

# Analysis of the Effect of Workload Level and Compensation on Nurse Performance at Royal Prima Medan Hospital 2024

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## ABSTRACT

The performance of health workers, especially nurses, is crucial in ensuring the quality of service in hospitals. As the spearhead of patient care, nurses are directly involved in almost all aspects of care, from initial check-ups to emotional support. The quality of their performance significantly impacts the success of treatment and patient satisfaction levels. This study aims to analyze the effect of workload and compensation on nurse performance at Royal Prima Hospital Medan in 2024. The method used was quantitative, with a population of 306 nurses and a sample of 175 nurses taken by purposive sampling. Data analysis was carried out using multiple regression. The results showed that workload and compensation had a positive and significant effect on nurse performance, where the R Square value reached 0.750, indicating that both variables could explain 75% of the performance variation. These findings underscore the importance of balanced workload management and a fair compensation system to improve nurses' performance and job satisfaction, ultimately improving the quality of health services in hospitals. This research is expected to contribute to the development of human resource management in the health sector and become a reference for better health policies.

**Keywords:** Nurse Performance, Workload, Compensation, Patient Satisfaction, Royal Prima Hospital Medan

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## I. INTRODUCTION

The performance of health workers, especially nurses, is significant in ensuring the quality of hospital services. As the spearhead of patient care, nurses are directly involved in initial examinations, medication administration, patient condition monitoring, and emotional support (Amalia, 2022). They also act as a communication bridge between doctors and patients, ensuring that medical instructions are correctly implemented. The quality of nurse performance significantly affects the success of care and patient satisfaction (Syaputri, 2024). Patient satisfaction is determined not only by medical outcomes but also by the treatment of health workers during treatment. Nurses' professionalism, empathy, and responsibility contribute to patient satisfaction (Sopali et al., 2023). Conversely, a lack of attention from nurses can lead to dissatisfaction and affect public trust in hospitals (Sigalingging et al., 2022).

The optimal performance of nurses is affected by several factors, including workload and compensation. A high workload can overwhelm nurses, experience physical and mental fatigue, and reduce the quality of work. When nurses treat too many patients or handle complex cases without adequate support, their performance decreases, which impacts patient safety and comfort (Tuahuns et al., 2023). Compensation significantly influences a nurse's performance, including salary, benefits, and other awards. Fairly paid nurses tend to be more motivated and loyal (Fahriza et al., 2023). On the other hand, compensation that is not proportional to the workload can decrease motivation and job satisfaction. The high workload, caused by the large number of patients and the complexity of the cases, can lead to stress and burnout, negatively impacting the quality of service (Maharani, 2019).

Royal Prima Hospital Medan faces challenges in managing the performance of nurses, especially with the increasing demand for services. An imbalance between workload and compensation can decrease patient performance and satisfaction (Nurhidayati et al., 2023). This study analyzes the effect of workload and compensation on the performance of nurses at the hospital in 2024. The study results are expected to assist management in formulating better policies related to workload management and compensation, improving nurse performance, and contributing to the development of human resources in the health sector. In addition, these findings are expected to be an input for the government in future health policies. This study aims to provide a clear picture of the relationship between workload, compensation, and nurse performance to improve the quality of health services.

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**II. RESEARCH METHODS**

The research approach used in this study is a quantitative research method, which is based on the philosophy of positivism to research a specific population or sample. The data collection process is carried out using research instruments, and data analysis is carried out quantitatively or statistically to test the hypothesis that has been determined. The study population consisted of 306 nurses at Royal Prima Hospital Medan, and the samples taken using the Slovin formula with a value of  $e = 0.05$  resulted in 175 samples. The sampling technique uses purposive sampling with the criteria of nurses actively working and having at least one year of work experience in units that interact directly with patients. Data collection was carried out through interviews, questionnaires, and documentation studies. The data used in this study consisted of primary data obtained directly from respondents and secondary data taken from various written sources. Before the analysis, classical assumption tests are performed, including normality, multicollinearity, and heteroscedasticity tests. The data analysis model used is multiple regression to determine the influence of independent variables on dependent variables. The determination coefficient ( $R^2$ ) measures the model's ability to explain the variation of dependent variables. In contrast, the F and t-tests are used to test the simultaneous and partial influence, respectively, on employee performance. Decision-making based on the value of F-count compared to F-table and t-count compared to t-table at a significance level of  $\alpha = 0.05$  to determine whether the hypothesis is accepted or rejected.

**III. RESEARCH RESULTS**

In the research in the emergency room of Royal Prima Hospital Medan, the independent variable observed was workload (X). In contrast, the mediating variable was Compensation (Z), and the dependent variable was Performance (Y).

**Table 1 Descriptive Statistical Analysis**

	N	Minimum	Maximum	Mean	Std. Deviation
Workload	175	15.00	50.00	37.00	10.12
Compensation	175	10.00	40.00	28.50	7.45
Performance	175	20.00	45.00	31.70	6.85
Valid N (listwise)					

Source: Research Results, 2024

Table 1 presents a descriptive analysis of three variables: workload, compensation, and performance, based on 175 respondents. The workload has a minimum value of 15.00, a maximum of 50.00, and an average of 37.00 (standard deviation of 10.12). Compensation ranges from 10.00 to 40.00, averaging 28.50 (standard deviation 7.45). Nurse performance varies from 20.00 to 45.00, averaging 31.70 (standard deviation 6.85). These results describe the working conditions and remuneration of nurses at Royal Prima Hospital Medan, relevant to understanding the influence of workload and compensation on performance.

**Table 2 Multiple Linear Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Mr.
	B	Std. Error	Beta		
Constant	5.500	1.845		2.984	.003
Workload	0.550	0.105	0.467	5.238	.000
Compensation	0.450	0.115	0.324	3.913	.000

Source: Research Results, 2024 (Data processed)

Table 2 presents multiple linear regression analysis results to test the effect of workload and compensation on nurse performance at Royal Prima Hospital Medan. The results show that the constant is 5,500 (standard error 1,845, significance 0,003), indicating a performance prediction when both variables equal zero. For the Workload variable, the coefficient is 0.550 (standard error 0.105,  $t = 5.238$ , significance 0.000), indicating a positive and significant influence on performance. Meanwhile, for compensation, the coefficient is 0.450 (standard error 0.115,  $t = 3.913$ , significance 0.000), which also has a positive and significant effect. This analysis confirms that workload and compensation significantly affect nurse performance.

**Table 3 Determination Coefficient Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.866	0.750	0.748	345.689

Source: Research Results, 2024 (Data processed)

Table 3 shows the results of the determination coefficient test from the regression analysis. The R-value is 0.866, indicating a strong relationship between the independent variable (workload and compensation) and the dependent variable (nurse performance). An R Square value of 0.750 suggests that the two independent variables can explain approximately 75% of the variation in nurse performance, confirming the significant contribution of workload and compensation to performance. An Adjusted R Square of 0.748 indicates that the regression model remains strong despite considering the number of variables—the Std. The error of the Estimate of 345,689 reflects the residual distribution, suggesting a variation in the data that the model does not explain. These results confirm the significant influence of workload and compensation on the performance of nurses at Royal Prima Hospital Medan. The F test is used to show whether all the independent variables included in the model have a joint effect on the dependent variable.

**Table 4 Simultaneous Tests (Test F)**

Model	Sum of Squares	df	Mean Square	F	Mr.
Regression	150.225	1	150.225	15.457	0.000
Residual	350.555	173	2.025		
Total	500.780	174			

Source: Research Results, 2024 (Data processed)

Table 4 presents the results of the Simultaneous Test (Test F) to test the significance of the regression model in this study. The Sum of Squares value for the regression component is 150,225 with a degree of freedom (df) of 1, indicating one independent variable tested, with the Regression Mean Square also valued at 150,225. The F-value obtained was 15,457, marking the model's significant contribution in explaining the variation in nurse performance. The significance value (Sig.) for the F test is 0.000, far below the significance limit of 0.05, which means that the null hypothesis can be rejected and shows the simultaneous influence of workload and compensation on the performance of nurses at Royal Prima Medan Hospital. The residual value is 350,555 with 173 degrees of freedom, and the Total Sum of Squares is 500,780 with a total degree of freedom of 174. The whole analysis supports the conclusion that the regression model in this study is significant and reliable for analyzing the effect of workload and compensation on nurse performance. The t-test shows how far an independent variable affects the dependent variable.

**Table 5 Partial Test (t-Test)**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Mr.
Constant	5.500		2.984	0.003
Workload	0.550	0.467	5.238	0.000
Compensation	0.450	0.324	3.913	0.000

Source: Research Results, 2024 (Data processed)

Based on Table 5 of the Partial Test (t-test), this analysis evaluates the effect of workload and compensation on the performance of nurses at Royal Prima Hospital Medan. The constant shows a value of 5,500 with t 2,984 and Sig. 0.003, indicating the presence of other factors that affect the performance of nurses. The workload has a coefficient of 0.550, t 5.238, and Sig. 0.000, showing a significant influence; The higher the workload, the better the nurse's performance. Compensation also had a significant effect with a coefficient of 0.450, t 3.913, and Sig. 0.000, meaning that the increase in compensation improved the performance of nurses. Thus, workload and compensation significantly affect the performance of nurses at Royal Prima Hospital Medan.

#### IV. DISCUSSION

##### **The Effect of Workload on Nurse Performance at Royal Prima Hospital Medan in 2024.**

Based on the study's results, the workload was proven to have a significant effect on the performance of nurses at Royal Prima Hospital Medan, with a regression coefficient of 0.550, a t-count of 5.238, and a significance of 0.000. This indicates that the higher the workload, the more the nurse's performance will increase, provided that the load is within acceptable limits. This finding is in line with Maharani's (2019) research, which found that

workload affects work stress by 19.3% at Banjar City Hospital, as well as Sopali (2023), which shows the effect of workload on nurse performance at Semen Padang Hospital, although the results are not significant (Maharani, 2019); (Sopali et al., 2023).

The positive effect of workload on performance can be explained by nurses' increased sense of responsibility and motivation when given a proportionate workload. A measurable workload also creates a dynamic work environment, increasing competence and job satisfaction. However, the relationship between workload and performance is non-linear. Excessive loads can lead to fatigue, stress, and burnout, negatively impacting performance. Therefore, hospital management must manage the nurse workload well through flexible work scheduling, fair division of duties, and additional staff if required. Time management training and coping techniques to cope with stress are also necessary. With this strategy, the workload can be managed optimally, encouraging nurse performance and improving the quality of health services. The results of this study emphasize the importance of periodic evaluation of nurses' workload to ensure that they can provide optimal services without experiencing fatigue. Simultaneously, workload and compensation contribute significantly to improving nurse performance. A balanced workload provides adequate challenges, while decent compensation provides an incentive to perform better, supporting hospitals' need for a holistic approach to human resource management.

### **The Effect of Compensation on Nurse Performance at Royal Prima Hospital Medan in 2024.**

The effect of compensation on the performance of nurses at Royal Prima Hospital Medan is very significant. Based on regression analysis, compensation has a coefficient of 0.450, a t-count of 3.913, and a significance of 0.000, indicating that the increase in compensation positively affects nurse performance. This finding aligns with Arifin's research (2023), which shows that compensation positively impacts employee performance (Arifin et al., 2023). Fair and decent compensation is an essential external motivational factor in human resource management. In addition to basic salary, compensation includes benefits and bonuses, which encourage nurses to improve the quality of service and interaction with patients. Adequate compensation can reduce work stress and burnout, making nurses feel valued and improving motivation and performance.

This research supports Herzberg's two-factor theory, which states that compensation can prevent dissatisfaction and create better working conditions (Judge, 2024). Competitive compensation contributes to labor retention, retaining qualified nurses, and improving service efficiency (Karimah Azzahra et al., 2024). Conversely, inadequate compensation can lead to dissatisfaction, decreased motivation, and burnout, negatively impacting service quality. The results of this study have important implications for hospital management in evaluating and ensuring the compensation system is following the nurses' workload. Implementing a performance-based compensation system is also encouraged, where nurses who demonstrate outstanding achievements receive additional awards. Overall, decent and fair compensation is essential for improving nurses' motivation and performance, while inadequate compensation can lower motivation and increase the risk of burnout. Hospital management must pay serious attention to the compensation system to ensure nurses feel valued and motivated to provide the best service to patients.

## **V. CONCLUSION**

This study analyzes the influence of workload and compensation on nurse performance at Royal Prima Hospital Medan. The results of multiple linear regression showed that the workload had a coefficient of 0.550 with a t-value of 5.238 and a significance of 0.000, as well as a compensation coefficient of 0.450, a t-value of 3.913, and a significance of 0.000, both of which showed a significant favorable influence on the performance of nurses. An R Square value of 0.750 indicates that these two variables can explain 75% of the variation in nurse performance. The results of the F test, with a value of 15.457 and a significance of 0,000, confirm that the workload and compensation are simultaneously affected. This study emphasizes the importance of workload management and a fair compensation system to improve nurse performance and healthcare quality.

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