Relationship Between Workload and Nurse Performance in the Inpatient Ward of Nene Mallomo Hospital

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Abstract. *Workload is an effort to detail the components and target volume of work in a certain time unit and result unit. Performance is the appearance of the results of personnel's work both in quantity and quality in an organization. The ratio of nursing staff needs is based on the number of patients treated still not meeting the standard. On the one hand, it is said that in providing services to patients, quality must be improved. The type of research used is " Cross sectional" with a point time approach where researchers only take measurements once during the observation. The research location was carried out at the inpatient installation of Nene Mallomo Sidrap Hospital on November 1-30, 2010. The number of samples in this study was 52 people. From the results of the statistical test analysis using Chi square, it was found that there is a relationship between nurses' workload and nurse performance at Nene Mallomo Hospital, Sidenreng Rappang Regency in 2023. The suggestion in this study is expected to regulate nursing staff in terms of quantity and quality so as to reduce the heavy workload which in turn will improve work performance, job satisfaction, and have an impact on improving the quality of nursing care and patient satisfaction.*

Keywords: *Workload, Nurse Performance, Inpatient Ward*

INTRODUCTION

Nursing services as an integral part of the health service system greatly determine the quality of health services. Nursing personnel as part of the health workforce system are expected to be able to meet the demands and needs of health services nationally and globally, (World Health Organization, 2016; Aluttis et al., 2014; Kingma, 2007; Britnell, 2019; Marć et al., 2019; Boniol et al., 2022). Nursing is a very important profession and determines the provision of health services. In hospitals, nursing also plays a very strategic role, where most health workers are nurses who provide nursing care (Duffy, 2022). Quality nursing services can be achieved, one of which depends on the balance between the number of personnel and the workload of nurses in a hospital, (Sochalski, 2004).

The performance of implementing nurses is a problem as long as they are not aware of the workload which includes the number of patients, the level of patient dependency, the type of activities to be carried out, the average time of nursing actions, the assignment system and facilities that are their responsibility to be implemented (Campagna et al., 2021; Andersson et al., 2022; Koy et al., 2022).

Based on the results of a National survey conducted by Buerhaus & Staiger (1999), the working conditions of registered nurses have changed which has caused the quality of care

services to decline. One of the reasons is that they feel that when they are in the workspace, they often forget to take a break and eat snacks (5711 respondents), feel increased pressure to complete work (5340 respondents), pressure to complete work after shifts (4210 respondents), cannot complete continuing education and experience stress and illness (3762 respondents), feel very tired and have no motivation after work (3617 respondents), feel unmotivated and sad because they cannot provide nursing services (3222 respondents) and 2928 respondents feel they do not have the energy to provide optimal qualitative nursing services, all of which are caused by high workloads. High workloads because staffing cannot be optimal.

Inpatient Installation Services are very complex services and cause the greatest influence compared to other services, so that nursing resources greatly determine the quality of services produced in addition to other resources, the image of nurses is less than satisfactory and demands for equality as partners, doctor complaints, and nurses' attitudes that are not conducive to patients and fellow co-workers so that nurses' duties tend to create pressure on the job so that it is necessary to examine the factors that play a role in nurse performance in terms of workload and individual characteristics. In the inpatient installation of Nene Mallomo Sidrap Hospital, the number of nurses is 118 nurses, the total number of patients in 2013 was 3749 people with a BOR of 74.94%, in 2014 there were 4182 people with a BOR of 63.6% and in 2015 there were 5036 people with a BOR of 54.00% with a total of 111 TT beds, the ratio of the number of nurses to patients treated is 1: 5-6 patients in the morning and 1: 10-15 patients in the afternoon and evening.

METHODS

According to the research objectives, the type of research used is " Cross sectional". Researchers study the dynamics of the correlation between independent variables and dependent variables with the "point time" approach model, namely researchers make measurements only once at the time of observation.

RESULT AND DISCUSSION

Respondent Demographic Characteristics

The demographic characteristics identified from respondents in this study include gender, age and length of service.

Respondent gender

Table 1. Gender distribution of nurses working at the Inpatient Installation of Nene Mallomo Sidrap Hospital in 2016.

No	Gender	n	%
1	Woman	44	84.6
2	Man	8	15.6
		52	100

Source: Primary Data

From the table above, it can be seen that of the 52 respondents, the majority were female, 44 people (84.6%), while the male respondents were 8 (15.6%).

Age

Table 2. Age distribution of nurses working at the Inpatient Installation of Nene Mallomo Sidrap Hospital in 2016.

No	Age	n	%
1.	20-30 years	38	73.1
2.	31-40 years	10	19.2
3.	41-50 years	4	7.7
		52	100%

The majority of the frequency distribution of nurses' ages is 20-30 years, namely 38 people (73.1%), the rest are 31-40 years old, 10 (19.2%), and 41-50 years old, 4 (7.7%).

Respondent's length of service

Table 3. Distribution of length of service of nurses assigned to the Inpatient Installation of Nene Mallomo Sidrap Hospital in 2016.

No	Age	n	%
1.	1-5 years	29	55.8
2.	6-10 years	14	26.9
3.	> 10 years	9	17.3
		52	100%

Source: Primary Data

From the table above, it can be seen that the majority of respondents have worked for between 1 - 5 years, as many as 29 people (55.8%), the rest in sequence 5 - 10 years as many as 14 people (26.9%), while those who worked > 10 years were 9 people (17.3%).

Respondents' Special Characteristics

Nurses' workload

Table 4. Distribution of workload of nurses on duty at the Inpatient Installation of Nene Mallomo Sidrap Hospital in 2016.

No	Workload	n	%
1.	Light	31	59.6
2.	Heavy	21	40.4
		52	100%

Source: Primary data

From the table above, it is stated that the workload of nurses at the Inpatient Installation of Nene Mallomo Sidrap Hospital is 31 nurses (59.6%) are classified as having a light workload, 21 nurses (40.4%) are classified as having a light workload.

Nurse Performance

Table 5. Distribution of Nurse Performance on Duty at the Inpatient Installation of Nene Mallomo Sidrap Hospital in 2016.

No	Performance	n	%
1.	Good	30	57.7
2.	Not enough	22	42.3
		52	100%

Source: Primary data

From the results of the table above, the results of the performance of nurses on duty at the Medical-Surgical Inpatient Installation of Nene Mallomo Sidrap Hospital were obtained, 30 nurses (57.7%) were classified as having good performance and 22 nurses (42.3%) were classified as having poor performance.

Relationship between Nurse Workload and Nurse Performance

Table 6. Relationship between Nurse Workload and Nurse Performance in the Inpatient Installation of Nene Mallomo Sidrap Hospital in 2016.

No	Workload Nurse	Nurse Performance				Total		Chi-square α=0.0.5	Significant (P)
		Good		Not enough					
		n	%	n	%	n	%		
1	Light	22	71.0	9	29.0	31	100.0		
2	Heavy	8	38.1	13	61.9	21	100.0	X²=5.543	0.019
Amount		**30**	**57.7**	**22**	**42.3**	**52**	**100.0**		

Source: Primary Data

The table above shows that the light nurse workload on good nurse performance is 22 respondents (71.0%) while the heavy nurse workload on good performance is only 8 respondents (38.1%). The results of the statistical test with chi-square obtained a value of ρ = 0.019 greater than α = 0.05 and the result of X^2 = count = 5.543. This means that the null hypothesis is rejected and the alternative hypothesis is accepted. So there is a relationship between nurse workload and nurse performance.

General Characteristics of Respondents

Based on the results of univariate analysis, there is one table, namely the frequency distribution table of respondent characteristics based on age group, gender, and length of service.

Respondent characteristics based on age according to demographic data

The results of the univariate analysis showed that the age group of 20-30 years was 38 nurses and 31-40 years was 10 nurses. This is based on the theory that the age range of 18-35 years is a productive age in working, so that at that age a person should be able to show good performance. The results of this study are in accordance with the opinion of Siagian (1999) that the older a person is, the more technical and psychological maturity increases, the more capable they are in making decisions and being wise. This is closely related to the high ability of respondents in carrying out nursing care.

The researcher's assumption is that most of the nurses in the inpatient installation of Nene Mallomo Hospital are aged between 20-40 years and have great potential in improving excellent nursing services so that comprehensive nursing services can be achieved. From a study conducted by Simanjuntak (1985), which was quoted by Supratman (1997), it was explained that work performance increases with increasing age and then decreases towards old age/retirement, the highest level of productivity occurs at the age of 35 to 39 years.

Respondent Characteristics Based on Gender

The results of the Univariate analysis in this study showed that the number of female respondents was around 44 nurses (84.6%), while the number of male respondents was 8 nurses (15.4%). From a study conducted by Jefferson et al. (2015) it was found that although female doctors work less per week than male doctors, their total productivity, in terms of direct and indirect patient service, is no less than that of men. So the researcher assumes that, even though there are more female respondents than male respondents, this does not affect their work productivity.

Respondent characteristics based on length of service

The results of the Univariate analysis in the study conducted at the inpatient installation of Nene Mallomo Hospital showed that respondents who had a work period of 1-5 years were 29 respondents (55.4%) while respondents who had a work period of 6-10 years were 14 people (26.9%). This means that on average, nurses who work in the inpatient installation have a new

work period so that experience in carrying out nursing care, having communication skills, caring for patients, and determining nursing actions is still lacking. This is in accordance with Siagian's Theory (1999) that the longer a person works in an organization, the higher their productivity. Meanwhile, Schermerkan in 1988 in Siagian (1999) explained that there are two differences between new workers and workers who have a long work period or are experienced in producing products, the longer a person's work period, the more experienced and the higher their productivity.

The researcher's assumption is that the majority of nurses who have 1-5 years of experience (76.92%) do not have any obstacles in providing nursing care to clients in inpatient installations. This is supported by the education level of the majority of them having a DIII in nursing.

Respondents' Specific Characteristics

Nurse Workload

Nurse workload is the length and weight of a job and the number of tasks carried out by nurses both in terms of quantity and quality. In terms of quantity, it shows: the number of jobs, the variety of jobs that must be done, the length of time to complete the job. In terms of quality: it is the expected work performance demands. In the questionnaire, the nurse workload contains 13 statement items that must be filled in by respondents with the choice of number 1 if the workload for each job is stated as light, number 2 if the workload for each statement is stated as moderate, and number 3 if the workload for each statement is stated as heavy.

According to the results of this study, the inpatient installation room of Nene Mallomo Hospital is a workplace that most respondents (59.6%) feel provides a light workload. and 40.4% of respondents feel a heavy workload. The difference in workload levels is thought to be due to demographic factors: age and length of service. While quantitatively due to the many and varied jobs in the inpatient installation, family expectations for patient recovery and the less than ideal nurse-client ratio. It can be assumed that the more and more diverse the jobs, the more the workload of inpatient installation nurses will increase. In the Indonesian Psychiatric Quarterly (1998), workload limits are individual responses to the length and amount of work and the number of tasks that must be completed.

The results of this study are in line with research conducted by Miranda et al. (2023) in the ICU Room of Sawerigading Hospital, Palopo City, which stated that the majority of nurses (80%) answered that the workload was moderate and some nurses (13.3%) answered that the workload was high, and is supported by research by Hendro Prasetyo (2003) in the ICU installation. Inpatient medical surgical hospital dr. Soebandi Jember Hospital stated that 32 nurses (74.42%) were classified as having a heavy workload, 9 nurses (20.93%) were classified as having a moderate workload, 2 nurses (4.65%) were classified as having a light workload.

Nurse Performance

Nurse performance includes assessments in which there are 5 question items in the questionnaire, planning has 3 question items, implementation has 5 question items, evaluation has 3 question items, communication skills has 3 question items, institutional and professional expectations have 10 question items.

According to the results of this study, inpatient installation is a workplace where the performance of a nurse in providing nursing services uses nursing practice standards. Nursing practice standards are norms or affirmations about the quality of a nurse's work that is considered good, right and correct. In table 5.2, most respondents (57.7%) showed good level performance, a small number of respondents (42.3%) showed poor level performance. good level performance in this study, supported by data 55.8% of respondents recorded quite complete data reviewed according to the assessment guidelines, 57.7% nursing diagnoses based on formulated problems were quite complete, 63.5% nursing diagnoses reflecting PE/PES were quite complete,

71.2% action plans based on nursing diagnoses were quite complete, 69.2% action plans were prepared based on nursing diagnoses were quite complete, 63.5% actions were implemented referring to nursing plans were quite complete, 53.8% all actions that had been recorded briefly and clearly were quite complete, 75.0% evaluation results were recorded quite completely, 80.8% wrote in a standard format quite completely and 59.6% records were in accordance with the actions implemented quite completely, which gave the impression of good work implementation. While the performance is less supported that 61.5% of the data are grouped as incomplete biopsychosocialspiritual, 63.5% of the problems are formulated based on incomplete gaps, 67.3% of the formulation of objectives contains patient components, incomplete behavioral changes, 65.4% of action plans refer to objectives with incomplete command sentences, action plans describe incomplete patient involvement, 75.0 each action includes initials, clear names, dates and times of incomplete and 59.6 nursing record files are filled in accordance with applicable provisions incomplete, which indicates less than optimal nurse performance. This is in accordance with Gilbert's theory, 1997 that performance is behavior displayed by a person according to their field of duty and Robins' performance, 1996 employees are a function of the interaction between ability and motivation.

The results of this study are in line with research conducted by Prasetyo et al. (2003) at the installation Inpatient medical surgical care at Dr. Soebandi Hospital, Jember, stated that 28 nurses (65.12%) were classified as having good performance and 15 nurses (34.88%) were classified as having sufficient performance.

The relationship between workload and performance

In accordance with the hypothesis proposed in the study that there is a relationship between workload and nurse performance, the hypothesis was then tested using the chi square statistical test using an error rate of 0.05, then from the statistical calculations the following results were obtained: From the results of the chi square statistical test calculation, the p value was obtained = 0.019 and the result of X^2 = count = 5.543, this proves that a light workload will indicate good nurse performance and conversely a heavy workload will have an impact on nurse performance in the less category, This excessive workload causes nurses to experience fatigue/saturation and decreased work productivity.

The results of this study are in line with research conducted by Prasetyo et al. (2023) at the installation inpatient medical surgery RS dr. Soebandi Jember stated that From the results of the statistical calculation of the "Correlation Spearman Rho" test, the value of r (rho) = 0.994 was obtained with a significance level of 0.00 (p <0.05), there is a relationship between nurse workload and nurse performance.

CONCLUSION

The description of the workload of nurses at Nene Mallomo Sidrap Hospital is light, with 31 nurses (59.6%). The performance overview of nurses at Nene Mallomo Hospital, Sidrap, is mostly categorized as having good performance, namely 30 nurses (57.7%). There is a relationship between workload and nurse performance (p = 0.019) which means that the lighter the nurse's workload, the better their performance will be.

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