


Analysis of Nursing Staff as a Basis for Human Resource Management Policy Formulation at Hospital X Tangerang

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Article Info	ABSTRACT
<p>Keywords: Work Stress, Productivity, Stress Management, Mental Health, Perceived Stress Scale</p>	<p>Stress is a psychological response commonly experienced by individuals when facing internal or external pressures. Measuring stress levels among nurses is essential to understand their mental condition and ensure task performance is maintained. This descriptive quantitative study aimed to assess the stress levels of nurses at Hospital X in Tangerang over the past month using the Perceived Stress Scale (PSS-10). The study involved a total population of 20 nurses, with data collected through a 10-item Likert-scale questionnaire. Descriptive analysis was used to determine the frequency and percentage of stress levels. Results showed that 55% (11 respondents) experienced low stress, while 45% (9 respondents) had moderate stress, with an average score of 14, a minimum of 7, and a maximum of 25. These findings highlight the need for effective stress management strategies by hospital management to prevent worsening stress and to enhance nurse productivity.</p>
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INTRODUCTION

Mental health is a critical aspect of an individual's life that can significantly affect quality of life, work productivity, and social relationships. One of the most common mental health issues is stress. According to Lazarus (1984), stress is a psychological and physical condition that arises when individuals perceive that environmental demands exceed their personal resources to cope. If not managed properly, stress can have long-term negative effects on an individual's physical, emotional, and social well-being. In the workplace, stress often leads to a decline in employee productivity across various sectors. In line with a study by Kurniawan et al. (2021) on manufacturing employees, there is a significant negative correlation between job stress and productivity; the higher the stress levels, the lower the productivity.

Among nurses, stress also increases the risk of work-related errors. Research by Hasanah and Dewi (2019) found that high job stress among nurses is associated with an increased incidence of procedural mistakes. Such medical negligence is often exacerbated by heavy workloads, rotating shift schedules, and insufficient emotional support from the work

environment. Stress may also lead to higher absenteeism and an increased desire to resign. A study by Putra and Yuliana (2020) on private sector employees found that work stress significantly influences turnover intention, particularly when caused by conflicts with superiors or excessive workloads. Prolonged work-related stress also contributes to job dissatisfaction. According to Rahmadani and Syafitri (2022), job stress has an inverse relationship with job satisfaction, ultimately lowering employee loyalty. Additionally, stress affects interpersonal relationships in the workplace. A study by Arifin et al. (2023) showed that emotional stress at work may escalate conflicts among employees, particularly in competitive environments.

To assess stress levels, the Perceived Stress Scale (PSS-10), developed by Cohen, Kamarck, and Mermelstein (1983), is widely used. This instrument consists of 10 items measured on a Likert scale and is designed to evaluate an individual's perception of stress over the past month. The PSS-10 has demonstrated strong validity and reliability across diverse cultures and populations (Lee, 2012). Its brief administration time makes it practical for time-constrained professionals, such as hospital nurses. The tool measures general stress rather than stress triggered by specific causes and is sensitive enough to detect changes in stress levels before and after interventions.

In the healthcare sector, a study by Putri et al. (2020), which employed the PSS-10 to assess healthcare workers at a COVID-19 referral hospital, revealed that 60% of respondents experienced moderate to high levels of stress. This suggests that a high-pressure work environment contributes to elevated stress perception. Similarly, Babore et al. (2020) found high stress levels among nurses working in COVID-19 units, primarily due to anxiety and the risk of infection.

Hospital X is a type-C private hospital located in Tangerang. It offers various health services including inpatient care, outpatient clinics, maternity wards, pediatric specialties, and child development clinics. The hospital emphasizes promotive, preventive, curative, and rehabilitative approaches in its services and upholds strong values of professionalism and integrity. Although no malpractice or medical negligence has been recorded, several online patient reviews highlight dissatisfaction with medical services, including unclear queue procedures, unsatisfactory communication by medical staff, and diagnostic errors. In light of these issues, this study aims to analyze the work stress levels of nursing staff as a foundation for developing human resource management policies at Hospital X, Tangerang, in 2025.

METHODS

This study adopted a quantitative approach using a cross-sectional research design, where measurements were conducted at a single point in time across all respondents. The cross-sectional design was chosen to capture the real-time condition of work-related stress experienced by nurses without the need for prolonged observation. The research was carried out in May 2025 at Hospital X, a type-C private hospital located in Tangerang. The primary objective was to identify stress levels among nursing staff as a foundation for formulating evidence-based and adaptive human resource management (HRM) policies.

The target population of this study comprised all staff nurses actively working at Hospital X Tangerang. A total sampling technique was employed, involving all 20 nurses in the population as respondents. All participants were recruited voluntarily after receiving an explanation about the purpose and procedures of the study. This approach was deemed appropriate given the small and relatively homogeneous population, which allowed for comprehensive analysis without sampling bias.

Data were collected using the Perceived Stress Scale (PSS-10), a psychometric instrument developed by Cohen, Kamarck, and Mermelstein (1983). The PSS-10 consists of 10 items designed to measure an individual’s perceived stress over the past month. Each item was rated on a five-point Likert scale ranging from 0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, to 4 = very often. The PSS-10 was selected due to its proven validity and reliability across various cultural and professional contexts, as well as its practicality for time-constrained healthcare professionals such as nurses.

The total scores derived from the PSS-10 were categorized into three stress levels: low (0–13), moderate (14–26), and high (27–40). The collected data were analyzed descriptively through frequency distribution and percentage to illustrate the respondents’ stress profiles. Furthermore, cross-tabulation analyses were conducted based on demographic characteristics such as gender, marital status, and age to identify how stress levels varied across these variables. These findings served as the basis for developing HRM policy recommendations aimed at both preventing and addressing occupational stress among nursing personnel.

RESULTS AND DISCUSSION

This study involved 20 respondents. The majority of the participants were female, totaling 13 individuals (65%). Most respondents were married, accounting for 12 individuals (60%), and the most common age among them was 27 years old (15%).

Table 1. Characteristics of Nurse Respondents at Hospital X Tangerang

Variable	Number	Percentage (%)
Gender		
Male	7	35%
Female	13	65%
Marital Status		
Married	12	60%
Unmarried	8	40%
Age (Years)		
25	1	5%
26	2	10%
27	3	15%
28	2	10%
29	1	5%
30	2	10%
31	1	5%

Variable	Number	Percentage (%)
32	1	5%
33	1	5%
34	2	10%
35	1	5%
37	2	10%
39	1	5%

In this study, it was found that 11 out of 20 nurses, or approximately 55% of respondents, experienced low levels of stress, while 9 out of 20 nurses, or around 45% of respondents, experienced moderate levels of stress.

Table 2. Overview of Nurses' Stress Levels at Hospital X in Tangerang

Stress Level	Frequency	Percentage
Low	11	55%
Moderate	9	45%
High	0	0%

Based on Table 2, it is evident that the majority of nurses (55%) at Hospital X in Tangerang experienced low levels of stress, while 45% reported moderate stress, and none experienced high stress. These findings suggest that, overall, the work environment is relatively manageable, with more than half of the respondents demonstrating effective stress coping mechanisms. However, the presence of nearly half the sample experiencing moderate stress indicates the need for early preventive measures. Hospital management should maintain the existing positive work conditions while also implementing targeted interventions, such as regular psychological assessments, stress management training, and support programs, particularly for nurses showing early signs of psychological strain. Such efforts are essential to prevent the escalation of stress levels and to promote a healthy, productive nursing workforce.

Table 3. Frequency Distribution of Respondents' Stress Levels Based on Gender, Marital Status, and Age at Hospital X in Tangerang

Variable	Stress Level: Low	%	Stress Level: Moderate	%
Gender				
Male	5	71%	2	29%
Female	6	46%	7	54%
Marital Status				
Married	9	75%	3	25%
Unmarried	2	25%	6	75%
Age (Years)				
25	0	0%	1	100%
26	1	50%	1	50%
27	1	33%	2	67%

Variable	Stress Level: Low	%	Stress Level: Moderate	%
28	1	50%	1	50%
29	0	0%	1	100%
30	1	50%	1	50%
31	0	0%	1	100%
32	0	0%	1	100%
33	1	100%	0	0%
34	2	100%	0	0%
35	1	100%	0	0%
37	2	100%	0	0%
39	1	100%	0	0%

Table 3 indicates that moderate stress levels were more prevalent among female respondents, with 7 individuals (54%) reporting such conditions. This finding aligns with the study by Raynold Kaiser et al. (2023), which stated that women are more prone to experiencing stress (70.8%). Women tend to be more vulnerable to work-related stress due to a combination of biological, psychological, social, and cultural factors. Biologically, women exhibit stronger stress responses due to hormonal influences, making them more sensitive to social pressure and workplace conflicts. Role conflicts, particularly among married women juggling professional and domestic responsibilities, also significantly contribute to higher stress risk.

To mitigate work-related stress among female nurses, HR management should implement preventive strategies by carefully considering workload, dual roles for married employees, and the psychological and biological aspects of women. Hospital management is encouraged to implement fair and adaptive work schedules, particularly for female nurses with family obligations. Flexible shift arrangements and less burdensome rotation systems should be prioritized. Additionally, minimizing excessive overtime and frequent night shifts can help reduce stress.

In terms of marital status, unmarried respondents showed higher stress levels, with 6 individuals (75%) reporting moderate stress. This is in line with the findings of Indah Rhamdani and Magdalena Wartono (2019), who found that unmarried nurses tend to experience higher levels of occupational stress compared to their married counterparts. Unmarried individuals often lack consistent emotional support, while married employees benefit from spousal support, allowing them to share emotional burdens more effectively.

Employees with sound mental health generally exhibit stronger work motivation and the ability to complete tasks with greater focus and consistency. Therefore, HR management should enhance emotional and mental health support strategies for this group by providing access to professional psychological counseling specifically designed for healthcare workers. In addition, establishing peer support groups among nurses can serve as a platform for sharing experiences and solutions, fostering positive peer interactions.

Age-wise, the respondents experiencing stress were mostly 27 years old, accounting for 2 individuals (67%). This result aligns with findings by Hairil Akbar et al. (2023), which,

although not explicitly mentioning the age of 27, indicated that younger age groups are generally more susceptible to occupational stress. Age is a significant factor influencing stress levels, closely related to emotional maturity. Moreover, experience in the workplace and individual resilience under pressure also influence stress levels. Older employees tend to possess greater emotional stability and are better equipped to manage work pressure and conflict.

Therefore, management is advised to provide stress management training, especially for younger employees, to improve their emotional regulation capabilities. Formal and informal recognition of achievements among younger workers may also boost their morale and mitigate work-related stress.

CONCLUSION

The study on the stress levels of nursing staff at Hospital X in Tangerang using the PSS-10 instrument revealed that moderate work-related stress was more prevalent among female nurses. In addition, nurses aged 27 and those who were unmarried also experienced higher levels of stress compared to other age groups and married respondents. Based on these findings, it is recommended that the management of Hospital X take early preventive measures to mitigate the negative impact of stress. Individuals with better mental stability are more likely to concentrate effectively on their tasks, thereby minimizing the risk of errors at work. Moreover, improved focus can enhance work efficiency and enable timely task completion. Management should regularly conduct surveys on job satisfaction and stress levels among nurses in order to design appropriate interventions tailored to their needs. Periodic initial screenings should also be implemented to detect potential severe stress early, which could otherwise hinder organizational goals. Furthermore, ongoing counseling and educational programs should be provided to support nurses in managing their stress effectively.

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