



ORIGINAL ARTICLE

The relationship between motivation and work compensation with nurse performance

Diah Sukma Wardani¹, Santy Deasy Siregar^{2*}, Masryna Siagian², Mustika Lili Perdani³, Martono³, Claudia Tanamal³, Wennie Fransisca³, Yulia Karen³

ABSTRACT

This study investigates the relationship between motivation, compensation, and nurse performance at Muyang Kute Hospital, Bener Meriah Regency, Indonesia, using an analytical survey with a cross-sectional design. A sample of 154 nurses was randomly selected from a population of 250. Data were collected via questionnaires measuring motivation, compensation, and performance, categorized as "good" or "poor." Bivariate analysis using the chi-square test revealed a significant association between both motivation and compensation with nurse performance ($p < 0.05$). Nurses with positive motivation and compensation demonstrated significantly better performance. Specifically, 98.1% of nurses with positive motivation and 94.9% with positive compensation exhibited good performance. These findings underscore the critical role of intrinsic and extrinsic factors in enhancing nurse performance, highlighting the need for strategies to improve motivation and ensure adequate compensation to optimize healthcare delivery.

Keywords: nurse performance, motivation, compensation, healthcare

Introduction

Nurses are the backbone of healthcare delivery, serving as the primary point of contact for patients and playing a pivotal role in ensuring the effectiveness, safety, and compassion of care. Their contributions extend beyond clinical tasks to encompass emotional support, patient education, and advocacy, making them indispensable to the functioning of healthcare systems worldwide.¹ The performance of nurses is directly linked to patient outcomes and the overall quality of healthcare. High-performing nurses contribute to reduced hospital readmissions, lower mortality rates, and improved patient satisfaction. Conversely, lapses in nurse performance can lead to medical errors, compromised patient safety, and increased healthcare costs. As such, understanding and optimizing nurse performance is critical to achieving better health outcomes and sustaining the integrity of healthcare systems.^{2,3}

In the context of nursing, both intrinsic motivation (e.g., passion for patient care, sense of purpose) and extrinsic compensation (e.g., salary, benefits) are crucial. Nurses are often driven by a strong desire to help others, but fair compensation is equally important to recognize their hard work and maintain job satisfaction.^{4,5} Nurses face unique stressors, such as long hours, emotional strain, and high-stakes decision-

Affiliation

¹Undergraduate in Public Health Science, Universitas Prima Indonesia, Medan, Indonesia

²Department of Public Health, Universitas Prima Indonesia, Medan, Indonesia

³Faculty of Medicine, Dentistry and Health Science, Universitas Prima Indonesia, Medan, Indonesia

*Correspondence:

santydeasysiregar@unprimdn.ac.id

making, which can impact their motivation and performance.^{6,7} Compensation plays a vital role in mitigating these stressors, as it provides financial stability and acknowledges the challenges of the profession. Ensuring fair compensation relative to the stress and demands of nursing is essential for sustaining motivation and retaining skilled professionals.^{8,9}

A preliminary survey, conducted by researchers at Muiyang Kute Hospital and based on interviews with nursing staff, revealed that 5 out of 154 nurses in the Bener Meriah Regency hospital exhibited poor performance. This was attributed to non-compliance with hospital regulations and inadequate teamwork. These issues were hypothesised to arise from insufficient disciplinary motivation and a lack of punitive sanctions for underperforming nurses. The present study aims to investigate the relationship between motivation and work compensation with nurse performance at Muiyang Kute Hospital.

Method

This research employs an analytical survey design to investigate the relationship between motivation, job compensation, and nurse performance at Muiyang Kute Hospital in Bener Meriah Regency in 2024. A cross-sectional study design was utilized. The study was conducted at Muiyang Kute Regional Public Hospital (RSUD), focusing on nurses. The selection of this location was based on several considerations: (1) indications of declining work motivation among nurses, potentially linked to inadequate compensation; (2) the availability of a sufficient sample size for the research; and (3) formal approval from the institution where the research was conducted. Data collection took place in September 2024. The population for this study comprised all 250 nurses at Muiyang Kute Regional Public Hospital in Bener Meriah Regency. Using Slovin's formula with a 5% margin of error and a 95% confidence level, the calculated sample size was 153.85, which was subsequently rounded up to 154 nurses. A random sampling technique was employed.

Primary data for this study were obtained directly from the respondents, namely nurses at Muiyang Kute Regional Public Hospital, through questionnaires. Secondary data were sourced from medical records at Muiyang Kute Regional Public Hospital and relevant research materials. This research measured three primary variables: motivation, compensation, and nurse performance. Motivation and compensation, as independent variables, were assessed using questionnaires, each comprising eight questions. Both variables were categorised into two levels: "good" (coded as 1) if respondents scored between 5 and 8, and "poor" (coded as 2) if they scored between 1 and 4. For motivation, scores of 5-8 indicated a strong drive to achieve better work outcomes, while scores of 1-4 suggested inadequate motivation. In terms of compensation, scores of 5-8 reflected that the compensation received met the nurses' welfare standards, whereas scores of 1-4 indicated otherwise. The dependent variable, nurse performance, was also measured using an eight-question questionnaire. Similar to the independent variables, nurse performance was categorised as "good" (coded as 1) if respondents scored 5-8, signifying that their performance met hospital satisfaction standards. A "poor" category (coded as 2) was assigned if respondents scored 1-4, indicating performance that did not meet these standards.

Data processing in this study involved several systematic stages. Firstly, editing was conducted to ensure data accuracy and completeness. Incomplete data were supplemented through follow-up interviews. Subsequently, coding was performed to assign codes to each data point, facilitating processing and preventing duplication. The entry stage involved inputting the coded data into a computer for processing using SPSS software. Finally, tabulation was carried out by presenting the data in frequency distribution tables to aid interpretation.

Data analysis was conducted using two approaches: univariate and bivariate. Univariate analysis was used to describe the characteristics of each research variable, generating frequency distributions and percentages. Meanwhile, bivariate analysis aimed to examine the relationships between the independent and dependent variables. The statistical test employed was the chi-square (χ^2) test, which is appropriate for this study's data ($\alpha = 0.05$).

Results

Table 1 presents the characteristics of the 154 nurses sampled in this study. The sample exhibited a slight male preponderance, with 83 male nurses (53.9%) compared to 71 female nurses (46.1%). The age distribution of the nurses within the sample was relatively even; 79 nurses (51.2%) were under 38 years old, and 75 nurses (48.7%) were 39 years or older, indicating a broad age range.

Table 1. Nurse's characteristics (n=154)

Variable	n	%
Gender		
Male	83	53,9
Female	71	46,1
Age		
< 38 years	79	51,2
> 39 years	75	48,7
Income		
< 2 million	16	10,3
≥ 2 million	138	89,6
Motivation		
Positive	93	60,3
Negative	61	39,6
Compensation		
Positive	93	60,3
Negative	61	39,6
Nurse performance		
Positive	104	67,5
Negative	50	32,5

The analysis revealed a strong influence of nurse motivation on their performance. Of the 53 nurses with positive motivation, 98.1% (52 nurses) demonstrated positive performance, while only 1.9% (1 nurse) exhibited negative performance. Conversely, among the 43 nurses with negative motivation, only 27.9% (12 nurses) showed positive performance, and 72.1% (31 nurses) displayed negative performance. The p-value of 0.000 indicates that the relationship between motivation and nurse performance is statistically highly significant ($p < 0.05$). This suggests that nurses with positive motivation tend to exhibit better performance, and vice versa.

Table 2. Relationship between nurse motivation and compensation with nurse performance

Variable	Nurse performance						p
	Positive		Negative		Total		
	n	%	n	%	n	%	
Motivation							
Positive	52	98,1	1	1,9	53	100	0,000
Negative	12	27,9	31	72,1	43	100	
Compensation							
Positive	56	94,9	3	5,1	59	100	0,003
Negative	8	21,6	29	78,4	37	100	

In addition to motivation, compensation also demonstrated a significant relationship with nurse performance. Of the 59 nurses with positive compensation, 94.9% (56 nurses) showed positive performance, and 5.1% (3 nurses) exhibited negative performance. Meanwhile, among the 37 nurses with negative compensation, only 21.6% (8 nurses) displayed positive performance, and 78.4% (29 nurses) showed negative performance. The p-value of 0.003 indicates that the relationship between compensation and nurse performance is also statistically significant ($p < 0.05$), albeit not as strong as the relationship between motivation and performance.

Discussion

The demographic characteristics of the sample, as presented in Table 1, reveal a slightly male-dominated nursing workforce at Muyang Kute Hospital. This finding, while not the primary focus of the study, warrants consideration in the context of regional nursing workforce dynamics. The relatively balanced age distribution suggests a mix of experienced and younger nurses, potentially contributing to a diverse range of skills and perspectives within the hospital. Notably, a significant majority of nurses (89.6%) reported an income of ≥ 2 million, indicating a generally stable financial situation within the surveyed population. However, the 10.3% earning less than 2 million raises concerns about potential financial stress, which could impact motivation and performance.

The core findings of this study, as shown in Table 2, highlight the profound influence of motivation on nurse performance. The statistically significant p-value of 0.000 demonstrates a strong association, with nurses exhibiting positive motivation displaying significantly higher rates of positive performance (98.1%). Conversely, negative motivation was strongly correlated with poor performance, with 72.1% of nurses in this category demonstrating negative performance. This finding underscores the critical role of intrinsic and extrinsic motivational factors in driving effective nursing practice. The near absence of negative performance among positively motivated nurses suggests that cultivating a motivated workforce is paramount for optimizing patient care.

Furthermore, the study revealed a significant, though slightly less pronounced, relationship between compensation and nurse performance ($p = 0.003$). Nurses with positive compensation reported a high rate of positive performance (94.9%), while those with negative compensation showed a substantial rate of negative performance (78.4%). This finding aligns with existing literature emphasizing the importance of fair compensation in maintaining job satisfaction and performance. The weaker association compared to motivation suggests that while compensation is a significant factor, intrinsic motivation, such as a sense of purpose and dedication to patient care, plays an even more dominant role in driving nurse performance.⁵

The strong correlation between motivation and performance underscores the need for hospital management to implement strategies that foster a positive work environment, promote professional development, and recognize the value of nurses' contributions. This may involve initiatives such as mentorship programs, opportunities for continuing education, and fostering a culture of teamwork and support. Similarly, while compensation is not the sole driver of performance, ensuring fair and competitive salaries and benefits is essential for attracting and retaining skilled nursing professionals.^{10,11}

Conclusion

Overall, the analysis indicates that both nurse motivation and compensation have a significant impact on their performance. Nurse motivation proved to have a stronger influence than compensation; however, both play crucial roles in determining nurse performance. Therefore, it is essential for hospital management to address and enhance nurse motivation and provide adequate compensation to improve their performance. Future research could explore the specific motivational factors that are most effective in this context and investigate the long-term impact of compensation and motivation on nurse retention and patient outcomes.

References

1. Alwani SS. Nurses are the Backbone of a Healthcare System. *Liaquat Natl J Prim Care*. 2020;2(2).
2. Glarcher M, Vaismoradi M. A systematic integrative review of specialized nurses' role to establish a culture of patient safety: A modelling perspective. *J Adv Nurs*. 2024 Feb 17;
3. Audet LA, Bourgault P, Rochefort CM. Associations between nurse education and experience and the risk of mortality and adverse events in acute care hospitals: A systematic review of observational studies. *Int J Nurs Stud*. 2018 Apr;80:128–46.
4. Agustian Zen. Determinants of Employee Engagement and Productivity: An Analysis of Work Motivation, Competence, Compensation and Transactional Leadership. *East Asian J Multidiscip Res*. 2023 Mar 4;2(2):863–92.
5. Zeng D, Takada N, Hara Y, Sugiyama S, Ito Y, Nihei Y, et al. Impact of Intrinsic and Extrinsic Motivation on Work Engagement: A Cross-Sectional Study of Nurses Working in Long-Term Care Facilities. *Int J Environ Res Public Health*. 2022 Jan 24;19(3):1284.
6. Kelly P, Porr C. Ethical Nursing Care Versus Cost Containment: Considerations to Enhance RN Practice. *OJIN Online J Issues Nurs*. 2018 Jan 31;23(1).
7. Khamisa N, Oldenburg B, Peltzer K, Ilic D. Work Related Stress, Burnout, Job Satisfaction and General Health of Nurses. *Int J Environ Res Public Health*. 2015 Jan 12;12(1):652–66.
8. Sinanto R. Nurse's welfare in terms of compensation, job stress, and Job Satisfaction Against Nurse Performance in Indonesia. *J Int Heal Sci Manag [Internet]*. 2023 Apr 30;9(17):23–30. Available from: <http://dergipark.org.tr/en/doi/10.48121/jihsam.1031261>
9. Aman-Ullah A, Aziz A, Ibrahim H, Mehmood W, Aman-Ullah A. The role of compensation in shaping employee's behaviour: a mediation study through job satisfaction during the Covid-19 pandemic. *Rev Gestão*. 2023 May 2;30(2):221–36.
10. Hakvoort L, Dikken J, Cramer-Kruit J, Nieuwenhuizen KM van, van der Schaaf M, Schuurmans M. Factors that influence continuing professional development over a nursing career: A scoping review. *Nurse Educ Pract*. 2022 Nov;65:103481.
11. Maassen SM, van Oostveen C, Vermeulen H, Weggelaar AM. Defining a positive work environment for hospital healthcare professionals: A Delphi study. *Alameddine M, editor. PLoS One*. 2021 Feb 25;16(2):e0247530.