

Relationship between Workload and Nurses Caring Behavior in the Inpatient Room of Sultan Agung Islamic Hospital Semarang

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ABSTRACT

Nurses are among the employees who make a significant contribution to the hospital's success as a provider of good services and public satisfaction. Hospitals need to ensure that there is no excessive workload (*overload*), which can influence the level of nurses' work in providing nursing care based on behavior *caring*. This study aims to determine the relationship between the level of workload and employee behavior *caring* demonstrated by nurses working in the inpatient room of Sultan Agung Islamic Hospital Semarang. This study used a quantitative research design using a descriptive approach *cross-sectional*. This study was conducted in July 2024 with a sample of 72 nurses. The majority of nurses experienced a moderate workload, with the highest physical demands and the highest behavioral demands *caring* good with the lowest indicator in the aspect *connectedness*. Statistical test results *rank spearman* obtained p-value of 0.000 and r -.690, so it can be concluded that there is a strong and significant relationship between the level of workload and employee behavior *caring* nurse in the inpatient room.

Keywords: Workload, behavior *caring*, nurse

Introduction

Nurses are among the employees who contribute significantly to the success of hospitals as providers of excellent and satisfying services to the community. Nurses spend most of their time, 24 hours a day, interacting directly with patients, their families, and the general public in the hospital environment (Q. Wuwung, 2020).

Nursing care is one of the most important healthcare services provided in hospitals, as nurses constitute over 60% of all hospital employees. Improving the quality of healthcare services in hospitals is crucial both nationally and globally, driven by the growing public demand for hospital-based healthcare services (Intan Rizkianti, 2020).

Patient satisfaction with the professional care they receive is likely to motivate them to use these services again in the future. Therefore, providing quality psychological care to patients can have a significant impact, indicating that nurses should consider implementing a psychological approach to nursing (Belladonna, Istichomah, & Monika, 2020).

Behavior *caring* is a moral ideal of nursing that aims to help, guide, or take steps to assist individuals or other groups in achieving certain goals by addressing actual or predicted needs to improve the conditions of human life. Behavior *caring* Nurses can be demonstrated through attention, appreciation, willingness and readiness to meet medical needs with empathy (Pardede, Simamora, & Irwan, 2020).

Patients are holistic beings with diverse biological, psychological, social, and spiritual needs. However, because nurses focus solely on physiological needs while in the hospital, these holistic needs are not met. High workloads often leave nurses feeling overwhelmed, especially when work demands exceed their expected limits. This can impact the quality of nurses' performance in providing caring services to patients (Q. Wuwung, 2020).

Excessive workload can cause tension and stress. This can be caused by several factors, such as excessive demands on skill levels, high work

speed, large work volumes, and so on (Sunyoto in Maharani et al., 2019).

High workloads on nurses have the potential to lead to burnout, decreased empathy, responsiveness, and compassion for patients, and decreased performance. Workload is also a major factor influencing mental health, stress, job satisfaction, and burnout, which can negatively impact patients, nurses, and hospitals *caring*, which is based on values such as care, compassion, and respect for the patient's spiritual beliefs, is at the heart of nursing practice (Herman, 2021).

Researchers conducted a preliminary study in the inpatient ward of Sultan Agung Islamic Hospital in Semarang using interviews with several nurses for data collection. The study results showed that three of the five nurses reported that the calculation of nursing staff needs was not fully optimized, potentially increasing the nurses' workload. Furthermore, the nurses indicated that they had made efforts to implement caring behaviors optimally. However, they acknowledged obstacles to optimally implementing caring behaviors, particularly when the number of patients increased, as this condition required nurses to carry out various nursing actions simultaneously.

This aligns with a study conducted by Padila & Andri (2022) involving 35 nurse respondents, which found that 61.3% of nurses experienced high workloads. These results indicate that the disproportionate number of healthcare workers and nurses to the workload negatively impacts workload overload.

Based on the above phenomenon, where the nurses' workload has increased and the provision of care has not been optimal *caring* nurses, Therefore, researchers are interested in conducting research to find out whether there is a relationship between workload and nurse behavior *caring* to nurses in the inpatient ward of Sultan Agung Islamic Hospital Semarang.

Research methods

This research uses a quantitative research design with a descriptive approach *cross-sectional* which aims to describe the relationship between variables at a certain point in time. The variables studied are the level of workload and employee behavior *caring* nurse.

The sample size for this study was 72 nurses. Sampling was determined using a random sampling technique *proportionate stratified random sampling*, that is where the process of selecting samples from the population is carried out randomly without considering existing groups or strata, thus

providing an equal opportunity for each member of the population to be selected as a research sample.

The data collection process in this study was carried out using the Nasa-TLX research instrument to measure the level of workload and the CBI-24 to measure work behavior *caring*. The study was conducted in the inpatient ward of Sultan Agung Islamic Hospital, Semarang, during July 2024.

Data analysis was carried out using a correlation test *rank spearman* because in this study the data was not normally distributed so that it met the requirements for the correlation test (*p-value* <0.05). Next, the collected data will be analyzed further using *software* SPSS 26.

The implementation of ethics in this research is carried out with basic ethical principles including *anonymity, beneficence, justice, dan non-maleficence*. This research has been declared to have passed ethical testing with the number *ethical clearance*: No.132/KEPK-RSISA/VII/2024) by RSI Sultan Agung Semarang.

Results and Discussion

Results

Based on research that has been conducted, of the 72 implementing nurses who provide nursing care in the inpatient ward of RSI Sultan Agung Semarang, based on gender, it shows that the majority of nurses are female, namely 58 nurses (80.6%).and 14 male nurses (19.4%).

Based on the age distribution of nurses, the average age is 32 years with a minimum age of 24 years and a maximum age of 43 years. Based on the length of service, nurses have worked for an average of 9 years with a minimum service period of 1 year and a maximum of 21 years.

Based on the nurses' last level of education, it shows that the majority are at the D3 Nursing education level, as many as 35 nurses (48.6%), followed by Professional Nursing as many as 26 nurses (36.1%) and S1 Nursing as many as 11 nurses (15.3%).

Based on the level of nurse workload, the majority of nurses experience a moderate workload with a total of 45 nurses (62.5%), followed by 14 nurses (19.4%) with a light workload and 13 nurses (18.1%) experiencing a heavy workload. Based on the dimensions of the workload elements, the highest nurse workload is influenced by *physical demand* (21.8%), followed by *effort* (19,6%), *performance* (19,1%), *mental demand* (16,7%), *temporal demand* (14.5%) and the lowest dimension is *frustration* (8,3%).

Based on the level of behavior *caring* nurses show that the majority of nurses behave *caring* good as many as 40 nurses (55.6%), followed by 32

nurses (44.4%) with good behavior *caring* good enough and behavior *caring* less good as much as 0 (0%). Based on behavioral indicators *caring* shows that the majority of respondents are in the fairly good category for all behavioral indicators *caring*. On the indicator *Assurance*, 58.3% of respondents were in the fairly good category, while 41.7% were in the good category. Indicators *Knowledge and Skill* as well as *Respectfulness* showed a similar pattern, with 56.9% in the fairly good category and 43.1% in the good category, respectively. The indicators *Connectedness* shows that the majority of respondents (62.5%) are in the fairly good category, with 37.5% included in the good category, with no respondents included in the less good category.

Distribution *scatter plot*, shows that the relationship between workload and behavior *caring* nurses tend to be negative, meaning the higher the workload, the lower the behavioral value *caring* nurses and vice versa. This can be seen from the slope of the regression line which decreases from the top left to the bottom right.

The equation of the regression line with ($y = 1.08E2 - 0.42x$), means that every 1 unit increase in workload will be associated with a decrease of approximately 0.42 units in behavior *caring* nurses, on average. This result is supported by a correlation test *rank spearman* which shows a correlation value of p-value (0.000) and r value (-.690), indicating a statistically significant relationship.

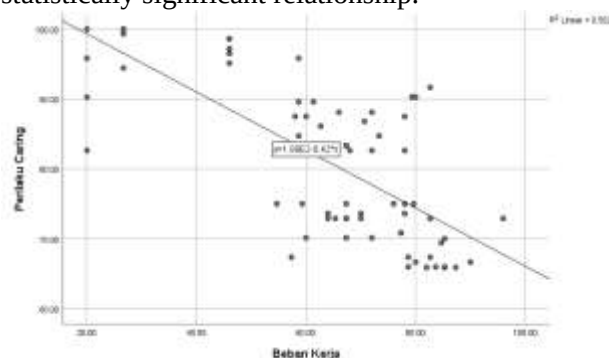


Figure 1. Distribution of Workload with Nurses' Caring Behavior (n=72)

Discussion

The gender characteristics of nurses in the inpatient ward at Sultan Agung Islamic Hospital in Semarang indicate that the majority are female. This aligns with the findings of Sampouw et al. (2022), who found that female nurses comprised more than a third of the total respondents in the study. This phenomenon aligns with the status of nurses in Indonesia within the Indonesian National Nurses Association (PPNI), where the majority (70.2%) are female (Ministry of Health of the Republic of Indonesia, 2023).

According to Ruditya & Chalidyanto (2015), citing Zelezny and Schultz's theory, a person's behavior is influenced by the socialization process, where individuals are shaped by cultural norms and values applied to a particular gender. Therefore, both male and female nurses have the same caring attitude toward patients and are highly motivated in providing nursing care.

Respondent characteristics based on age in the inpatient ward of Sultan Agung Islamic Hospital Semarang show that the average age of the majority of nurses is 32 years. A study by Anggari et al. (2018) showed that most hospital nurses are around 30 years old, which is considered productive age. This is also consistent with research conducted by Kristianingsih et al. (2022) that age >30 years is the peak period of intellectual development.

This is in line with research by Anggoro et al. (2019), which states that a nurse's age is often related to their level of maturity and experience, which influences how they handle tasks and responsibilities in their work. As nurses get older, their ability to manage stress and make decisions increases. These abilities support nurses in making wise decisions and improving their behavior *caring* in nursing practice.

Respondents' educational background in the inpatient ward at Sultan Agung Islamic Hospital in Semarang showed that the majority of respondents had a Diploma 3 in Nursing. This contrasts with the research findings of Kristianingsih et al. (2022), which showed that educational factors significantly influence work behavior.

According to Anggoro et al., (2019), higher levels of nursing education will make nurses feel more confident, including in terms of professionalism, motivation, and performance quality. Although the majority of nurses in this study had D3 nursing degrees, nurses consistently believe that their educational advancement is commensurate with their abilities, thus encouraging nurses to continuously improve the quality of nursing care services.

Respondent characteristics based on length of service in the inpatient ward at Sultan Agung Islamic Hospital Semarang showed that the majority of nurses had worked for an average of more than 9 years. This is consistent with research by Kristianingsih et al. (2022), which found that nurses had worked for more than 5 years.

Nurses with longer tenure have more experience and contribute more, enabling them to provide better care. This experience also increases nurses' capacity to handle various scenarios and provide better care to patients (Ramadhiani & Siregar, 2019).

Therefore, the experiences a person, especially nurses, has, will shape and influence their understanding of social stimuli. Therefore, greater experience will improve behavior *caring* nurse.

The distribution of nurses' workloads is predominantly in the moderate workload category. This analysis aligns with research by Kartika (2020), which found that the majority of nurses have a moderate workload (92.5%). Prasetyawati et al. (2022) also reported that the majority of nurses have a moderate workload (51.5%).

The nurses' workload can occur for several reasons, such as an increase in the number of patients, a lack of human resources, long working hours, and complex work demands (Ceviriana Novi Kurniawati & Asnet Leo Bunga, 2024). Demur et al., (2019) stated that the nurses' workload is inappropriate when the time required by the nurses to carry out activities, both directly and indirectly, in providing nursing services to clients exceeds 80% of the optimal productive standard.

The results of the questionnaire analysis based on workload elements indicate that physically demanding activities affect the nurses' workload, as most nursing tasks require physical activity such as moving patients, controlling wards, and other physically demanding tasks (Arasyandi & Bakhtiar, 2016). Meanwhile, the nurses' frustration level was the lowest, indicating that nurses did not feel annoyed, stressed, or disturbed at work (Rahmadani, 2024).

The nursing workload in the inpatient ward of Sultan Agung Islamic Hospital in Semarang is primarily due to the simultaneous increase in patient numbers and inadequate assessment of nursing staffing levels. This impacts the efficiency of nursing services and standards of behavior *caring*. Therefore, it is crucial to improve the workforce management system, which involves assessing nursing staffing needs and optimizing workload management, to ensure the quality of care and the well-being of nurses.

Distribution of behavior *caring* the majority of nurses behave *caring* in the good category. This analysis is in line with research by Yupartini et al., (2021) which shows that nurses have good behavior *caring* towards their patients. Sitorus & Wulandari, (2020) also conveyed the importance of demonstrating caring behavior *caring* towards patients.

Behavior *caring* Nurses must still implement this, as providing patient care requires not only physical care but also psychological support, which nurses can provide through their body language during interactions with patients. Therefore, nurses who are aware of their responsibilities will strive to

maintain and improve the quality of their nursing care.

The results of the study show that of the four behavioral indicators *caring* on the indicator *knowledge and skill* is the highest, while the behavioral indicators *caring* the lowest level of implementing nurses is in the indicator *connectedness*.

Research by Al-Awamreh & Suliman (2019) shows that nurses' knowledge and skills significantly contribute to patient satisfaction and the quality of nursing care. Meanwhile, research by Adib-Hajbaghery & Tahmouresi (2018) suggests that good connectedness not only increases patient satisfaction but can also improve patient health outcomes. Patients who feel connected to their nurses tend to have more positive care experiences and are more satisfied with the services they receive.

The results of this study show a significant relationship between nurses' workload and behavior *caring* nurses in the Inpatient Ward of Sultan Agung Islamic Hospital Semarang. The results of this study are in line with research conducted by Tusnia et al., (2017) which stated that nurses' workload is the main variable influencing nurses' behavior *caring*. In the research by Kaunang et al., (2023) it was also stated that there is a relationship between workload and behavior *caring* nurse.

According to researchers, the high workload of nurses can influence behavior *caring*. This leads to a decline in the quality of nursing care. Under these conditions, nurses often struggle to perform optimally and professionally, especially when the workload becomes too heavy.

This is in line with research by Kaunang et al., (2023), which revealed that a high workload can reduce nurses' motivation to implement behavior *caring* towards clients. Excessive workloads risk reducing the level of care and attention nurses provide to patients. Therefore, the majority of behaviors *caring* the nurses in this study were in the good category, so it is a challenge for each individual nurse to continue to build, maintain and improve behavior-based nursing services *caring* consistently.

Conclusion

Based on the research results, the majority of respondents were female (80.6%), with an average age of 32 years, a Diploma III in Nursing (48.6%), and an average length of service of more than 9 years. The workload of nurses in the inpatient ward of Sultan Agung Islamic Hospital Semarang was mostly in the moderate category, with 45 respondents (62.5%). Furthermore, the nurses'

behavior *caring* most nurses were in the good category, namely 40 respondents (55.6%).

The results of the analysis test show that there is a significant relationship between nurses' workload and behavior *caring* nurses in the inpatient ward of Sultan Agung Hospital Semarang with a value of *p-value* 0,000 ($p < 0.05$). The closeness of the relationship is included in the strong category with a positive correlation direction. This finding shows that the higher the nurse's workload, the higher the nurse's behavior *caring* nurses are getting lower.

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