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The Relationship Between Workload and Fatigue Level with Nurse Performance in Inpatient Ward

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ABSTRACT

Nurse performance play role important in ensure quality service health and safety patients at home sick. Demands high jobs in the ward care stay often cause burden hard work and fatigue related work, which can impact negative on performance nurse. Condition this need investigated for ensure service maintenance optimal nursing care. Research this aim for know level burden work, level fatigue related work and performance nurses, and analyze connection between burden work and fatigue related work with performance nurse in the ward care stay House Sari Asih Hospital Karawaci, Tangerang City. Research this use design observational analytic with cross-sectional approach. Population consists of from all over nurses working in the ward care stay House Sari Asih Hospital Karawaci, using technique taking total sample. Data collected use questionnaire burden work , fatigue and performance. Data analysis was Chi-Square test. Research results show that 50.6% of nurses own burden work low and 49.4% have burden work high. Nurses who experience fatigue related work amounted to 52.9%, while 47.1% did not experience fatigue. Nurse performance categorized good in 51.8% of respondents and bad in 48.2%. The Chi-Square test shows significant relationship between burden work and performance nurses ($p = 0.003$) and between fatigue related work and performance nurses ($p = 0.021$). Workload and fatigue related work relate with performance nurse in the inpatient ward of “Sari Asih” Hospital Karawaci City. Managing burden work and prevent fatigue related work required for increase performance nurse.

Keywords : burden work; fatigue related work; performance nurse

Background

Nurse performance is determinant main safety patients and quality service health. Nurse play role important in monitor condition patients, prevent incident safety, providing education, as well as detect error clinical and administrative since early . However, the burden high level of work faced nurse often trigger fatigue work, which has an impact on the decline concentration, accuracy taking decision clinical, and speed response services. A number of study show that burden overwork and fatigue work own connection significant negative with performance nurses, so that increase risk error services and reduce patient satisfaction (1) (2).

Various effort improvement performance nurse has done, such as training clinical, supervision, awards system, and improvements facility work. However, some intervention big still nature partial, no sustainable, and less integrated, so that the impact to practice nursing daily not optimal (3)(4) . Condition lack of strength nurses also make things worse burden work, especially in the office maintenance care stay, which is marked with ratio nurse-patient who does not balance and demands high service .

Global and national data show still existence gap between needs and availability power nurses. In Indonesia, the ratio nurse still below the national target, which has the potential increase burden work and fatigue nurses. Indonesian National Nurses Association survey reported more from half nurse experience fatigue work, both at home Sick or in the facilities primary care (5)(6). Conditions This impact directly to better performance low, increase incident safety patients, as well as weaken culture safety in hospitals (7) .

Survey early in the Inpatient Ward of “Sari Asih” Hospital Karawaci show that part big nurse experience burden work high and tired moderate, with variation performance tend decreased in nurses with burden work more high and tired heavy. Findings this in line with results study previously stated that burden work tall trigger fatigue physical and mental, which ultimately lower performance nurses

and quality of service (2)(8) . Study this aim for analyze connection burden work and level fatigue work with performance nurse in the Inpatient ward of “Sari Asih” Hospital Karawaci, Tangerang City in 2025 as base development policies and interventions improvement quality service nursing.

Methods

Study this use design observational analytic with cross-sectional approach. Focus main study is analyze connection between burden work and level fatigue work nurse in the inpatient ward of “Sari Asih” Hospital Karawaci. Data collected in a way simultaneously in one time without existence intervention from researchers, so that capable describe actual conditions in the field in a way objective .

The number of samples in this study was 85 hospitalized patients, taken using accidental sampling. Criteri inclusion covering nurse active and capable implementer fill in questionnaire in a way independent, whereas criteria exclusion covering nurses on leave length, rotation outside the unit, or own full administrative duties .

Variables independent in study is burden work and fatigue work, while variables dependent is performance nurses. Workload measured use questionnaire NASA-TLX adaptation that includes six dimensions burden work subjective. Scores are categorized become low and high based on mean value. Fatigue work measured use questionnaire KAUPK2 standards that assess aspect weakening activity , motivation , and symptoms physical . The results classified become No tired and exhausted. Nurse performance evaluated through the checklist evaluation self (self assessment) which is arranged based on Standard Procedure Operational (SOP) of the house sick, then categorized become good and bad Good .

Data obtained through distribution questionnaire in a way direct or online. Researchers also conducted interview short for clarify bullet points question use minimize understanding bias. Analysis univariate implemented for describe characteristics respondents, while analysis bivariate done with the Chi-Square (χ^2) test for evaluate connection between variables.

Study this has comply principle ethics basic, including respect to dignity human, guarantee data privacy and confidentiality, as well as principle justice. All respondents has accept explanation deep about objective research and signing sheet informed consent before data is collected .

Results

This section serve results research obtained from data collection through questionnaire to nurse in the inpatient ward of “Sari Asih” Hospital Karawaci, Tangerang City in 2025. Data analysis was carried out for know characteristics respondents, distribution variables research (load work, level fatigue, and performance nurses), and relationships between variables using the Chi-Square (χ^2) test.

Table 1. Characteristics frequency distribution respondents based on age, type gender, education level, employment status, and length of service nurse in the inpatient ward of “Sari Asih” Hospital Karawaci 2025

Characteristics Respondents	Frequency (F = 85)	Percentage (%)
Age		
20-24 Years	18	21.2
25-29 Years	39	45.9
30-35 Years	24	28.2
>35 Years	4	4.7
Type Sex		
Man	12	14.2
Woman	73	85.9
Level of education		
D3 Nursing	48	56.5
Profession Nursing (Ners)	37	43.5
Employee Status		
Contract	55	64.7

Characteristics Respondents	Frequency (F = 85)	Percentage (%)
Still	30	35.3
Length of working		
<1 Year	11	12.9
1-3 Years	40	47.1
4-6 Years	21	24.7
>6 Years	13	15.3

Based on Table 1 can known that part big respondents is at in group age 25-29 years as many as 39 people (45.9%), who showed that majority nurse in the inpatients room be at the age productive young . Based on type sex , some big respondents is women , namely as many as 73 people (85.9%), while nurse man only as many as 12 people (14.2%).

In terms of education, the majority nurse own education nursing diploma three (D3) level as many as 48 people (56.5%), and the remaining 37 people (43.5%) were educated nurse professional. Based on employment status, some big nurse status contract as many as 55 people (64.7%), while 30 people (35.3%) still status employee .

If seen from length of service, the majority nurse have a work period of 1–3 years as many as 40 people (47.1%), followed by 24.7% who worked for 4–6 years , and only part small (12.9%) who work not enough from 1 year. This is show that part big nurse in the inpatients ward of “Sari Asih” Hospital Karawaci own experience enough work and being during productive period for give service maintenance optimal nursing care .

Table 2. Distribution Frequency of Nurse Performance in the Inpatient Ward of “Sari Asih” Hospital Karawaci, Tangerang City in 2025

Nurse Performance	Frequency	Percentage
No Enough	41	48.2
Good	44	51.8
Total	85	100

Based on Table 2, it is known that part big nurse in the inpatient room “Sari Asih” Hospital Karawaci own good performance, namely as many as 44 people (51.8%), while 41 people (48.2%) had poor performance good . This result show that performance nurse in a way general classified as enough well , though still there is part nurses who need improvement in implementation duties and responsibilities the answer is for quality service nursing can more optimal.

Table 3. Distribution Workload Frequency Nurses in the Inpatient Ward of Sari Asih Hospital Karawaci, Tangerang City in 2025

Workload	Frequency	Percentage
Low	43	50.6
Tall	42	49.4
Total	85	100

Based on Table 3, it is known that part big nurse in the room maintenance patient care stay House Sari Asih Hospital Karawaci own burden Work low as many as 43 people (50.6%), while 42 people (49.4%) have burden Work high . This result show that distribution burden Work nurse relatively balanced between category low and high , which indicates existence variation demands Work between nurse in accordance with not quite enough responsibilities and conditions of each work unit that have not been Enough adequate .

Table 4. Distribution frequency of fatigue level nurse in the inpatient ward of “Sari Asih” Hospital Karawaci, Tangerang City in 2025

Fatigue Level	Frequency	Percentage
Not Tired	40	47.1

Tired	45	52.9
Total	85	100

Based on Table 4, it is known that part big nurse in the inpatient ward of “Sari Asih” Hospital Karawaci experience fatigue , namely as many as 45 people (52.9%), while 40 people (47.1%) did not experience fatigue. This result show that more from half nurse feel level fatigue in operate his duties, which can caused by factors burden work, long hours, and demands work salaried high in the Hospital.

Table 5. Workload relationship with nurse performance in the inpatient ward of “Sari Asih” Hospital, Karawaci, Tangerang City in 2025

Workload	Nurse Performance						P value
	No Enough		Good		Total		
	F	%	F	%	F	%	
Low	14	16.5	29	34.1	43	50.6	0.003
Tall	27	31.8	15	17.6	42	49.4	
Total	41	48.2	44	51.8	85	100	

Based on table 5, results analysis show that nurse with burden work low own good performance, namely as many as 29 people (34.1%), while nurse with burden ork tall own poor performance good , that is as many as 27 people (31.8%). The results of the Chi-Square test were obtained p value = 0.003 (< 0.05) which means there is connection significant between burden work with performance nurse in the inpatient ward of “Sari Asih” Hospital. This is show that the more tall burden work received nurse , then tend the more low level its performance .

Table 6. Relationship between Fatigue Levels with Nurse Performance in Inpatient ward of “Sari Asih” Hospital Karawaci, Tangerang City in 2025

Fatigue Level	Nurse Performance						P value
	No Enough		Good		Total		
	F	%	F	%	F	%	
Not Tired	14	16.5	26	30.6	40	47.1	0.021
Tired	27	31.8	18	21.2	45	52.9	
Total	41	48.2	44	51.8	85	100	

Based on Table 6, results analysis show that nurses who do not experience fatigue tend own good performance , namely as many as 26 people (30.6%), while nurses who experience fatigue tend own poor performance good , that is as many as 27 people (31.8%). The results of the Chi-Square test showed p value = 0.021 (< 0.05) which means there is connection significant between level fatigue with performance nurse in the inpatient ward of “Sari Asih” Hospital. Findings this show that the more tall level fatigue experienced nurse, then the more low performance is also shown in implementation task nursing .

Discussion

Analysis results univariate show that majority respondents is nurse age productive (25–35 years), dominated by women, with level associate nursing expert and nursing profession, and length of service relatively short (1–3 years). Characteristics this describe composition nurses who are physique still optimal, but in matter experience and stability work still in phase adaptation. Findings this in line with statement that nurse age productive tend own ability good job, but still prone to to pressure demanding work adaptation professional (8).

Most of the respondents status contract, which according to research resulth can increase pressure psychological related evaluation performance and uncertainty career (9). Condition This potential influence perception burden work , fatigue , and performance . In addition that , the difference background behind education level (associate nursing expert and nursing profession) allows existence variation in ability clinical , responsible response responsibility and demands work received nurses.

Workload nurse in study this divided almost balanced between category low and high. Variations

this show that intensity work in the room maintenance no distributed in a way evenly distributed among nurse, but more influenced by the number patient, complexity case, assignment administrative, and shift systems. Findings this in line with states that burden Work nurses are greatly influenced by demands physical, mental, and time in every work shift (11).

Fatigue level nurse show that more from half respondents experience fatigue. Fatigue covers aspect physical, mental, and emotional, which many experienced by nurses with long working hours and demands high accuracy. These results consistent with states that fatigue work as nurse is problem common in the room care and can develop become condition chronic if no managed with good (12)(13).

Nurse performance in study this relatively balanced between category good and bad good. Although part big nurse show good performance, proportion nurse with poor performance adequate still enough big and necessary get attention. The most affected aspect is accuracy time, effectiveness actions, and completeness documentation. This is in line with opinion, that burden work and pressure work impact straight to quality service and documentation nursing (14).

Analysis results bivariate show existence connection significant between burden work and performance nurses ($p = 0.003$). Nurses with burden work tall tend own better performance good compared to nurse with burden work low. Findings this strengthen theory that burden work that is not balanced can lower effectiveness work, improve fatigue, and has an impact on decreasing quality nursing services (15).

Research result this consistent with research which shows that burden high work relate with increasing stress work, fatigue emotional, and declining motivation, which in the end influence performance nurses (14)(16). Besides factor organization, motivation work and support the environment also plays a role as factor protector. research result explained that nurse with motivation tall capable maintain performance although face burden hard work (17).

Besides that, research this also found connection significant between level fatigue and performance nurses ($p = 0.021$). Nurses who experienced fatigue tend show better performance low. Fatigue influence concentration, accuracy, and speed response, which is very important in service nursing. that fatigue work is factor main decline performance and improvement risk error work findings (18)(19).

Fatigue No only nature physical, but also emotional and psychological. Fatigue emotional is consequence from pressure prolonged work that can lower empathy and motivation of nurses (20). Organization supporters, environment conducive work, as well as management good time become factor important in control fatigue and maintaining performance (21)(22).

Studies this own limitations because only analyze two variables main, so that not yet can describe the most influential and dominant factors to performance nurses. The cross-sectional design also limits withdrawal conclusion cause and effect. Besides that, research this not yet measure ratio nurse-patient, distribution task between shifts, as well as factor adaptation individuals who are likely influence perception burden work, fatigue, and performance.

Research result show that nurse still capable maintain relative performance good although is at in condition burden enough work weight and level high fatigue, which indicates the existence of an adaptation process professional. However, adaptation the not yet can made into base for maintain burden high work in a way sustainable. Findings this implies importance management burden work, settings shift system, as well as support organization so that performance nurse can maintained optimally and sustainably.

Conclusions and Recommendations

Studies this show that burden work and level fatigue relate significant with performance nurse in the inpatient ward of "Sari Asih" Hospital Karawaci, Tangerang city in 2025. Nurse with burden work more height and level fatigue tall tend show better performance low, although in a way general performance nurse still in category enough good. Findings this show that demands sustainable work can influence ability nurse in do maintenance nursing optimally.

Research result this confirm importance management burden work, settings system work and shifts, as well as effort prevention fatigue as an improvement strategy performance nurse. Findings this also provides base for development policy management nursing and becoming reference for institution education as well as studies more carry on in research other factors that influence performance nurse.

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