


Analysis Of Factors Related To Workload Of Nurses At UPT Rumbia Regional Public Hospital Jeneponto District

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Article Info	ABSTRACT
Keywords: Workload Nurses Hospital	Nurse workload is the average frequency of each type of work in a certain period of time that must be carried out by health workers. This workload must receive attention because it is one of the bases in preparing a health worker needs plan. Excessive workload will affect the productivity of health workers, while the workload is caused by the number of health workers that is not yet adequate. This study aims to analyze factors related to the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency. Type of research used The type of research conducted is an analytical observational study with a cross-sectional study design. Collecting data through questionnaires. In this study, 72 nurses working at the UPT Rumbia Regional General Hospital, Jeneponto Regency were the subjects. Data analysis using the chi-square test. The results of the study showed that the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency was related to job descriptions ($p = 0.006$), facilities/means ($p = 0.019$), additional tasks ($p = 0.000$), and the number of examinations ($p = 0.010$). The workload on all variables studied in this study showed that there was a relationship between the workload of nursing staff. It is expected that nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency who have less workload will develop their work and need to improve their skills.
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INTRODUCTION

A hospital is a facility (a functional unit referred to as a health facility in the Constitution) that provides secondary or referral medical services, both simple (such as care) and more complex (such as heart and brain surgery) (Qurrotu'aini et al., 2023). Nurses are a very important and decisive profession in providing health services because they are the front line in achieving patient satisfaction with their needs for care or recovery from their illness. Because they are the first to speak to patients and the longest to speak to them, nurses are very influential in society's assessment of the quality of care they provide to patients (Wahyuningsih et al., 2021).

According to the World Health Organization (WHO), there were 19.3 million nurses worldwide in 2011. In Indonesia, there were 147,264 nurses in hospitals, which is 45.65 percent of all medical personnel in hospitals. Overall, the nurse ratio is 87.65 per 100,000 population, far from the 2019 target of 180 per 100,000 population. The nurse ratio is also

lower in Yogyakarta, with 122.74 per 100,000 population, and in Kulon Progo, with 84.91 per 100,000 population, still far from the 2019 target of 158 per 100,000 population (Wahyuningsih et al., 2021).

Workload is the ability of a nurse's body to carry out responsibilities in carrying out a job (Nursalam, 2014) in (Wahyuningsih et al., 2021). Nurses' workload can be seen from two perspectives, namely subjectively and objectively. Subjective workload is the workload seen from the nurse's perspective or perception, while objective workload is the real situation in the field (Pudjirahardjo, 2013) in (Wahyuningsih et al., 2021).

Nurse workload is the average frequency of each type of work within a certain period of time that must be carried out by health workers. This workload must be considered because it is one of the bases for preparing a health worker needs plan. Excessive workload will affect the productivity of health workers, while the workload is caused by the number of health workers that is not yet adequate (Kandou & Kawatu, 2019)

The workload of nurses can be seen from aspects such as the tasks carried out based on the main function, according to the job description that they do, the number of patient visits, work capacity according to the level of education, the working time they use to do the tasks according to the working hours that take place every day, as well as the completeness of facilities that can help in completing the work well.

Based on the data from the recording and reporting of nursing services, the number of examinations has increased from year to year, and the number of existing personnel remains the same, as can be seen in the following table:

Table I.1 Number of outpatient visits at Rumbia Hospital

No	Year	Number of Examination	Number of nursing service personnel
1	2021	273.618	45 people (1:20 patients/day)
2	2022	327.359	53 people (1:21 patients/day)
3	2023	310.181	61 people (1:11 patients/day)

Table I.2 Number of inpatient visits at Rumbia Hospital Year 2021-2023

1	2021	191.532	30 people (1:6 patients/day)
2	2022	222.121	35 people (1:6 patients/day)
3	2023	217.126	38 people (1:5 patients/day)

Table I.3 Number of HCU Rooms in Rumbia Hospital Year 2021-2023

1	2021	41.043	8 people (1:5 patients/day)
2	2022	50.001	8 people (1: 6 patients/day)
3	2023	45.537	8 people (1:5 patients/day)

Table I.4 Number of Obstetric Rooms in Rumbia Hospital Year 2021-2023

1	2021	41.043	7 people (1:5 patients/day)
2	2022	55.237	10 people (1:5 patients/day)
3	2023	47.518	15 people (1:3 patients/day)

Based on the attached data, it is identified that the workload on nursing services at the UPT Rumbia Regional General Hospital, Jeneponto Regency shows that the workload of nurses is still high, the increasing number of visits to the hospital means the number of visits to nursing also increases, resulting in an increase in the workload of the workforce. In previous years, there were also delays in nursing service personnel completing their duties because most of them were doing double duties. Based on the background above, the formulation of the problem in the study is what factors are related to the workload of nursing staff at the UPT Rumbia Regional General Hospital, Jeneponto Regency

METHODS

This type of research is included in quantitative research with a cross-sectional research design where the independent and dependent variables are collected at the same time or period, meaning that each research subject is observed only once and the impact is measured according to the condition or status at the time of observation. where the independent variables (working hours, job descriptions, completeness of facilities and equipment, additional tasks, and number of examinations) interact with the dependent variable (nurse workload) simultaneously. This research was conducted at the UPT Rumbia Regional General Hospital Jeneponto Regency in May 2024.

The population in this study was all nursing staff at the Rumbia Regional General Hospital UPT, Jeneponto Regency, totaling 89 people. In this study, at the Rumbia Regional General Hospital UPT, Jeneponto Regency, there were 72 nurses who were respondents, based on the calculation of the number of samples using the Slovin formula.

RESULTS AND DISCUSSION

Based on the results of data collection using a questionnaire on nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency from May to August 2024, the data was then processed using the SPSS for Windows version 20.0 program, which can be presented in the form of a table as follows:

Respondent Characteristics

Table 1 Distribution of Respondents Based on Nurses at UPT Rumbia Regional General Hospital Jeneponto Regency

Age Group (years)	Total (n)	Percentage(%)
20-25 tahun	15	20.8
26-30 tahun	30	41.7
31-35 tahun	23	31.9
36-40 tahun	4	5.6
Total	72	100.0
Jenis Kelamin	Total (n)	Percentage(%)
Laki-laki	16	22.2
Perempuan	56	77.8
Total	72	100.0

Tingkat Pendidikan	Total (n)	Percentage(%)
S1 Keperawatan	13	18.1
DIII Keperawatan	40	55.6
Ners	19	26.4
Total	72	100.0

Source: Primary Data 2024

The table above shows that the highest number of respondents was in the age group between 26 - 30 years, namely 30 people (41.7%) and the lowest was in the age group 36 - 40 years, namely 4 people (5.6%), while in the age group 20 - 25 years, namely 30 people (41.7%). years old as many as 15 people (20.8%) and aged 31 – 35 years as many as 23 people (31.9%). There were 56 females (77.8%) while there were 16 males (22.2%). The highest number of respondents was at the DIII Nursing education level of 40 people (55.6%), while the lowest was at the S1 Nursing education level of 13 people (18.1%). Meanwhile, there were 19 Nurses (26.4%).

Univariate Analysis

Working hours

Table 2 Distribution Based on Working Hours of Nurses At UPT Rumbia Regional General Hospital Jeneponto Regency

Working hours	Total (n)	Percentage(%)
Not enough	18	25.0
Enough	54	75.0
Total	72	100.0

Source: Primary Data 2024

The table above shows that the majority of respondents stated that their working hours were in the sufficient category, namely 54 people (75.0%), while those who stated that their working hours were in the insufficient category were 18 people (25.0%).

Job description

Table 3 Distribution Based on Job Description for Nurses At UPT Rumbia Regional General Hospital Jeneponto Regency

Job description	Total (n)	Percentage(%)
There isn't any	24	33.3
There is	48	66.7
Total	72	100.0

Source: Primary Data 2024

The table above shows that the majority of respondents stated that job descriptions were in written form, namely 48 people (66.7%), while those who stated that there were no job descriptions in written form were 24 people (33.3%).

Facilities/amenities

Table 4 Distribution Based on Facilities/Infrastructure at UPT Rumbia Regional General Hospital Jeneponto Regency

Facilities/amenities	Total (n)	Percentage(%)
Not available	21	29.2
Available	51	70.8
Total	72	100.0

Source: Primary Data 2024

The table above shows that the majority of respondents stated that the facilities/means they wanted to use were available, namely 51 people (70.8%), while 21 people (29.2%) stated that the facilities/means were not available.

Additional tasks

Table 5 Distribution Based on Additional Tasks for Nurses At UPT Rumbia Regional General Hospital Jeneponto Regency

Additional tasks	Total (n)	Percentage(%)
There isn't any	56	77.8
There is	16	22.2
Total	72	100.0

Source: Primary Data 2024

The table above shows that the majority of respondents stated that there were no additional tasks, namely 56 people (77.8%), while those who stated that there were additional tasks were 16 people (22.2%).

Number of inspections

Table 6 Distribution Based on the Number of Examination of Nurses at the UPT Rumbia Regional General Hospital Jeneponto Regency

Number of inspections	Total (n)	Percentage(%)
Not enough	18	25.0
Enough	54	75.0
Total	72	100.0

Source: Primary Data 2024

The table above shows that the majority of respondents stated that the number of patient examinations was in the sufficient category, namely 54 people (75.0%), while those who stated that the number of patient examinations was in the insufficient category were 18 people (25.0%).

Workload

Table 7 Distribution Based on Nurses' Workload at UPT Rumbia Regional General Hospital, Jeneponto Regency

Workload	Total (n)	Percentage(%)
Workload according to	52	72.2
Less Workload	14	19.4

Workload	Total (n)	Percentage(%)
More workload	6	8.3
Total	72	100.0

Source: Primary Data 2024

The table above shows that the majority of respondents stated that their workload was in accordance with their job, as many as 52 people (72.2%), while 6 people (8.3%) had an excessive workload and 14 people (19.4%) had an insufficient workload.

Bivariate Analysis

Relationship between working hours and workload

Table 8 Distribution of Relationship Between Working Time and Nurse Workload at UPT Rumbia Regional General Hospital Jeneponto Regency

Working time	Working time						Total	P Value
	Workload according to		Less Workload		More workload			
	n	%	n	%	n	%		
Not Enough	18	25.0	0	0	0	0	18	25,0
Enough	34	47.2	14	19.4	6	8.3	54	75,0
Total	52	72.2	14	19.4	6	8,3	72	100,0

Source: Primary Data 2024

The table above shows that respondents who stated that their working hours were sufficient and in accordance with their workload were 34 people (47.2%), those who said that their workload was excessive were 6 people (8.3%), and those who said that their workload was lacking were 14 people (19.4%). Meanwhile, those who said that their working hours were lacking and in accordance with their workload were 18 people (25.0%), and none said that their workload was lacking or excessive.

The results of the statistical test showed that the p value = 0.010 was less than the alpha value ($\alpha = 0.05$), so H_0 was rejected. This shows that there is a significant correlation between working hours and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

Relationship between job description and workload

Table 9 Distribution of Relationship between Job Description and Workload At UPT Rumbia Regional General Hospital Jeneponto Regency

Job description	job description						Total	P Value
	Workload according to		Less Workload		More workload			
	n	%	n	%	N	%		
There isn't any	23	31,9	1	1,4	0	0	24	33,3
There is	29	40.3	13	18,1	6	8.3	48	66,7
Total	52	72.2	14	19.4	6	8,3	72	100,0

Source: Primary Data 2024

The table above shows that respondents who stated that there was a job description in written form and in accordance with their workload were 32 people (31.9%), those who said that their workload was excessive were none, and those who said that their workload was lacking were 1 person (1.4%). Meanwhile, those who said that there was no job description in written form and in accordance with their workload were 29 people (40.3%), those who said that their workload was excessive were 6 people (8.3%) and those who said that their workload was lacking were 13 people (18.1%).

The results of the statistical test showed that the p value = 0.006 was less than the alpha value ($\alpha = 0.05$), so H_0 was rejected. This shows that there is a significant correlation between job descriptions and the workload of nurses at the Rumbi Regional General Hospital UPT, Jeneponto Regency.

Relationship between facilities/means and workload

Table 10 Distribution of Relationship between Facilities/Infrastructure and Nurses' Workload at UPT Rumbia Regional General Hospital Jeneponto Regency

Facilities/amenities	job description						Total	P Value	
	Workload according to		Less Workload		More workload				
	N	%	n	%	n	%			
Not available	20	27,8	1	1,4	0	0	21	29,2	0,019
Available	32	44,4	13	18,1	6	8,3	51	70,8	
Total	52	72.2	14	19.4	6	8,3	72	100,0	

Source: Primary Data 2024

The table above shows that respondents who stated that facilities/means were available and the workload was appropriate were 32 people (44.4%), those who said their workload was excessive were 6 people (8.3%) and those who said their workload was lacking were 13 people (18.1%). Meanwhile, those who said that facilities/means were not available and appropriate to their workload were 20 people (27.8%), those who said their workload was excessive were none and the workload was lacking were 1 person (1.4%). The results of the statistical test obtained a p value = 0.019 < alpha value ($\alpha = 0.05$) so that H_0 was rejected with the interpretation that there was a significant relationship between facilities/means and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

Relationship of additional tasks to workload

Table 10 Distribution of Additional Task Relationships with Nurses' Workload at Rumbia Regional General Hospital UPT Jeneponto Regency

Additional Tasks	Additional Tasks						Total	P Value	
	Workload according to		Less Workload		More workload				
	n	%	n	%	n	%			
There isn't any	52	72,2	0	0	4	5,6	56	77,8	0,000
There is	0	0	14	19,4	2	2,8	16	22,2	
Total	52	72.2	14	19.4	6	8,3	72	100,0	

Source: Primary Data 2024

The table above shows that respondents who stated that there were additional tasks and their workload was excessive were 2 people (2.8%), and those who said their workload was insufficient were 14 people (19.4%). Meanwhile, those who said there were no additional tasks and in accordance with their workload were 52 people (72.2%), those who said the workload was excessive were 4 people (5.6%). The results of the statistical test showed that the p value = 0.000 was less than the alpha value ($\alpha = 0.05$), so H_0 was rejected. This shows that there is a significant correlation between additional tasks and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

Relationship between number of inspections and workload

Table 11 Distribution of the Relationship between the Number of Examination and the Workload of Nurses at the Rumbia Regional General Hospital UPT Jeneponto Regency

Number Of Checks	Additional Tasks						Total		P Value
	Workload according to		Less Workload		More workload		N	%	
	n	%	n	%	n	%			
Not enough	18	25,0	0	0	0	0	18	25,0	0,010
Enough	34	47,2	14	19,4	6	8,3	54	75,0	
Total	52	72.2	14	19.4	6	8,3	72	100,0	

Source: Primary Data 2024

The table above shows that respondents who stated that the number of their examinations was in the sufficient category and their workload was appropriate were 34 people (47.2%), and those who said their workload was excessive were 6 people (8.3%) and the workload was lacking were 14 people (19.4%). Meanwhile, those who said the number of examinations was in the insufficient category and appropriate to their workload were 18 people (25.0%), those who said the workload was excessive and lacking were none.

The results of the statistical test showed that the p value = 0.010 was less than the alpha value ($\alpha = 0.05$), so H_0 was rejected. This shows that there is a significant correlation between the number of examinations and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

Discussion

Working time

The table above shows that respondents who stated that their working hours were sufficient and in accordance with their workload were 34 people (47.2%), those who said that their workload was excessive were 6 people (8.3%), and those who said that their workload was lacking were 14 people (19.4%). Meanwhile, those who said that their working hours were insufficient and in accordance with their workload were 18 people (25.0%), and none said that their workload was insufficient or excessive.

The results of the statistical test showed that the p value = 0.010 was less than the alpha value ($\alpha = 0.05$), so H_0 was rejected. This shows that there is a significant correlation between working hours and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

The results of this study stated that the working hours given in the sufficient category were 34 people (47.2%) with the existence of appropriate working hours, it is expected to create an appropriate level of workload so that the ability and skills of officers in carrying out various health efforts to patients will provide satisfactory services.

The results of this study indicate that there is a relationship between the time spent by a nurse and their workload. In line with Moenir's opinion (2021), working hours affect productivity and efficiency. Decreased productivity and increased risk of fatigue, illness, and accidents usually occur when people work longer than they are able and do not work with high efficiency.

Job description

Job descriptions in this study are based on Job descriptions describing the tasks that need to be done by nurses in the Hospital. The contents of the job description or tasks are in the form of types of work or tasks that must be done, work result standards that must be achieved, time to complete the work or tasks, materials used in the work and how to carry out the work or tasks.

The results of the study showed that more nurses said that there was a job description, namely 48 people (66.7%) who interpreted that there was a written job description at the UPT Rumbia Regional General Hospital, Jeneponto Regency, so that health workers could have a workload level that was not excessive because there was a division of tasks given to each health worker. The results of the statistical test obtained a p value = 0.001 < alpha value ($\alpha = 0.05$) so that H_0 was rejected with the interpretation that there was a significant relationship between job descriptions and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

There were also respondents who already had job descriptions but their workload level was excessive, as many as 6 people (8.3%). This is possible because of the wrong work attitude that causes fatigue which causes the level of workload owned by nurses to increase. Repetitive routine tasks, both involving muscle and emotional work, contribute to nurses' work fatigue (Sumantri et al., 2024). Nurses have many tasks, including providing patient care based on the care process, carrying out care actions by paying attention to patient needs, carrying out patient medical programs, communicating with patients and families, accompanying visiting doctors to reporting patient conditions to doctors, and many more.

Facilities/means

Facilities are everything that makes things easier or smoother for tasks. Facilities are very important in carrying out an activity, and the level of completeness of the facilities greatly affects how much workload a person has in completing the tasks and responsibilities given to him/her.

The results of the study showed that more nurses said that the facilities and equipment they wanted to use were available, namely 32 people (44.4%) which indicated that the availability of facilities and equipment at the UPT Rumbia Regional General Hospital, Jeneponto Regency allows health workers to easily provide health services to patients, causing the level of workload carried by nurses not to be too heavy.

The results of the statistical test obtained a p value = 0.019 <alpha value ($\alpha = 0.05$) so that H_0 was rejected with the interpretation that there was a significant relationship between facilities/facilities and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

Facilities and equipment greatly support the implementation of work, so if the facilities and equipment are sufficient in terms of quality and quantity, it will affect a person's workload. The facilities in the hospital determine the status of the hospital, the more complete / sophisticated the hospital facilities are, the greater the possibility of attracting patients in addition to the manpower factor.

Additional tasks

Additional tasks are also included in the task list, and each employee also performs additional tasks, as well as primary tasks. The job description itself is written information that includes a description of the job, responsibilities, working conditions, and aspects of the job that are relevant to a company.

The results of the study showed that more respondents said there were no additional tasks and their workload was appropriate, namely 52 people (72.2%) who gave the interpretation that the workload of health workers at the UPT Rumbia Regional General Hospital, Jeneponto Regency had an appropriate level of workload.

The results of the statistical test obtained a p value = 0.000 <alpha value ($\alpha = 0.05$) so that H_0 was rejected with the interpretation that there was a significant relationship between additional tasks and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

There is a relationship between doing more tasks and more workload, according to the results of this study. The more tasks a nurse has to do, the heavier their workload. However, additional tasks do not always increase the workload of nurses, and they can even be more productive if the additional tasks do not exceed their current abilities. According to Yalis Ilyas (2010), this shows that the number of activities affects the workload, so that health workers can be given additional tasks as long as they do not cause their workload to exceed the standard. The more tasks a nurse has to do, the more energy is expended and the more working time is required. Nurses in hospitals also have to make monthly activity reports, attend meetings, and teach nursing students.

Number of inspections

The number of examinations is the number of examinations served at the Hospital which is calculated per day, per month and per year. One factor that can cause a decrease in personnel work is complaints about the high workload of personnel. This can be seen if there is an increase in the number of patient visits and will result in an increase in the number of examinations while the number of personnel remains the same for a long period. The results of the study showed that more respondents said that the number of examinations was in the sufficient category and the workload was appropriate, namely 34 people (47.2%) which indicates that although the number of health examinations carried out on patients was in the sufficient category, their workload level was still appropriate (not less and not excessive).

The results of the statistical test obtained a p value = 0.010 <alpha value ($\alpha = 0.05$) so that H_0 was rejected with the interpretation that there was a significant relationship between the number of examinations and the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency.

The greater the number of visits to a hospital, the greater the number of examinations carried out on hospital staff so that the greater the output of each health worker, the greater the number of visits and the more nurses' work, the heavier the nurse's work, this means that the workload of health workers is getting bigger. The number of visits to a health service unit is influenced by the prevalence of illness in the area and public awareness to seek treatment. The number of visits will increase if the prevalence of illness is high and the public is aware of seeking treatment at health services (Yaslis, 2021).

CONCLUSION

Based on the process of collecting, processing, presenting, and discussing, it can be concluded that there is a relationship between working hours, job descriptions, facilities/means, additional tasks, and the number of examinations with the workload of nurses at the UPT Rumbia Regional General Hospital, Jeneponto Regency. then it is hoped that further research is needed on workload with different variables.

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