

# The Dynamics of Workload, Work Shifts, and Work Stress: Implications for Nurse Performance in Inpatient Wards at Military Hospital X

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## ABSTRACT

Nurse performance is a crucial factor in ensuring the quality of hospital services, particularly in inpatient wards, which face high workload pressure and intensive shift work systems. This study aims to analyze the effect of workload and shift work on nurse performance, with work stress as a mediating variable at military hospital X. Using a quantitative approach with Partial Least Squares (PLS) analysis and involving 85 inpatient nurse respondents, the results showed that workload had a significant positive effect on performance but not on work stress; while shift work had a significant positive effect on work stress but did not affect performance. Another important finding is that work stress significantly mediated the relationship between shift work and performance, but did not mediate the relationship between workload and performance. This study confirms that intensive shift work combined with a shortage of workers can increase work stress, which in turn acts as adaptive and productive stress in improving performance, especially when supported by factors such as self-efficacy, military organizational culture, and nurse work resilience.

**Keywords:** *Workload, Shift Work, Work Stress, Nurse Performance*

## INTRODUCTION

Nursing care is the spearhead of hospital service quality. However, nurses often face work challenges, particularly in terms of workload and a busy shift system. In this study, increased patient flow and patient turnover can impact nurses' workloads by reducing patient preparation time. Furthermore, the number of nurses per shift is inadequate compared to the number of inpatients. There are also differences in the length of work hours in nurses' shift schedules, with some working more than 40 hours per week on average. Inpatient nurses' days off do not coincide with typical days off, such as Sundays or national holidays, so their days off are random, following the available shift schedule.

Furthermore, shift rotation is not clockwise; rather, the shift schedule is irregular or random. Irregular shift work can impact nurses' psychological health and lead to fatigue, anxiety, depression, stress, and sleep disturbances (Alghamdi & Bahari, 2025).

There is an influence between workload and performance, such as physical workload, which can trigger fatigue. There is also a significant relationship between the number of patients treated in the inpatient ward and the type of care activities with the performance of nurses in hospital inpatient wards (Andiani & Jayanagara, 2023), (Yunaspi et al., 2020), (Mulatta & Waskito, 2024), (Sugiharto & Handayani, 2024). A

heavy workload can trigger negative effects on employees, such as increased stress and decreased health, which can affect employee performance (Firjatullah et al., 2023), (Saedpanah et al., 2023).

Furthermore, irregular shift work hours can affect nurses' psychological health, such as fatigue, anxiety, depression, stress, and sleep disorders. It also decreases the quality of patient care. Nurses experiencing stress and fatigue can experience decreased cognitive function, which impacts decision-making and concentration, also affecting nurse performance. (Alghamdi & Bahari, 2025) Furthermore, it has been stated that work shifts and work stress also affect performance. (Nyarko et al., 2024), (Alsharari et al., 2021), (Arini, 2021), (Ernawati et al., 2023), (Andi Mastay Amirah et al., 2022).

Issues regarding workload, shift schedules, and work stress not only impact nurses' personal well-being but can also reduce the quality of healthcare provided to patients and impact hospital quality. Previous research has shown mixed results regarding the effect of workload and shift work on nurse stress and performance, depending on the organizational context and different working conditions.

Hospital X, as a military-based hospital, has a unique work system, high discipline, and demands for professionalism that can influence the dynamics of stress and performance. Therefore, this study aims to analyze the influence of workload and shift work on nurse performance, with work stress as a mediating variable, in the context of a military hospital. The results are expected to provide a basis for strategic and adaptive nursing human resource management in a high-pressure work environment.

## LITERATURE REVIEW

### Workload

Workload is a work condition in the form of work tasks that must be completed within a certain timeframe, both quantitatively and qualitatively (Sugiharto & Handayani, 2024). A high nurse workload causes fatigue

and exhaustion (Ilyas, 2014). A very high nurse workload can be felt by requiring more time and precise timing to complete work, requiring greater concentration while working, and experiencing difficulty completing work. Furthermore, nurses also experience psychological exhaustion, stress, and frequent confusion while working (Andiani & Jayanagara, 2023).

Two factors influence workload (Firjatullah et al., 2023): external factors in the form of tasks related to responsibilities and complexity of the work; work organization such as length and work system; the work environment; and external factors in the form of somatic factors such as gender, nutrition, health conditions, and psychological factors such as motivation and confidence. There are three indicators of workload (Koesomowidjojo, 2017): targets to be achieved, work conditions, and time utilization.

### Shift Work

Shift work is a period of time that requires workers to perform regular work tasks, performed in groups over 24 hours. It is a standard method of professional practice for nurses, as hospitals and nursing services operate 24 hours a day (Ernawati et al., 2023) and (Alsharari et al., 2021).

The impacts of shift work can include fatigue, anxiety, depression, and stress, which can lead to decreased cognitive function, which impacts decision-making and concentration (Alghamdi & Bahari, 2025). Furthermore, night shift work is associated with poor performance and low adoption of safety indicators when the shift is performed on a rotating shift schedule (Alsharari et al., 2021). It also worsens nurses' alertness and work performance, and risks reducing the quality of care (Amiard et al., 2023). Indicators of a shift work system, according to (Ekaningtyas, 2016), include shift duration, number of workers, shift rotation speed, shift rotation direction, rest periods, holidays, and the regularity of the shift schedule.

## **Work Stress**

Stress refers to an imbalance between perceived demands and an individual's perceived ability to respond to them, with emotional, cognitive, behavioral, and physiological indications (Wisudawan B et al., 2024). Stress has been used as a psychological precursor to disease, as a result of a number of conditions, anxiety reactions, discomfort, or those under a lot of pressure. Stress reactions are full of commonly known symptoms such as fear, anxiety, and anger.

Research studies conclude that factors such as age, nursing role status, length of service, nursing field, and interpersonal needs are related to the dimensions of stress (Wisudawan B et al., 2024). The limited capacity of nurses compared to the number of patients causes nurses to experience fatigue in their work. Work stress can also affect employee performance, such as piling up work that must be completed within a certain time (Andi Masti Amirah et al., 2022), (Ernawati et al., 2023). Some indicators of work stress include workload, leadership attitudes, work hours, conflict, communication, and work authority (Hasibuan, 2020).

## **Nurse Performance**

Work performance, or success/failure, is the result of human resource performance, both qualitatively and quantitatively, achieved by employees in carrying out assigned tasks according to their job responsibilities (Mangkunegara, 2016); (Ilyas, 2004).

Individual performance within an organization/company is assessed through employee performance evaluations to determine whether the company/organization is developing or not. A performance appraisal system serves as a medium for obtaining general information, payroll systems, promotions, disciplinary actions, and retirement (Marquis, B. L., & Houston, 2006).

Nurse performance is the work results demonstrated by nurses in carrying out their duties according to professional standards, capable of carrying out work well, effectively, efficiently, and productively in accordance with the goals of the hospital organization (Bakti et al., 2024). Indicators for measuring employee performance include work quality, work quantity, timeliness, effectiveness, and independence (Robbins, Stephen P., 2016).

## **Research Methods and Data**

This study employed a quantitative approach based on a positivistic paradigm, aiming to address the formulated research questions by examining the relationships between variables. The research design employed was explanatory, explaining the direct and indirect influences between variables through their mediating role. Data were analyzed using descriptive statistics to describe the characteristics of respondents and variables, and inferential statistics to test the established hypotheses. The inter-variable influence test was conducted using the Partial Least Squares (PLS) method using SmartPLS software, which is capable of processing complex structural models even with a relatively limited sample size.

The population was all nurses at military Hospital X, with a total sample size of 85 inpatient nurses drawn using total sampling or census techniques (Jaya, F P, 2025). Data were collected through a closed-ended questionnaire based on a 1–5 Likert scale, covering variables such as work shift, workload, job stress, and nurse performance. Each variable was measured using indicators whose validity and reliability had been tested. Data analysis was performed using Partial Least Squares (PLS) using SmartPLS 3.0 software to examine the relationships between variables and the role of mediators. The conceptual framework of this study is presented below.

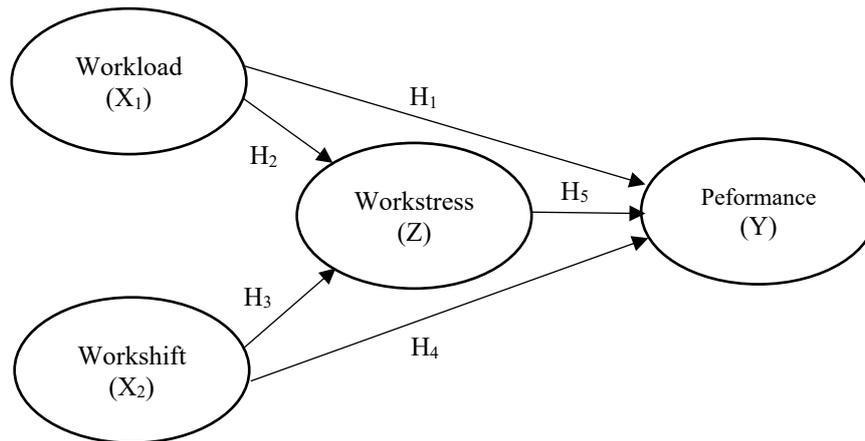


Figure 1. Conceptual Framework

**Results of Analysis and Hypothesis Testing**

**a. Outer Loading Test (Validity Test)**

The results of the Partial Least Square (PLS) Output in the Outer Measurement Model or validity test show that the results of all Workload indicators (X1), Work Shift indicators (X2), Work Stress indicators (Z) and Performance indicators (Y) are declared

valid with all indicator values above 0.7. Convergent validity is carried out by looking at the validity indicators indicated by the outer loading value which is the correlation number between the indicator and its construct, an indicator is said to meet convergent validity if it has an outer loading value > 0.7 (Ghozali, Imam, 2015).

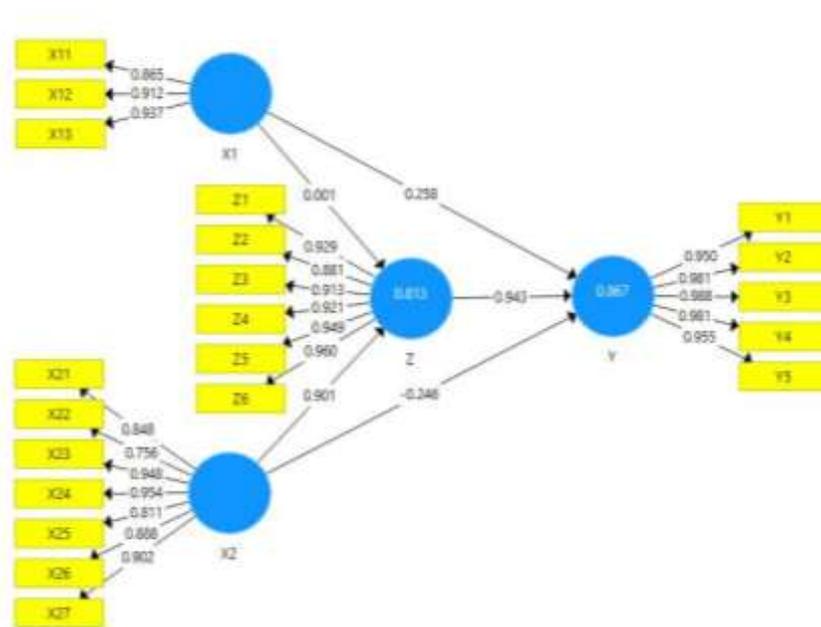


Figure 2. PLS Output of the Relationship Between Variables

**b. Reliability Test**

Calculation of the reliability value of the 4 variables, it is known that the Composite Reliability result is > 0.70, meaning that all of these variables are reliable or their reliability can be trusted (Ghozali, Imam, 2015).

	Composite Reliability
X1	0,931
X2	0,958
Y	0,988
Z	0,973

Table 1. Composite Reliability

**c. Structural Model Test**

Subsequently, the inner model assessment can be evaluated through the R-Square (R<sup>2</sup>) value.

	R Square
Y	0,867
Z	0,813

**Table 2. R-Square (R<sup>2</sup>)**

Based on the table above, the Q<sup>2</sup> value is obtained using the latent variable equation as proposed by Solimun (2010).

$$Q^2 = 1 - (1 - R_1^2) (1 - R_2^2) (1 - R_n^2)$$

$$Q^2 = 1 - (1 - 0,867) (1 - 0,813)$$

$$Q^2 = 1 - (0,133) (0,187)$$

$$Q^2 = 1 - 0,024871$$

$$Q^2 = 0,975129 \approx 0,975$$

Based on the analysis results, the Q<sup>2</sup> value of 0.975 indicates that the model is very good, meaning that the variables included in the model are able to explain 97.5% of the phenomenon of nurse performance, while the remaining 2.5% is explained by other variables not included in the model and by error.

**d. Hypothesis Testing**

Subsequently, hypothesis testing was conducted. A research hypothesis is considered acceptable if the p-value is below 0.05. The following presents the path coefficient values and p-values obtained from the structural model (inner model) analysis.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Workload(X1) → Job Performance(Y)	0,258	0,260	0,082	3,164	0,002
Workload (X1) → Work Stress (Z)	0,001	0,006	0,131	0,008	0,993
Work Shift (X2) → Work Stress(Z)	0,901	0,900	0,124	7,275	0,000
Work Shift(X2) → Job Performance (Y)	-0,246	-0,234	0,140	1,758	0,079
Workload (X1) → Work Stress (Z) → Job Performance (Y)	0,001	0,004	0,123	0,008	0,993
Work Shift (X2) → Work Stress (Z) → Job Performance (Y)	0,850	0,838	0,159	5,359	0,000

**Table 3. Result of Path Coefficients**

Based on the table above, the results of the hypothesis testing are as follows:

1. Workload has a significant positive effect on nurse performance with a coefficient of 0.258 and a p-value of 0.002 (<0.05).
2. Workload does not significantly affect nurse work stress with a coefficient of 0.001 and a p-value of 0.993 (<0.05).
3. Work shifts have a significant positive effect on nurse work stress with a coefficient of 0.901 and a p-value of 0.000 (<0.05).

4. Work shifts do not significantly affect nurse performance with a coefficient of -0.246 and a p-value of 0.079 (>0.05).
5. Workload and work shift simultaneously significantly affect nurse performance through work stress. However, only work shifts contribute significantly to the mediation pathway, with a coefficient of -0.850 and a p-value of 0.000 (>0.05).

**Research Discussion and Implication**

**1. Workload on Nurse Performance**

The results indicate that workload has a significant positive effect on nurse performance in the inpatient ward of Hospital X. This finding is supported by the characteristics of nurses, the majority of whom have a Diploma (D3) education and are nursing professionals (81.2%), and have more than 5 years of service (40%), indicating they possess sufficient academic capacity, work experience, and skills to manage their workload professionally. This is also supported by the high score on the "targets to be achieved" indicator, indicating that nurses are capable of completing tasks according to hospital service standards.

Organizationally, Hospital X operates under a military structure with a clear command system through the roles of the Head of the Hospital Unit (Karu) and the Head of the Team (Katim), enabling effective team collaboration. This is relevant to the Human Capital theory of Becker (1993) and Lengnick-Hall & Cynthia (2003), as cited in (Kaloko et al., 2025), which emphasizes that individual education, skills, and capabilities support work productivity. Furthermore, teamwork support also strengthens work resilience and efficiency, as Sitepu (2025) noted that solid team collaboration can improve work effectiveness and service quality.

On the other hand, high workloads are not perceived as a psychological burden because nurses are accustomed to a disciplined and hierarchical work culture and demonstrate high self-efficacy and adaptability (Bandura, 2012). This finding is further reinforced by high performance indicators for work quality and quantity, in line with Performance Theory (Mangkunegara, 2016), which states that work performance or achievement is the qualitative and quantitative results achieved by an employee in carrying out their duties in accordance with their assigned responsibilities. Workload indicators also demonstrate nurses' positive perceptions of their work.

Furthermore, work motivation is also a crucial factor; Both intrinsic motivations, such as readiness and the call to duty as a

civil servant, and extrinsic motivation, such as performance evaluations and opportunities for promotion. According to Locke's (1968) Goal Setting theory, as cited by Mellyani & Suhardi (2025), specific and challenging goals can enhance motivation and performance, as seen in this context.

This research also aligns with the findings of Yunaspi et al. (2020), Mellyani & Suhardi (2025), and Sugiharto & Handayani (2024), which demonstrate a positive relationship between workload and performance when supported by good management and motivation. Conversely, these findings contradict research by Firjatullah et al. (2023), Larasati et al. (2023), and Syaputra & Lidya Martha (2024), which states that high workloads reduce performance because they trigger physical, mental, and social stress.

It can be concluded that in the context of a military hospital with a clear management system, strong team support, and an adaptive organizational culture, nurses' resilience is fostered, enabling them to cope with high workloads rather than become obstacles but instead trigger improved performance. Consequently, hospital management needs to maintain nurses' positive perceptions of workload by strengthening competency training, self-efficacy, and implementing a fair incentive system.

## **2. Workload on Work Stress**

The results of this study indicate that workload does not significantly influence nurses' work stress in the inpatient ward of Hospital X, which can be explained by various factors. The majority of respondents were married women, who therefore possess multitasking abilities and psychological resilience due to role accumulation, in line with the theory (Sieber, 1974 in Maharani et al., 2020), which states that role accumulation can have more positive impacts than negative ones. Furthermore, if someone maintains internal motivation despite experiencing stress, they can balance work and personal life.

Support from team leaders also acts as a buffer against work stress, in line with the

findings of Feng et al. (2023) regarding the benefits of role accumulation in improving career adaptability through self-efficacy and social support. A work experience of more than 5 years for most respondents indicates adequate work experience that supports cognitive appraisal skills, as explained by Lazarus & Folkman (1984) in Kurniawan et al., 2023. Cognitive appraisal refers to the process of an individual assessing the situation at hand. In this case, a positive secondary appraisal strategy enables nurses to view the workload as manageable.

Coping strategies, according to Lazarus, R.S. & Folkman, 1984, suggest that stressful situations can have detrimental effects both physiologically and psychologically. Individuals will not allow these effects to persist and will take action to address them, known as coping strategies. Coping strategies, particularly emotion-focused coping (Burt & Katz, 1988) in Arishanti (2024), include relaxation, social support, and emotional adjustment. Ganster & Rosen (2013) in Arishanti (2024) add that the ability to regulate emotions is closely related to psychological well-being. High self-efficacy is also a key factor, as an individual's confidence in completing tasks can mitigate work stress, as suggested by Gil-Almagro et al. (2024), who stated that self-efficacy plays a mediating role between anxiety and psychological resilience (hardiness).

This research is supported by the findings of Rahmawati et al. (2020), which showed no relationship between workload and work stress, and that organizational standards and personality moderated the impact of workload. Conversely, these results are inconsistent with those of Ilahi et al. (2023), who found that workload significantly influenced nurses' work stress in a psychiatric hospital.

Thus, it can be concluded that nurses' work stress is more influenced by perceptions, experiences, self-efficacy, coping strategies, and social support than by the sheer workload. Consequently, hospitals can focus stress management on factors other than workload, while maintaining proportional

workload management and clear standard operating procedures (SOPs) to prevent excessive stress.

### **3. Shift Work on Work Stress**

The results of the study indicate that work shifts have a significant effect on the work stress of inpatient nurses at Hospital X, indicating that the higher the intensity of work shifts, the higher the nurses' work stress. Based on McGrath's theory (1970) in Wisudawan et al., (2024), stress occurs when demands exceed an individual's ability to respond, which is exacerbated by an imbalance in the number of workers per shift, such as the ratio of nurses to beds below the ideal standard according to the Gillies formula calculation (Ilyas, 2004) and Indonesian Minister of Health Regulation No. 56 of 2014. This imbalance increases the psychological burden, reinforced by the findings of Amirah et al. (2022) and Tamata & Mohammadnezhad (2023) that the shortage of nurse's triggers fatigue and psychological disorders.

Furthermore, the administrative burden (non-nursing duties) in BPJS claims also increases the workload, triggering stress for nurses on each shift. Irregular shift schedules, rapid rotations, random rotation directions, and work hours exceeding 40 hours per week, combined with a shortage of nurses per shift, are perceived by nurses as disrupting work rhythms and insufficient time for recovery and maintaining a work-rest balance. They also disrupt the circadian rhythm, potentially leading to burnout and stress. Furthermore, the existing shift schedules do not allow for optimal service delivery.

This research aligns with research (Lufianti & Azizah, 2025; Alghamdi & Bahari, 2025; Aurelia, 2024; Amirah et al., 2022), which found a strong, positive correlation between shift work and work stress. The more irregular a nurse's shift, the greater their work stress. Furthermore, nurses working in shifts, especially those with rapid shift changes and frequent night shifts, tend to experience higher levels of work stress, fatigue, and anxiety. Working hours also significantly

influence fatigue, with working more than 40 hours per week triggering fatigue, and busy morning shifts can also increase stress.

Although some nurses have adapted, others have not been able to adjust optimally, indicating high pressure from the shift system. These results differ from research by Maydinar & Fernalia (2020), which found that shift work did not affect stress in the operating room because nurses are accustomed to it and work within a more controlled work system. Thus, in the context of military hospitals with diverse inpatient units, shift work stress, particularly from a shortage of nurses per shift, irregular schedules, and administrative demands, is a major factor contributing to significant work stress. Practical implications suggest that hospitals need to review their shift rotation systems, strengthen nurses' stress resilience through psychological support programs and stress management training, and increase the number of nurses per shift, taking into account patient density in each inpatient unit, to reduce the potential for excessive stress

#### **4. Shift Work on Nurse Performance**

The results of the study indicate that work shifts do not significantly affect the performance of nurses in the inpatient ward of Hospital X, which indicates that although nurses face a dense, irregular shift work system, and the number of personnel per shift is less than ideal, this condition has not had a direct impact on decreasing performance. According to (Bakti et al., 2024) nurse performance is the work achievement demonstrated by implementing nurses in carrying out nursing care tasks so as to produce good output for the organization, patients and nurses themselves within a certain period. In this study, the majority of nurses have been able to adapt to the direction and speed of shift rotation, utilize rest time, and maintain good performance, as indicated by indicators of quality, quantity, and work effectiveness in the performance variable.

This is in line with research (Andriani, 2025), (Nelfita & Saputra, 2025), which states that

work adaptation has a significant positive effect on performance. Furthermore, self-efficacy in nurses is present. Although nurses work under busy and irregular shift schedules, accompanied by a shortage of nurses, these shift schedules do not significantly affect nurse performance. Self-efficacy is an individual's belief in their ability to complete certain tasks, which plays a role in improving employee performance. Furthermore, the military work culture that fosters discipline is a major supporter of nurse performance stability, even in challenging shift systems.

This is in line with research (Dian Dwiana Maydinar, Fernalia, 2020), (Zaidar et al., 2022), which states that morning shifts require nurses to be more productive because patient activities such as surgeries and other medical procedures are often carried out during the morning shift, where nurses' activities are more intense but their work duration is also shorter. This explains why the work shift does not significantly affect nurse performance, as nurses can still demonstrate maximum work performance within the appropriate work duration. Furthermore, nurses' performance in nursing services is also influenced by several factors, including organizational characteristics (leadership), individual characteristics (motivation), and job characteristics (workload). In other words, they are able to adapt to the organization/leadership where they work. Internal motivation also impacts a strong work ethic and a desire to improve themselves, which may be related to the appreciation of work achievements within the organization.

A "night off" schedule also serves as a significant support system that allows for post-night shift recovery. Adjustments to work duration on each shift are also assessed based on workload, particularly during the more intensive morning and afternoon shifts. This finding is inconsistent with research by Min et al. (2021), which stated that irregular work shift systems, accompanied by quick returns (quick shift breaks), significantly negatively impact nurses' performance

through the mechanism of Sickness Presenteeism, which ultimately reduces performance quality.

These findings suggest that performance is not directly influenced by the shift system, but rather by internal factors such as self-efficacy, work adaptation, and adjustment, which encourage nurses to maintain their performance. This is further supported by organizational characteristics. Although not statistically significant, the negative trend suggests the potential for long-term performance decline if shift system imbalances and staffing shortages are not addressed promptly. Therefore, these results emphasize the importance of adaptive and sustainable shift management to maintain optimal nurse performance in the long term. Consequently, hospitals can evaluate their shift systems, such as maintaining appropriate shift durations and considering other shift indicators such as rotation speed, rest periods, holidays, and regularity of shift schedules. They also strengthen internal support, such as rewards, work adaptation training, and work allocation appropriate to the workload.

## **5. Workload and Shift Work on Performance via Work Stress**

The results of study indicate that workload and shift work simultaneously significantly influence nurse performance through the mediation of job stress. Specifically, only the shift work path was significant, while the workload path was insignificant. This finding is consistent with the previous hypothesis, where workload has a direct positive impact on performance without increasing stress, thanks to nurses' self-efficacy and psychological resilience. Conversely, dense, random, and rapidly rotating shifts increase job stress, which actually encourages nurses to improve their performance due to the urge to maintain performance evaluations, which impacts job security, especially for contract nurses (82.4%).

This stressful work system also prevents moonlighting (working multiple jobs outside the organization), which negatively impacts

performance (Ngosi et al., 2025). Therefore, although dense shift work can trigger stress, it actually acts as a work barrier, preventing nurses from taking on multiple jobs, which risks reducing focus and performance in the long term.

Research by Åkerstedt et al. (2022) supports that although intensive shift work triggers stress and social disruption, positive perceptions and social adaptation can transform stress into eustress. Nurses who experience the dynamics of daily shifts develop social adaptations, expand their networks, and strengthen team cohesion, leading to improved performance. Performance indicators such as effectiveness, independence, and work quality reflect nurses' optimal performance under pressure. Although stress increases due to a shortage of staff per shift, nurses remain focused thanks to clear standard operating procedures (SOPs) and motivation to maintain performance. However, this may reflect only short-term compensation, which can trigger the risk of burnout in the long term if not supported by organizational support (Tamata & Mohammadnezhad, 2023).

Workload, however, does not increase stress due to efficient inpatient management, a disciplined military culture, and nurses' work experience of over five years (40%), which strengthens coping with workload. Thus, work stress only mediates the effect of shift work on performance, not workload, highlighting the importance of adaptive shift management and organizational support to maintain stress within functionally productive limits. The implication is that hospitals need to strategically manage work shifts to keep them challenging but not exhausting, while maintaining team social support and regular psychological evaluations.

## **CONCLUSION**

1. Workload has a significant and positive effect on nurse performance in the inpatient ward of Hospital X. This indicates that workload has a positive

- influence on improving nurse performance. In other words, workload can be a driving force for performance improvement as long as it remains within manageable limits.
2. Workload does not have a significant effect on nurse work stress in the inpatient ward of Hospital X. This indicates that workload does not have a significant effect on nurse work stress levels, indicating that workload is not the primary cause of work stress in the context of this study.
  3. Work shifts have a significant and positive effect on nurse work stress in the inpatient ward of Hospital X. This indicates that work shifts have a significant and positive effect on nurse work stress levels. Therefore, rotating work schedules and patterns, combined with a shortage of workers, can affect nurses' psychological well-being.
  4. Work shifts do not have a significant effect on nurse performance in the inpatient ward of Hospital X. This indicates that work shifts do not directly affect nurse performance, indicating that busy and irregular shift schedules do not necessarily impact nurse performance in the field.
  5. Workload and work shift simultaneously significantly influence nurse performance through work stress in the inpatient ward of Hospital X. This indicates that workload and work shift simultaneously influence nurse performance through work stress as a mediating variable. However, the only significant mediation pathway for work stress is through work shifts on performance, indicating that work stress plays a significant role as a link between work shifts and performance.

#### **Declaration by Authors**

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