The Effect of Workload on Emotional Exhaustion and Its Impact on the Performance of Female Nurses at Hospital Dr. Tadjuddin Chalid Makassar

Syamsiar S. Russeng¹*, Wahiduddin², Lalu Muhammad Saleh¹, T. A. Tenri Diah¹ and Harun Achmad³

¹Department of Occupational Safety and Health, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia.
²Epidemiology Department, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia.
³Department of Pediatric Dentistry, Faculty of Dentistry, Hasanuddin University, Makassar, Indonesia.

Authors’ contributions

This work was carried out in collaboration among all authors. Author SSR designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors Wahiduddin and LMS managed the analyses of the study. Authors TATD and HA managed the literature searches. All authors read and approved the final manuscript.

ABSTRACT

In hospitals, most nurses experience a decrease in performance due to the workload factor. Workload is a working condition and job descriptions that must be completed within a certain time. The too high workload experienced by nurses can result in emotional exhaustion, indirectly emotional exhaustion can greatly affect the performance of the nurse. This study aims to determine the effect of workload on emotional exhaustion and its impact on the performance of female nurses at the hospital. Dr. Tadjuddin Chalid Makassar. This type of research is analytic observational with cross sectional design. The sample in this study were 96 married female nurses and the sample was taken using simple random sampling method. Data were taken from respondents using questionnaires on workload, performance and emotional exhaustion. The data analysis technique in this study used SPSS and Smart PLS. The results of this study indicate that there is an influence
between workload and emotional fatigue with \( p \) value \( (0.002) < (0.05) \), emotional fatigue with performance \( p \) \((0.000) < (0.05) \), and workload with performance \( p \) \((0.000) < (0.05) \). The conclusion of this study is that there is an effect of workload with emotional exhaustion, emotional exhaustion with performance and workload with performance on female nurses at the hospital. Dr. Tadjuddin Chalid Makassar

**Keywords:** Workload; performance; emotional exhaustion.

### 1. INTRODUCTION

Hospital is one of the chains in the provision of health services as well as an organization with an open system and always interacts with its environment to achieve a dynamic balance and has the main function of serving people who are in need for health services as well as a place for research based on a decision letter\([1]\). Nursing personnel are the most dominant human resource in hospitals. The number of health workers in Indonesia in 2015 were as many as 500,000 people, and 80% of service activities in the hospital was nursing service / care\([2]\).

The conditions found in hospitals were the domination of female nurses, especially those who were married and with children \([3]\). Research conducted in Italy in 2017 showed that of the 942 total number of female nurses in Italian hospitals, 500 of them were female nurses who were married and with children. \([3]\). Research conducted in 2015 at Gorontalo City Hospital showed that out of 54 female nurses, there were 30 (61%) married female nurses. \([4]\). A married female nurse plays both roles thus it requires more energy and tends to experience more work fatigue due to a larger workload \([5]\).

Workload is a working condition and job descriptions that must be completed within a certain time \([6]\). Several aspects related to this workload are the number of patients who have to be treated, their work capacity is in accordance with the education obtained, the shifts used to do their duties according to the working hours that take place every day, and complete facilities that can help nurses complete their work properly \([7]\).

Excessive workload may occur due to a mismatch among workers or nurses as well as their jobs. According to Gozali (2016), workload has a negative and significant effect on employee performance. This means that the higher the workload, the lower the resulting performance, and vice versa, the lower the workload, the higher the employee's performance. Usually nurses work for 24 hours continuously thus it can also cause higher work fatigue \([8]\).

Emotional fatigue or emotional exhaustion is considered the final stage of burnout and occurs when employees or nurses feel tired, overwhelmed, and feel emotionally drained by their work \([9]\). The emotional fatigue felt by nurses because they have to balance their role as nurses and spend energy, thoughts and emotions to maintain good relations between employees/nurses and their families. Research by Sholikhan (2017) suggested that emotional exhaustion has a direct and significant effect on the performance of nurses. The lower the nurses experiencing emotional exhaustion, the higher their performance will be, and vice versa \([10]\). The performance itself can be said to be the main contributing factor that the employees/nurses give to the hospital. The success of a hospital is determined by the quality and performance of the employees / nurses at the hospital to achieve the hospital goals that have been set \([11]\).

Based on the above background, the researcher was interested in examining deeper the effect of workload on emotional exhaustion and its impact on the performance of female nurses at Hospital Dr. Tadjuddin Chalid Makassar.

### 2. RESEARCH METHODS

The research used in this study was analytical observational with the design of cross sectional with the aim of overseeing the effect of a workload on emotional fatigue and its impact on female nurses’ performance at Hospital Dr. Tadjuddin Chalid Makassar.

The populations in this research were all nurses at Hospital Dr. Tadjuddin Chalid Makassar amounted to 128 nurses. The sample in this study were some of nurses at Hospital Dr. Tadjuddin Chalid Makassar which amounted to 96 female nurses whom all of which already married. Data collection techniques used in this study, namely through observation,
questionnaires, and documentation. The data analysis design used in this study were univariate, bivariate and multivariate with the chi square test and path analysis using the SmartPLS application presented in tabulation and narrative form.

3. RESULTS

The results of this study provided information about the effect of workload on emotional exhaustion and its impact on the performance of female nurses at Hospital Dr. Tadjuddin Chalid Makassar. The number of female nurses at Dr. Tadjuddin Chalid Makassar as many as 128 people with a total sample of 96 female nurses who were all married. The following table is the results of the analysis through the Univariate test based on the characteristics of the respondents and the variables studied are as follows:

Based on Table 1, it was found that out of 96 female nurses who were married as respondents, the most age group was 27-36 years as many as 63 people (65.6%). The distribution of respondents based on educational status was mostly at S1, amounted 54 people (56.3%) then based on the working period, the most working period was 1-11 years amounted to 74 people (77.3%), nurses who had 0-2 children, amounted to 56 people (58.4%), and all nurses did not have ART (household assistants). Then for the work shift in a month the nurses who got 8 morning shifts are 67 people (69.8%), 67 people

Table 1. Results of Univariate Test Analysis Based on Characteristics of Respondents and Variables Studied on Female Nurses at Hospital Dr. Tadjuddin Chalid Makassar

| Year 2020 | Age Group (year) | Frequency (n) | Percentage (%) |
|-----------|------------------|---------------|----------------|
|           | 27 – 36          | 63            | 65.6           |
|           | 37 – 48          | 33            | 34.4           |
| Education | DIII             | 42            | 43.7           |
|           | S1               | 54            | 56.3           |
| Work Period | 1 – 11         | 74            | 77.3           |
|           | 12 – 23          | 22            | 22.7           |
| Children  | 0 – 2            | 56            | 58.4           |
|           | 3 – 5            | 40            | 41.6           |
| With ART  | Yes              | 0             | 0              |
|           | No               | 96            | 100.0          |
| Morning Shift | 8               | 67            | 69.8           |
|           | 22               | 29            | 30.2           |
| Noon Shift | 0                | 29            | 30.2           |
|           | 8                | 67            | 69.8           |
| Night Shift | 0               | 29            | 30.2           |
|           | 8                | 67            | 69.8           |
| Workload  | Not heavy        | 41            | 42.7           |
|           | Heavy            | 55            | 57.3           |
| Emotional Fatigue | No fatigue | 27            | 28.1           |
|           | Fatigue          | 69            | 71.9           |
| Performance | Fairly good  | 26            | 27.1           |
|           | Poor             | 70            | 72.9           |

Source: Primary Data, 2020
get 8 noon shifts (69.8%) and those who get 8 night shifts are 67 people (69.8). The workload itself, most of the respondents who chose the heavy workload categories are 55 people (57.3%), for emotional exhaustion most respondents choose the fatigue category amounting to 69 people (71.9%) and for the performance mostly are in the poor category as many as 70 people (72.9%).

Based on the results of the chi square test, it was found that there was a relationship between workload variable on emotional fatigue and performance. Meanwhile, emotional fatigue on performance also had a relationship. The results of the analysis using path analysis using the Smart PLS application found that the effect of workload on emotional fatigue had a value of \( p = 0.002 \) with an estimated contribution value of 0.311 (31.1%), the effect of emotional fatigue on performance had a value of \( p = 0.000 \) with a contribution of an estimate value of 0.338 (33.8%), and the effect of workload on performance had a value of \( p = 0.000 \) with a contribution of an estimate value of 0.424 (42.4%). The results of the path analysis test can be seen in the following Figure.

4. DISCUSSION

Workload is a condition in which workers are faced with tasks that must be completed at a certain time. In this study, data and information collection were obtained using a questionnaire. This study showed that workload had an influence on emotional exhaustion; this is also confirmed by the research carried out by Shantz et al (2016) which stated that there is an influence of workload on emotional fatigue, someone who feels overloaded will try their best to manage demands by giving extra time and efforts. The use of extra time and energy can result in feelings of emotional exhaustion when employees run out of stock of time and energy[12].

This shows that individuals who feel they have an excessive workload will experience emotional exhaustion, because these individuals have to give extra in terms of time and energy to resolve excessive demands. Therefore when individuals run out of time and energy as a result of these demands, the individual will experience emotional exhaustion[13].

This study also showed the influence between emotional exhaustion and performance, where emotional exhaustion is an excessive emotional feeling and fatigue with a job. This is in line with the research carried out by Tropanzano et al (2003) which found that the more employees experience emotional fatigue, the lower the employee's performance[14].

![Fig. 1. The results of the path analysis test](image-url)
Research by Wright T.a (1998) also found that emotional exhaustion has a direct and significant effect on employees' performance. The lower the employee experiences emotional exhaustion, the more their performance will increase, and vice versa. This shows that when employees experience emotional exhaustion, the employees will experience a decrease in performance [15,16,17,18].

This study also shows that there is an influence between workload and performance. This is also confirmed by the research carried out by Ozali (2016) which stated that workload has a negative and significant effect on employee performance, meaning that the higher the workload, the lower the performance, and vice versa, the lower the workload, the higher the employee performance [8,19,20,21].

5. CONCLUSION AND SUGGESTION

This study concluded that there is an influence between workload and emotional fatigue with value (p = 0.002 <0.05), emotional fatigue with performance (p = 0.000 <0.05 and workload with performance (p = 0.000 <0.05) to female nurses at Hospital Dr. Tadjuddin Chalid Makassar. Suggestions for Hospital Dr. Tadjuddin Chalid is to improve the performance of nurses, the hospital management needs to pay attention and rearrange factors such as workload and emotional fatigue properly as well as facilities and hospital infrastructure that would make nurses to feel comfortable while working. In addition, it is expected that there will be a mental health development program for nurses. This will improve the performance and good nursing services for patients so as to improve the image and quality of services at Hospital Dr. Tadjuddin Chalid in the eyes of the people of Makassar.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Joeharno NE. Nurse Performance in Implementing Nursing Care in Hospitals and Factors Affecting It; 2008.
2. Indonesia K. Indonesia Health Profile; 2016.
3. Ghislieri C, Gatti P, Molino M, Cortese CG. Work Family Conflict And Enrichment in Nurses: Between Job Demands, Perceived Organisational Support and Work–Family Backlash. J Nurs Manag. 2017;25(1):65–75.
4. Urip E. Relationship between Work Shift and Work Stress in Nurses in the Internal Room of Prof. hospital. Dr. H. Aloe Saboe, Gorontalo City. J Nurses; 2015.
5. Daeng LC, Hartati S, Widyastuti E. The fear of success in career women is viewed from multiple role conflicts. J Psychol. 2012;1(2):1–6.
6. Munandar. Industrial and Organizational Psychology. Jakarta: University of Indonesia Press; 2005.
7. Priharjo R. Basic Techniques for Providing Drugs for Nurses.Jakarta: EGC Publisher; 2008.
8. Ghozali N. The Influence of Employee Competence and Workload on Employee Performance at Bank Danamon Tuanku Tambusai Pekanbaru Branch.J Business and Management. 2016;1(1):39–46.
9. Maslach C, Jackson SE. The Measurement Of Experienced Burnout. 1981;99-113.
10. Sholikhan. Job Satisfaction and Its Impact on Teacher Performance. 2017;238–53.
11. Hamdiyah, Haryono AT, Fathoni A. Employee Performance Improvement Through Compensation, Work Environment and Leadership Style in Banyumanik Supermarkets Semarang. J Manage. 2016;02(02):1–11.
12. Shantz A, Arevshatian L, Alfes K, Bailey C. The Effect of HRM Attributions on Emotional Exhaustion and The Mediating Roles of Job Involvement and Work Overload. Hum Resour Manag J. 2016;26(2):172–91.
13. Hobfoll SE. Conservation of Resources: A New Attempt at Conceptualizing Stress. Am Psychol. 1989;44(3):513–24.
14. Cropanzano R, Rupp DE, Byrne ZS. The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. J Appl Psychol. 2003;88(1):160–9.
15. Wright TA, Cropanzano R. Emotional exhaustion as a predictor of job performance and voluntary turnover. J Appl Psychol. 1998;83(3):486–93.

16. Saleh LM, Russeng S, Rahim MR, Awaluddin. The Effect of Progressive Muscle Relaxation on Decreasing Work Stress in Air Traffic Controller, Enfermería Clínica. Elsevier Doyma. 2020; 30:231-235.

17. Achmad H, Rasmidar Samad, Hendrastuti Handayani, Sri Ramadhany, Mardiana Adam, Mardiana And Andam Dewi Suci. Analysis of Disease Risk Factors of Early Childhood Caries (Ecc) On Pre-School Children Psychosocial Project Review. Asian Journal. of Microbiol. Biotech. Env Sc. © Global Science Publications Suppl Issue. ISSN-0972-3005. 2018;20:18-25.

18. Achmad H, Sri Ramadhany, Susilowaty Mudjari, Mardiana Adam. Determinant Factors of Dental Caries in Indonesian Children Age 8-12 Years Pesquisa Brasileira em Odontopediatria e Clinica Integrada. 2018;18(1):4037.

19. DOI:ISSN 1519-0501

19. Achmad H. Horax S, Ramadhany S, et.al. Resistivity of Ant Nest (Myrmecodia pendants) On Ethanol Fraction Burkitt's Lymphoma Cancer Cells (Invitro) Through Interleukin 8 Angiogenesis Obstacles (Il-8). Journal of International Dental and Medical Research. ISSN 1309-100X. 2019;12(2):516-523.

20. Achmad H. Biopsychosocial Identification of Early Childhood Caries (ECC) As A Predictor Of Risk, Factors Of Caries In Pre-School Children, International Dental and Medical Research. ISSN 1309-100X. (Scopus index). 2019;11(1):107-115.

21. Achmad H. Hendra Chandha, Sri Harun, Sudjarwo I, Yunus M, Rahma K. Rusdi, Khaireuniwa P. Prevalence of Medically Compromised Children Regarding Dental Caries and Treatment Needs in Wahidin Sudirohusodo Hospital, Journal of International Dental and Medical Research. ISSN 1309-100X. 2017;10(3):915-920.