, patient admission, and treatment of COVID-19 patients in emergency and critical units. The existence of the Education and Training field at RSDC WAK which is supported by the government and non-governmental organizations has an impact on supervision to ensure that every volunteer with various educational backgrounds and skills can properly care for COVID-19 patients (Helmi et al., 2021).

Nursing is a profession that is responsible for the continuing care of patients, reinforcing the need to assess an environment in which professionals can be satisfied with their work, and carry out activities with attention to quality and patient safety. Nurses' satisfaction with their work is very important because they have a key role in determining the quality of patient care (Kalinowska & Marcinowicz, 2020). A nursing manager needs to realize that providing support to nurses means supporting the creation of high-quality patient care. However, if you ignore the problems that occur among nurses, it will have a negative impact on patient care (Maghsoud, et al., 2022).

CONCLUSION

Nurses' workloads have increased during the pandemic because of many factors. This study highlighted the influential indicators of nurses' workload perceptions consisting of two, namely: caring for COVID-19 patients with various characteristics is not easy and an increase in the amount of work for patient safety. However, a work environment that is built with good attitudes and cooperation between colleagues can provide a very satisfying feeling toward their work. These results can be considered a manager's policy in determining a workload analysis that pays attention to health, motivation, and work produced during the pandemic. The limitation of this study is that researchers have not explored further the workload and job satisfaction in detailed interviews or direct observations. Therefore, this data can be used as a reference for the next similar research topic. Thus, it can provide more complete information regarding recommendations for nursing management strategies in dealing with possible pandemics in the future.

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