# Impact of Workload and Burnout on Nurse Performance: A Path Analysis

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*Abstract*— This study aims to assess and analyze how the workload impacts the burnout levels and performance of nurses at Lanto Daeng Pasewang General Hospital in Jeneponto. The study involved a sample of 109 nurses from the hospital, selected using accidental sampling and analyzed through path analysis. The findings indicate a positive and statistically significant correlation between workload and burnout among the nurses at Lanto Daeng Pasewang General Hospital in Jeneponto. Additionally, workload positively and significantly affects the performance of nurses in the same hospital. While burnout shows a positive relationship with performance, it is not statistically significant. Furthermore, burnout does not act as a mediating factor between workload and performance

*Keywords— workload, burnout, performance*

## I. INTRODUCTION

Human resources play a crucial role in various activities to achieve the goals and progress of an organization. Human resources are the only assets in a organization that possess emotions, desires, skills, knowledge, motivation, energy, and contributions. Therefore, human resources are the potential possessed by every individual determined by their intellectual intelligence and physical strength[1]–[3]. Every organization aims to acquire the best human resources and how these human resources can be maintained and continue working together with constantly improving job quality [4]–[7]. The quality of human resources is also vital in the context of the medical sector, which is a crucial part as it determines survival[8]–[10]. Hospitals operate around the clock, with the majority of their healthcare staff being nurses, accounting for approximately 60% of the total healthcare workforce in the institution.

Nursing services are implemented through job performance, where nurses are professional personnel who play an integral role in all forms of hospital services[11]–[14]. The nursing team consists of individuals directly involved in continuously addressing patient health issues around the clock. Therefore, the quality of hospital services greatly depends on the performance of this nursing team. Despite the crucial role nurses play in the healthcare system, criticism regarding the provided services remains a focus of public attention. Assessing the performance of nurses is crucial because the quality of hospital services is highly influenced by their performance. Suboptimal performance has the potential to decrease the quality of service, resulting in discomfort and dissatisfaction for patients. One important factor affecting the performance of nurse is their workload [15]–[17]. According to data from The National Institute for Occupational Safety and Health, occupations within hospitals often experience high levels of stress and depression. The American National Association for Occupational Health also places work-related stress among nurses at the forefront. The workload of nurses plays a significant role in influencing their performance, with workload imbalances being a common occurrence.

There is a correlation between workload and performance[18]–[20]. It showed that as employees perceive higher workloads, their performance tends to decrease. However, a different finding was reported by Simanjuntak and Agtovia [21], suggesting that workload can have a positive impact on performance. This aligns with the research of Aprilia [22], Azizah [23], as well as Tjiabrata [24], all of which affirm that there is a positive correlation between workload and performance. In essence, higher workloads lead to greater improvements in employee performance. According to Fatimah (2022), varying levels of workload intensity, socio-demographic characteristics, and work-life imbalance can increase the risk of burnout in workers, including nurses. This is supported by several previous studies such as those conducted by Rahmadyah [25]; Rahayu, et.al [26]; Adnyaswari & Adyani [27]; Lidia and Sularso [28] found that burnout negatively affects performance. However, a different research outcome was shown in the study by Halawa, et.al [29] which found that burnout does not affect nurse performance.

The preliminary survey results indicate that there are still many inpatients who are dissatisfied with the nursing care provided by nurses. The most commonly expressed patient dissatisfaction is related to the attitudes of hospital staff, such as delays in service and lack of communication, difficulty in finding doctors, especially specialists, the length of waiting time for inpatient admission, and the cleanliness of the hospital environment. The attitude, and friendliness of staff, as well as the ease of obtaining information and communication, rank highest in patient and family satisfaction perceptions. Based on these statements, it can be concluded that the performance of the nurses is not yet optimal.. Based on the background described above, this research aims to investigate the influence of workload on burnout and the performance, of nurses at RSUD Lantor Daeng Pasewang in Jeneponto

## II. METHODS

The method employed in this research is a descriptive method with a quantitative approach, aiming to understand the relationships between the variables under

investigation. The quantitative method focuses on specific research, utilizes numerical data, and involves deductive reasoning [30]. The population consists of 150 nurses in the Inpatient Department of RSUD Lanto Daeng Pasewang. The study utilized the Slovin formula to establish a sample size of 109 participants. The sampling technique used in this study is accidental sampling.

Accidental sampling involves randomly selecting cases or respondents that happen to be available in a given context [31]. The instrument utilized in this research is a questionnaire with a Likert scale ranging from 1 to 5. Data analysis is conducted using SPSS 26 software and Sobel Test.

## III. RESULTS AND DISCUSSION

### A. Validity and Reliability Testing

The validity test is used to determine the suitability of a system being used, and it involves testing the significance of correlation coefficients at a significance level of 0.05 (Wiyono, 2011). Statements with significance values below 0.05 are considered valid. In the validity test, it is observed that the correlations between each indicator of the variables Workload (X), Burnout (Z), and Performance (Y) show significant results, with the R-value> the R table and Sig < 0.05. This leads to the conclusion that all statements representing the variables Workload (X), Burnout (Z), and Performance (Y) are considered valid.

As for the reliability testing of the workload variable (X1) instrument, the Cronbach's Alpha value, or α, is 0.831. The reliability testing for the burnout variable (Z) instrument yields a Cronbach's Alpha or α value of 0.762. Finally, the reliability testing for the nurse performance variable (Y) instrument results in a Cronbach's Alpha or α value of 0.861. This demonstrates that the questionnaire used in the research is reliable, as the alpha (α) value is greater than 0.60.

### B. Hypothesis Testing: Path Analysis

Path analysis is a technique employed to investigate the impact of intermediary factors. It's an expansion of multiple linear regression analysis, essentially utilizing regression analysis to gauge the causal connections among pre-defined variables in a theoretical causal model. The capability of path analysis lies in unveiling the intricate web of relationships among three or more variables. However, it is not designed to affirm or disprove hypothetical causalities [32]. Multiple linear regression techniques with two models were used in this research to analyze the data, assisted by the SPSS program.

Table 1. Results of Multiple Regression Analysis (Model 1)

| Model | Unstandardized Coefficients | | t | Sig |
|---|---|---|---|---|
| | B | Std Error | | |
| Contant | 11.345 | 2.464 | 4.604 | .000 |
| Workload | .912 | .086 | 10.560 | .000 |
| Burnout | .059 | .092 | .642 | .523 |

Dependent Variable: Performance
Source: Processed primary data, 2023.

Based on Table 1 (Path 1) and Table 2 (Path 2) from the data processing results, the regression equations acquired are as follows:

$$Y = 0.912 X1 + 0.059 X_2 + 2.464e1 \dots (1)$$

In Table 1, it is evident that the constant holds a value of 11.345. This suggests that in the absence of any effects from the workload and burnout variables, the performance variable maintains a value of 11.354. Additionally, the coefficient for the workload variable stands at 0.912, signifying a favorable effect on performance. Likewise, the coefficient for the burnout variable is 0.059, indicating a positive influence on performance..

According to the regression analysis results presented in Table 1, it is evident that the computed t-value for the workload support variable is 10.560, with a significance level of 0.000. Comparatively, the critical t-value at degrees of freedom n-k = 109-3 = 106, with a significance level of 0.05, is 1.659. This indicates that the calculated t-value (t_calculation) surpasses the critical t-value (t_table), and the significance value of 0.000 is less than 0.05. Consequently, it can be concluded that there is a positive and statistically significant impact of the workload variable on the performance of nurses at RSUD Lanto Daeng Pasewang. Furthermore, the burnout variable also exerts an influence on performance, albeit not significantly.

Table 2, Path Coefficient I

| Model | R | R Square | Adjusted R Square | Std Error |
|---|---|---|---|---|
| 1 | .743ᵃ | .552 | .544 | 2.179 |
| a. Predictors: (Constant), Burnout, Workload | | | | |

Source: Processed primary data, 2023.

In Table 2 the correlation coefficient (R) is calculated to be 0.552. This suggests that the combined influence of X1 and X2 on Y accounts for 55.2%, leaving 44.8% attributable to other variables not considered in the study. Additionally, the value of e1 is determined using the formula e1 = √(1 – 0.552) = 0.742.

Table 3. Multiple Regression Analysis Results (Model 1)

| Model | Unstandardized Coefficients | | t | Sig |
|---|---|---|---|---|
| | B | Std Error | | |
| Contant | 2.127 | 2.542 | .837 | .404 |
| Workload | .340 | .083 | 4.081 | .000 |

Dependent Variable: Burnout
Source: Processed primary data, 2023.

$$Y = 0.340 X1 + 2.542e2 \dots (2)$$

In Table 3, it is observed that the constant value is 2.127, indicating that when there is, no influence from the workload variable, the value of the burnout variable is 2.127. Furthermore, the coefficient value of the workload variable is 0.340, indicating a positive influence of the workload variable on burnout with a significance level of 0.000.

Tabel 4, Path Coefficient II

| Model | R | R Square | Adjusted R Square | Std Error |
|---|---|---|---|---|
| 1 | .363ᵃ | .132 | .124 | 2.255 |

| a. Predictors: (Constant), Workload |
| b. Dependent Variable: Burnout |

Source: Processed primary data, 2023.

In table 4, the correlation coefficient (R) is obtained as 0.132. This indicates that the influence of X1 on Y is 13.2%, while the remaining 86.8% is contributed by other variables not included in the study.       Meanwhile the value of e1 is obtained using the formula $e1 = \sqrt{(1 - 0.132)} = 0.363$.

### C. Sobel test

Tabel 5. Sobel Test for Indirect Effect

| Workload – Burnout – Performance | | | |
|---|---|---|---|
| A | B | Sa | Sb |
| 0.340 | 0.059 | 0.083 | 0.092 |
| Test tatistic = 0.63358704 Std. Error = 0.26317 0.52635036 | | | |

Source: Processed primary data, 2023.

Based on the information in Table 5,  the significance value or p-value for the impact of burnout as an intervening variable between workload and   performance is 0.526. Given that the p-value is greater than 0.05, it can  be concluded that burnout does not serve as a mediating factor in the relationship between workload and performance.

## IV.   DISCUSSION

### A.   The Influence of Workload on Performance

According of data analysis,  it was found that workload has a positive and significant   impact   on performance. This research finding is consistent with the studies  conducted by Lesamana et.al. [33] and Magfira et al. [34], which indicate a correlation between workload and employee performance. The workload for nurses includes heavy responsibilities, tight schedules, and significant physical and emotional demands. However, if nurses can effectively manage their workload or receive adequate support from their team and organization, they can maintain or even improve their performance despite the high workload. However, it is important to remember that each individual has  a different level of tolerance and capacity for workload, and other factors such as experience, skills, and resources  can  also  influence  how  workload  affects performance.

### B.   The Influence of Burnout on Performance

Based on  the data  analysis it was found  that burnout does not significantly influence performance. This research finding is consistent with the study conducted by Hawala and Kurniawati in Ainun [35]. It indicates that even though nurses may experience high levels of burnout, it  does not       have..a       significant       impact       on       their workplace performance.                        This suggests that in specific cases, individuals can remain productive and effective in their jobs despite experiencing high levels of fatigue or exhaustion. Other factors such as effective coping strategies, social support, or a conducive work environment may play a crucial role in maintaining good performance despite the presence of burnout.

In this context, the  researcher assumes that  there is no significant impact  between the two  variables. Upon examining the  general data  regarding the  ages of  the respondents, it is evident that the majority fall within the productive age range.

### C.   The Influence of Workload on Burnout

The research results indicate a positive correlation between workload and burnout. This..means that  the higher the level of workload experienced by an individual,  the higher  the  level  of  burnout  they are  likely  to  experience. Contributing factors to this positive correlation may include high work volume, time pressure, and complex job demands. This research finding aligns with Atmaja and Suana's (2019) [36] study on restaurant employees. All of these factors can increase the  risk of  experiencing burnout.  Therefore, the management of RS Lanto Daeng Pasewang should pay attention to the allocation of workload to the nurses.

### D.   The Influence of Workload on Performance Through Burnout

The research findings indicate that burnout cannot serve as a mediator between workload and performance. This means that burnout does not play a role as a connector or intermediary factor in the influence between the workload experienced by nurses and the performance demonstrated in their work. In other words, even with a high level of workload, it does not always imply that burnout will occur or that  burnout  will  directly  and  significantly  impact performance.  Other  factors  can  also  affect  nurse performance, such as individual coping strategies, social support, and the  personal characteristics of each nurse. Therefore, although there is a correlation between workload and  burnout, it cannot be assumed that burnout will. automatically have a negative impact on performance. Nurse workload refers to the volume of work for nurses in a hospital unit. Meanwhile, nurse workload volume represents the time needed to attend to patients per day. Understanding nurse workload is crucial as a basis for determining nurse work capacity to achieve a balance between nursing staff and workload [37].

## V.   CONCLUSION AND SUGGESTION

The data analysis results indicate the following: (1) Performance is positively influenced by high workload; (2) Elevated workload contributes to heightened nurse burnout; (3) Burnout does not significantly affect performance; (4) Burnout does not act as a mediating factor between workload and performance.  Based on these research findings, it is expected that the Hospital Management, specifically in the Nursing department, pays attention to each nurse's workload according to their expertise and capacity. Additionally, they should conduct regular monitoring and evaluation of burnout in nurses to oversee their psychological well-being.

## VI. LIMITATIONS

The limitation in this study is the relatively small number of respondents. A suggestion for future research is to increase the number of participants. Furthermore, based on field interview results, it is evident that there are other factors influencing employee performance, namely the social support they receive. Therefore, it is hoped that future research will take into account job satisfaction as a dependent variable in its investigation.

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