

ISSN 2354-7642 (Print), ISSN 2503-1856 (online) Jurnal Ners dan Kebidanan Indonesia Tersedia online pada http://ejournal.almaata.ac.id/index.php/JNKI

# INDONESIAN JOURNAL OF NURSING AND MIDWIFERY

# The Correlation Between Workload And Occupational Stress Of Nurses In The Emergency Department Of Regional Public Hospital Rsud Prof. Dr. W. Z. Johannes Kupang

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# Abstrak

Unit gawat darurat di rumah sakit cenderung menimbulkan tingkat stres yang tinggi. Hal ini disebabkan oleh kondisi, yaitu, kondisi yang mengancam jiwa pasien yang sering memicu stres pada perawat. Perawat diminta untuk bertindak segera dan memiliki keterampilan khusus untuk memberikan perawatan yang akurat kepada pasien. Kondisi seperti itu menandakan peran utama perawat di rumah sakit. Ini juga menuntut peningkatan kinerja perawat untuk membuat konsep layanan kesehatan yang berkualitas. Stres kerja adalah istilah yang digunakan untuk merujuk pada depresi atau emosi, mudah tersinggung terhadap situasi di tempat kerja, dan itu ditandai oleh kondisi mental dan fisik seseorang. Ini pasti mempengaruhi kesehatan seseorang dan kondisi spiritual. Beban kerja yang berlebihan adalah salah satu faktor yang menyebabkan stres kerja perawat di gawat darurat Rumah Sakit Umum Daerah RSUD. W. Z. Johannes Kupang. Studi cross-sectional melibatkan 40 responden yang dipilih menggunakan metode total sampling. Data dianalisis menggunakan korelasi chi-square Pearson. Terungkap bahwa nilai p 0,000 lebih rendah dari á 0,05, yang berarti bahwa H0 ditolak dan menandakan bahwa beban kerja berkorelasi dengan stres kerja perawat di lokasi penelitian.

Kata kunci : Beban Kerja Perawat, Stres Kerja, Gawat Darurat

# Abstract

The emergency department in a hospital tends to pose a high stress level. This is due to the conditions, i.e., life-threatening condition of patients that often trigger the stress on the nurses. The nurses are required to act immediately and to possess specific skills to provide accurate treatment to the patients. Such a condition signifies the major role of nurses in a hospital. It also demands improvement in the performances of the nurses to conceptualize quality health services. Occupational stress is a term used to refer to depression or emotion, being irritable towards the situation of the workplace, and it is signified by both mental and physical condition of a person. This inevitably affects one's health as and the spiritual condition. Excessive workload is among the factors causing occupational stress. This study aims at exploring the correlation between workload and occupational stress of nurses in the emergency department of Regional Public Hospital RSUD. Prof. Dr. W. Z. Johannes Kupang. The cross-sectional study involved 40 respondents selected using a total sampling method. The data were analyzed using the Pearson chi-square correlation. It is revealed that the p-value 0.000 is lower than á 0.05, meaning that H0 is rejected and signifying that workload correlates with the occupational stress of the nurses in the research site.

Keywords: Nurses' Workload, Occupational Stress, Emergency Department

Info Artikel : Artikel dikirim pada 18 November2018 Artikel direvisi pada 14 Februari 2019 Artikel diterima pada 12 Maret 2019 DOI: http://dx.doi.org/10.21927/jnki.2019.7(1).18-23

# INTRODUCTION

A hospital is one of the infrastructures provided by the government or a community to provide health services. It functions primarily to provide all medical cares or to treat referred patients. The success of the hospital is signified by the quality health services. The importance of the human resources in the hospital determines the quality and management of the services in this health care institution (1). The emergency department also contributes to the performance of the hospital. The emergency department is a workplace that often triggers occupational stress. This is because the conditions, i.e., life-threatening condition of patients, that trigger the stress of the nurses in the department (2). The nurses are required to act immediately and to possess specific skills to provide accurate treatment to the patients.

Nurses are health officers that deal with their patients; they often work for 24 hours. The working schedule of the nurses is divided, into three shifts: morning, day and night shift. Such a schedule and work environment may lead to occupational stress(3).Occupational stress is a term describing a depression or emotion, being irritable towards the situation of the workplace. This impacts on the mental, physical and spiritual health of a person(4). Excessive workload and the number of patients, as well as the limited number of nurses often lead to occupational stress. The workload is a condition where a person is assigned a particular job and must accomplish it in a given time(5,6).

The data of the emergency department of Regional Public Hospital RSUD. Prof. Dr. W. Z. Johannes on 18 May 2017 reports that the number of patients in this department was 80-90 each day. The work shift in this unit is divided into three, namely morning/first shift (8 am to 2 pm), mid/second shift (2 pm to 9 pm) and night/third shift (9 pm to 8 am). It is revealed that visiting hours in the morning and mid shift in the department are generally the busiest in comparison to the night shift. This causes an issue as the number of nurses (seven to eight nurses for each shift) is outnumbered by the number of patients (approximately more than 50 patients) every day. As a result, the nurses consider that they are overwhelmed by their work by which it leads to occupational stress.

The number of nurses working in each shift is not proportionally distributed. Around 10 to 15 nurses are divided into three shifts, meaning that each shift has seven to eight nurses. The launch of health insurance increases the number of patients in the hospital. However, there are no attempts to recruit more nurses by which it adds more responsibilities for a nurse. This situation inevitably impacts on declining the nurses' performance due to an excessive workload that they have(2). In the light of the above discussion, this research attempts to explore the correlation between workload and occupational stress of the nurses in the Regional Public Hospital RSUD. Prof. Dr. W .Z. Johannes Kupang.

#### MATERIALS AND METHODS

Design study is a cross-sectional method to investigate the correlation of workload and occupational stress of nurses in the emergency department of Regiona I Public Hospital RSUD. Prof. Dr. W. Z. Johannes Kupang. The data were generated in one period, starting from January to February 2018. Furthermore, methods, i.e., univariate (frequency and percentage) and bivariate (chi-square test) were used to analyze the data. Statistic result must be p-value <0.05 for significant correlation between workload and occupational stress for nurses. The data scale used to measure workload and occupational stress is an ordinal scale with a score of <33% low, 34-67% medium and> 68% higher.

#### **RESULTS AND DISCUSSIONS**

# 1. Frequency Distribution of Demographic Data

The research finding is provided in the table as follows:

Characteristic		n	Percentage (n)			
Gender	Female	27	68			
	Male	13	32			
Age	21-30	23	57			
	31-40	11	28			
	41-50	6	15			
Education	Associate Degree III	34	85			
	Associate Degree IV	4	10			
	Bachelor Nursing 2		5			
Work	4-11 Bulan	2	5			
Experience	1-5 tahun	17	43			
(in year)	6-10 tahun	12	30			
	11-20 tahun	7	17			
	<u>&gt;</u> 20 tahun	2	5			
From: Primary Data 2018						

Table 1. Demographic data of the respondents

Table 1. shows characteristic of respondents, most of the respondent is female with frequency 27 respondents (68%), for age 21-30 years old with frequency 23 respondents (57%), for education associate degree III with frequency 34 respondents (85%), and for work experience 1-5 years with frequency 17 respondents (43%).

# 2. Specific Data and Characteristics of the Respondents

The research finding is provided in the table as follows:

#### Table 2. Characteristics of Respondents Based on their Workload

n	Percentage (%)
	(%)
2	5
33	82.5
5	12.5
40	100
	5

From: primary data,2018

Table 2 shows 33 respondents (82,5 %) experiencing medium workload.

#### Table. 3 Characteristics of respondents Based on Occupational Stress

Occupational Stress	Ν	%				
Mild	9	22.5				
Medium	27	67.5				
Severe	4	10				
Total	40	100				

From: Primary data, 2018

Table 3 shows most of the respondents (27 respondent, 67, 5%) suffer f rom middle occupational stress.

# Table 4. The Correlation of Workload andOccupational Stress of Nurses

Workload	Occ	Total		
of Nurses	Mild	Medium	Severe	
Low	2	0	0	2
Medium	4	27	2	33
High	3	0	2	5
Total	9	27	4	40
Test Korelasi	0.001			

From: Primary data, 2018

Table 4 shows the p-value 0.001 this results signifying of the correlation between workload and occupational stress of nurses in the emergency department in the Regional Public Hospital Prof. Dr. W.Z. Johannes Kupang.

# 1. The Workload of Nurses in the Emergency Department of Regional Public Hospital RSUD. Prof. DR. W. Z. Johannes Kupang.

The results of the study showed that most IGD nurses experienced moderate workloads, this was allegedly due to nurses' physical duties in the Emergency Room. Emergency nurses every day carry out physical nursing activities such as lifting patients, encouraging patients. The examination of patients is said to be not so severe because it can still be handled properly and precisely because the number of nurses in the emergency department is in sufficient range to carry out every nursing action in the emergency department. This is where the problem arises the nurse feels the workload is very high which causes stress on the nurse.

Other factors that affect the workload of the nurses are the work environment, physical-related works, the schedule of each nurse and the educational level(7). The work environment refers to some duties, such as re-arranging some objects that are harmful to the patients or the nurses, e.g., moving misplaced oxygen tanks(3).

The complexity of the work, the level of difficulty, work responsibilities are covered in the physical-related works. This mostly relates to the external factor of the nurses. Physical works associate with some factors, e.g., workstation, the arrangement of the station and infrastructures including its condition, as well as the attitude of work(8). explains that physical works refer to the responsibility of the nurses.

Some aspects of work organization, i.e., duration of work and break time, duration of the shift, salary systems, the model of the structure of the organization, and distribution of work also contribute to the workload of the nurse(8).

It is expected that education is able to provide the nurses with a basic of particular skills needed to produce quality human resources. In addition, the educational system should also develop the attitudes and professionalism for the graduates as this is essential in real practice.

The educational system should be designed so that the graduates are able to compete in their work through their quality performance(9). This factor is assumed as among the contributing factors of workload.

### 2. Occupational Stress of Nurses in the Emergency Department of the Regional Public Hospital RSUD. DR. W. Z. Johannes Kupang.

This result showed the most of respondents suffer from moderate occupational stress.

This issue blames the duration of the work of the nurses in the hospital. Nurses with work experience more than two years seem to be able to adapt to the work environment by which it reduces the stress level; such nurses are likely to suffer from moderate stress.

his research also finds out that four nurses experience with severe stress. According to research Vita Yustiya tahun 2010 (7), individuals who suffer from severe stress are more likely to experience changes in physiology, psychology, and even behavior. This contrasts to those with the moderate stress that their condition does not result in a change of their behavior since it only impacts their physic and psychology. Nurses with low stress tend to maintain their condition stable during working. This discussion signifies that some nurses in the research area suffer from physiological and psychological disorder.

### 3. Occupational Stress of Nurses in the Emergency Department of the Regional Public Hospital RSUD. DR. W. Z. Johannes Kupang Based on the Work Organization

It is revealed that aspects of work organization, i.e. duration of work and break time, duration of the shift, salary systems, the model of the structure of the organization, and distribution of work contribute to the workload of the nurse(8). The number of nurses in each shift is 8 to 10. This number actually suggests that nurses in the emergency room have time to break.

# 4. The Correlation of Workload and Occupational Stress of Nurses in the Emergency Department of the Regional Public Hospital RSUD. DR. W. Z. Johannes Kupang

Table 4 shows the workload determining the stress level, respondents with high workloads indicating high stress.

The data indicated that anyone, regardless of their occupation, can suffer from stress, including nurses. The distribution of workload is among the factors contributing to such a condition. This condition is worsened by the limited number of nurses in each department in a hospital. Consequently, the duties are not well-distributed by which it leads to a condition that distracts a person to work.

Some factors, e.g., physical works, environment, and work experience can trigger stress. This research reports that the nurses are divided into some work shifts. The nurses who work in the morning shift have a different workload with those of the night shift. It is revealed that nurses who work in the morning shift are the one with the complex problem in their work.

The results of the interviews also showed that some high stress nurses are having problem of sleeping, irritability and highly dependent on others. Furthermore, the condition of the workplace, i.e. the temperature, distracts the nurses during working. Every person suffers from stress, but the level is varying from one to another(10). The result shows that the cause of the stress of the nurses is the workload. Such an excessive workload leads to a condition where the nurses overly spend their energy; this further results in overstress. Although the respondents mostly suffer from moderate stress, the research reports that two nurses have a problem with mild stress. Nevertheless, (11) argues that such a condition can also impact the wellbeing and psychology of a person.

A simple, yet repetitive works with monotonous work position can lead to boredom. An example that fits this description is a person who is working on a report. This person spends too much time sitting by which it causes stiffness especially on the back of the neck, and it ends up with stress. Wagiu 2017 points out that low intensity of a workload results in boredom and a condition called under stress(12). With that being said, the workload must be distributed properly where its level is onthe middle between conditions that trigger overstress and under stress; a person's characteristics must be taken into account during this process as well(10)

According to Robbins (as cited in Haryati, 2013), factors of work organization, i.e. the demands and workloads that require high responsibility are among the factors causing severe stress(10). The results of analysis and chisquare test signify a correlation between the workload and occupational stress of the nurses in the research area. This resonates to research by Arief Fardiansyah in the Community Health Center Puskesmas Blooto, Mojokerto City in 2014 where it reveals the similar results(13).

Research by Fitria Rukmala Dewi conducted in Regional Public Hospital RSUD RA. Basuni Gedeg Mojokerto in 2012 showed the same results where the workload of nurses contributes to the occupational stress(14). Although the method employed is different, i.e. using the Kendall Tau test in analyzing the data, research by Faridah and Puji Purwaningsih also reports the same result. This research focuses on the nurses of the emergency department of the Regional Public Hospital in Semarang regency in 2013. This study indicates that the workload and occupational stress of nurses in the emergency department are correlated.

#### CONCLUSION AND RECOMMENDATION

The workload of most of the respondents in the emergency department of the Regional Public Hospital RSUD. Prof. DR. W. Z. Johannes Kupang is categorized moderate. Most of the respondents in the emergency department of the Regional Public Hospital RSUD. Prof. DR. W. Z. Johannes Kupang suffers from moderate occupational stress (27 respondents, 67.5%). The workload contributes to the occupational stress, meaning that the heavier the workload, the more severe the stress.

Recomendation for The stakeholders in the Regional Public Hospital RSUD. Prof. DR. W. Z. Johannes Kupang should endeavor to improve the performance of the nurses and recruit more personals to tackle the issue of excessive workload. Furthermore, it is also recommended to consider the aspect of the workload in establishing a policy on the occupational stress of the nurses. The educational institutions can benefit much from this research. Further research can use this study as a reference to explore the issue of occupational stress and workload of nurses.Future researcher can use this research as reference. It also helps the researcher to determine the research design that is helpful to measure the variable of occupational stress and workload in two times. This functions to identify the time difference and to select appropriate research instruments.

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