

## **Differences between Workload and Work Stress Based on Nurse Turnover at Hospital Child and Mom Mutiara Bunda and Hospital Tni Au Sjamsudin Noor**

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### **Abstract**

*The largest human resource in hospital health services is occupied of nurses who are ready to help patients at any time and work 24 hours a day, alternately and continuously to provide comprehensive and professional nursing care. The purpose of this study was to determine the differences between workload and work stress as seen from the turnover of nurses at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor.*

*This research used mixed methods. The research subjects were nurses at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor Indonesian. The quantitative data was collected through questionnaires given to 56 respondents. Also, the qualitative data was collected by interviewing some informants who were selected using a purposive sampling method. The quantitative analysis technique was carried out by using the chi-square. The qualitative approach is carried out by using qualitative descriptive analysis techniques.*

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**Keywords:** *Workload, Work Stress, Nurse Turnover*

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### **INTRODUCTION**

The largest human resource in hospital health services is occupied of nurses who are ready to help patients at any time and work 24 hours a day, alternately and continuously to provide comprehensive and professional nursing care. Nurses are one of the determining factors for the hospital service quality because they make direct contact daily and have the most time with patients (Skg and Sosilo, 2014). Therefore, the presence of nurses in the hospital must receive special attention from the hospital management, especially regarding the welfare and comfort of nurses at work so that the nurse's decision to quit can be minimized.

The current phenomenon is that hospital performance often experiences disruption caused by the high turnover rate of nurses. The turnover problem is one of the main problems in the field of health services (Albattat et al, 2013). In developing countries, the turnover rate will increase faster than in developed countries (Wonowijoyo and Sherly, 2018). In the United States, according to the results of a survey conducted by the American Health Care Association (AHCA), it was found that the highest turnover rate was for nurses at 39.5% (AHCA, 2011). The rate of nurse turnover in Indonesia is also quite high. This is supported by the research done by Alfiyah (2013) which concluded that the nurse turnover rate in

private hospitals in Jakarta is 27.3% per year, far above the optimum turnover standard of nurses in a hospital, which is between 5-10% per year.

Brunetto and Teo (2013) stated that in terms of organizational management, nurse turnover rate can harm patient safety, psychological perceptions of nurses themselves, and disruption of service stability in hospitals. Also, high nurse turnover causes a reduction in the human resources of experienced and skilled nurses, thus endangering the quality of nurse services received by patients. A high nurse turnover rate can also reduce the quality and productivity of nurses, as well as weaken the nursing system and disrupt the implementation of effective nursing.

O'Brien-Pallas et al (2006) stated that turnover caused the hospital to experience huge losses, due to the large costs involved in selecting, recruiting, training, and additional costs for overtime employees. Therefore, the turnover rate should be lowered and it is necessary to find out what factors make nurses more likely to leave the hospital. Hayes et al (2012) stated that the causes of nurse turnover include workload, stress, burnout, style management, empowerment, role perceptions, individual factors, career advancement, and pay/benefits. This research will focus on workload factors and work stress.

The workload is a demanding job assigned to nurses. As stated by Hart and Staveland in Zaki and Marzolina (2016), the workload is something that arises as a result of the interaction between task demands in the work environment where it is used as a workplace, skills, and perceptions of workers. The workload is sometimes interpreted operationally in factors such as the demands of a task or the effort it takes to do the job.

The problems often experienced by nurses related to workload include workloads that are not proportional to the abilities of nurses, both physical abilities and skills as well as time. An excessive workload can result in discomfort at work which often triggers nurses to move to other places. Arabianingsih et al (2016) in their research found that excessive workload will influence nurses to change jobs. As outlined by the research conducted by WHO, in Southeast Asia, including Indonesia, nurses have an excessive workload because they also receive non-nursing assignments. Excessive tasks will result in poor nurse performance.

Furthermore, work-related stress can damage a person's physical, mental and mental health. Moreover, high levels of stress are associated with high levels of staff truancy and low levels of productivity. According to the American Institute of Stress, stress is a major factor in up to 80% of all work-related injuries and 40% of quitting at work. Nursing is considered a demanding and complex job. High job demand and a combination of too much responsibility, as well as too little authority, have been identified as some of the major sources of job stress among nursing staff.

The purpose of this study is to determine the difference between workload and work stress based on nurse turnover at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor.

## **METHOD**

This is mixed-methods research. The sample in the quantitative method is the nurse who served in the inpatient room of RSIA Mutiara Bunda and Sjamsudin Noor Indonesian Air Force Hospital, totaling 32 nurses. The sample in the qualitative method is the head nurses of RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor. The sampling technique was purposive sampling. The data collection techniques used were questionnaires and structured interviews. Furthermore, the quantitative data analyzed using chi-square analysis.

## **1. RESULT OF THE RESEARCH**

### **1.1 Quantitative Analysis**

#### **1.1.1 Characteristics of Respondents**

The characteristics of the respondents in the quantitative method are as follows.

**Table 1 Characteristics of Respondents**

Karakteristik	f	%
<b>Age:</b>		
≤ 25 years old	16	50.0
26 – 35 years old	14	43.8
36 – 45 years old	2	6.3
<b>Gender:</b>		
Male	4	12.5
Female	28	87.5
<b>Marital Status:</b>		
Married	11	34.4
Single	21	65.6
<b>Education Background:</b>		
DIII (Three Year Diploma)	18	56.3
DIV (Four Year Diploma)	4	12.5
S1 (Bachelor Degree)	10	31.3
<b>Working Period:</b>		
< 2 years	14	43.8
2-5 years	8	25.0
> 5 years	10	31.3
Total	32	100.0

**Source:** primary data

Table 1 showed that most of the nurses or 16 nurses were less than 25 years old. Moreover, 28 nurses (87.5%) were female. Most of the respondents or 21 nurses (65.6%) were not married. Furthermore, 18 nurses (56.3%) had DIII education. Also, 14 nurses (43.8%) have worked less than 2 years.

### 1.1.2 Nurse Workload

The frequency distribution of the nurse workloads at MutiaraBunda Hospital and RS TNI AU Sjamsudin Noor can be seen in the table below.

**Table 2 Frequency Distribution of Nurse Workloads**

Interval	f	%	Category
124 – 164	2	6.3	High
83 – 123	30	93.7	Moderate
41 – 82	-	-	Low
Total	32	100.0	

**Source:** primary data

The table above showed that most of the nurses or 30 nurses (93.7%) at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor believed that the workloads they have been carrying were in the moderate category.

### 1.1.3 Nurse Work Stress

The frequency distribution of the nurse work stress at MutiaraBunda Hospital and RS TNI AU Sjamsudin Noor can be seen in the table below.

**Table 3 Frequency Distribution of Nurse Work Stress**

Interval	F	%	Category
≤ 15	9	28.1	Not Shown
16 – 20	16	50.0	Light stress
21 – 25	4	12.5	Moderate Stress
26 – 30	2	6.3	Severe Stress
31 – 40	1	3.1	Dangerous Stress
Total	32	100.0	

Source: primary data

The table above showed that most of the nurses or 16 nurses (50.0%) at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor experienced a light level of work stress

#### 1.1.4 Nurse Turnover

The frequency distribution of the nurse turnover at MutiaraBunda Hospital and RS TNI AU Sjamsudin Noor can be seen in the table below.

**Table 4 Frequency Distribution of Nurse Turnover**

Interval	f	%	Category
13 – 16	7	21.9	High
9 – 12	11	34.4	Moderate
4 – 8	14	43.7	Low
Total	32	100.0	

Source: primary data

The table above showed that the turnover rates of nurses at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor were in a low category.

#### 1.1.5 Differences in Workload and Work Stress of Nurses Based on Turnover

The difference in workload and work stress of nurses based on turnover is determined based on the cut off point. The cut-off point for the workload is 106.97. Hence, the workload was said to be high if the score was > 106.97 and low if the score was ≤ 106.97. The cut-off point for work stress was 18.72. Hence, the work stress was considered high if the score was > 18.72 and low if the score was ≤ 18.72. The cut-off point for the nurse turnover was 9.19. Hence, the turnover was considered high if the score was > 9.19 and low if the score was ≤ 9.19.

The differences in the workload of nurses based on turnover can be seen in the table below.

**Table 5 Differences in Nurse Workload Based on Turnover**

Workload	Turnover				Total		Pearson Chi-square	p valu e
	High		Low		N	%		
	F	%	F	%				
High	8	53.3	7	46.7	15	46.9	3.020	0.085
Low	4	23.5	13	76.5	17	53.1		
Total	12	37.5	20	62.5	32	100.0		

Source: primary data

The table above showed the probability value (p-value) of 0.085 < 0.10. It meant that there was a significant difference in the workload of nurses based on nurse turnover at a 10%

confidence level. The cross-tabulation result between workload and nurse turnover showed that 15 nurses carried out the high workload, 8 nurses (53.3%) who exhibited high turnover intention, and 7 nurses (46.7%) who exhibited low turnover intention. The table above also showed that 17 nurses carried out the low workload, 4 nurses (23.5%) exhibited high turnover intention, and 13 nurses (76.5%) exhibited low turnover intention.

Thus, the nurses who carried out high workload exhibited high turnover intention. On the other hand, the nurses who carried out low workload exhibited low turnover intention.

The differences in work stress of nurses based on turnover can be seen in the table below.

**Table 6 Differences in Nurse Work Stress Based on Turnover**

Work Stress	Turnover				Total		Pearson Chi-square	p valu e
	High		Low		N	%		
	F	%	F	%				
High	9	64,3	5	35,7	14	43,8	7,619	0,00 8
Low	3	16,7	15	83,3	18	56,2		
Total	12	37,5	20	62,5	32	100, 0		

**Source:** primary data

The table above showed the probability value (p-value) of 0.008 < 0.05. It meant that there was a significant difference in the work stress of nurses based on nurse turnover. The cross-tabulation between work stress and nurse turnover showed that 14 nurses carried out high work stress levels, 9 nurses (64.3%) who exhibited high turnover intention, and 5 nurses (35.7%) who exhibited low turnover intention. The table above also shows that 18 nurses experienced low levels of work stress, 3 nurses (16.7%) exhibited turnover intention, and 15 nurses (83.3%) exhibited low turnover intention.

Thus, the nurses who experienced high work stress exhibited high turnover intention. On the other hand, the nurses who experienced low work stress exhibited low turnover intention.

## 1.2 Qualitative Analysis

The results of interviews with the head nurses at MutiaraBunda Hospital and RS TNI AU Sjamsudin Noor can be seen in the tables below.

**Table 7 Description of Nurse Workload**

Theme	Code	Interpretation
Determination of workload	RSIA	Based on working hours (Shift)
	RDIS	A group of employees complete tasks according to the specified time
Workload compatibility with the service	RSIA	Yes, it is appropriate, because although the working hours are long (12 hours), there are not too many patients.
	RDIS	The workload is not compatible with the service, because of the shortage of nursing personnel
Constraints in determining the nurse workload	RSIA	Nothing
	RDIS	There are obstacles, because there is still a shortage of nurses so that each nurse has to do two tasks at once

**Table 8 Description of Nurse Work Stress**

Theme	Code	Interpretation
Factors that influence job stress	RSIA	Long working hours
	RDIS	Poor work environment, excessive workload, anxiety level, family problems, economic problems
How to avoid work stress	RSIA	Trying to be calm / relaxed while working so that the tasks will not become a burden
	RDIS	Discussing it with the head nurse or with coworkers, reporting to the leader when having difficulties in carrying out tasks, spending quality time with family or with friends. In addition, the hospital management needs to increase the number of nurses.

**Table 9 Description of Turnover**

Theme	Code	Interpretation
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Factors causing turnover	RSIA	The salary standard is still below the UMR (Minimum Wage)
	RDIS	The salary is still below UMR (Minimum Wage), additional workloads, increase in the workload and work offers from other hospitals.
Turnover cases in hospital	RSIA	Not often
	RDIS	There is no, because the nurses who work in this hospital have been selected according to the hospital regulations.
Minimize turnover	RSIA	Providing comfortable work place by providing the facilities needed and fostering a sense of kinship among employees so that employees feel at home working even though the salary is still below UMR (Minimum Wage).
	RDIS	In conducting recruitment, prospective nurses must have mutually agreed requirements. Signing an employment contract stating that no quitting for least 3 months and must report 1 month in advance before quitting. Providing counseling for nurses Paying attention to the needs of nurses to support hospital services. Implement a nurse retention program Implementing career development program

## 2. DISCUSSIONS

### 2.1 Effect of Workload on Nurse Turnover

The results showed that there was a significant difference in the workload of nurses based on nurse turnover. The workload is the amount of work that must be done by a person or organizational unit within the specified time (Soleman, 2011). The excessive workloads carried by nurses could result in bad performances. This situation caused the nurses to feel uncomfortable working in the hospital and foster the intention to move to other workplaces with low workloads. Conversely, an appropriate workload would make nurses felt comfortable at work, thereby reducing the nurses' intention to leave the hospital. Based on the results of cross-tabulation, it showed that nurses who carried out high workload exhibited a high turnover intention. On the other hand, nurses who carried out low workload exhibited low turnover intention.

The results of the descriptive analysis showed that the workloads of nurses at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor were in the moderate category, namely 30 people (93.7%). It meant that the majority of nurses did not feel burdened by the tasks given by the hospital, both in terms of physical, psychological, or working time. The nurses were still able to carry out their duties well even though the working time set by the hospital management was a long, 12-hour shift. According to the head of the RSIA Mutiara Bunda, the long working hours did not create a heavy workload, because the number of patients receiving treatment was also small so that the turnover intention of the nurses was also low. However, different results were shown by the nurses at RS TNI AU Sjamsudin Noor. Since the number of nurses was still insufficient, each nurse must carry out additional tasks. However, the turnover cases rarely occurred because the nurses who worked at this hospital were bound by an employment contract.

Thus, the turnover rate of nurses at RS TNI AU Sjamsudin Noor was also in the moderate category. Moreover, only 14 respondents (43.7%) exhibited the turnover intention. Hence, it was concluded that the nurse turnover rate at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor was in a low category.

## **2.2 Effect of Work Stress on Nurse Turnover**

The results showed that there was a significant difference in the work stress of nurses based on nurse turnover. Luthans (2002) defined work stress as a response in adjustment which was influenced by individual differences and psychological processes as a consequence of environmental behavior; a condition that placed excessive psychological or physical demands on a person.

Work stress that could not be overcome by nurses could harm nurses. The distribution of work time that was not appropriate and disrupted the life pattern of nurses could disrupt the emotional stability of the nurses. As a result, the nurses became unable to relax, easily experienced panic, thereby increasing the work stress of nurses. Nursing was considered a demanding and complex job. High job demand and a combination of too much responsibility, as well as too little authority, have been identified as some of the major sources of job stress among nursing staff. This condition could encourage the nurses to look for other jobs another low-stress job. The cross-tabulation results showed that the nurses who experienced high work stress exhibited high turnover intention. On the other hand, the nurses who experienced low work stress exhibited low turnover intention.

Based on the descriptive analysis, it showed that the work stress of nurses at RSIA Mutiara Bunda and RS TNI AU Sjamsudin Noor was at the light level. As reflected by the result of 16 respondents (50.0%). It showed that the majority of nurses did not feel that their works were stressful tasks. This condition occurred because the nurses cared for a small number of patients. Therefore, even though the working hours were long it did not create stressful workloads for the nurse. Also, according to the head of RSIA Mutiara Bunda hospital, the hospital management provided facilities that supported the work of nurses and maintained a sense of kinship between hospital staff and employees, so that the nurses felt comfortable at work. Moreover, the low level of stress resulted in the low turnover rate of the nurses.

The same thing was done by the management of RS TNI AU Sjamsudin Noor. Even though the workload was high, the management provided counseling for nurses so that the work stress level of nurses could be minimized. This condition prompted the nurses to carry out their duties properly. Thus, the turnover intention could be suppressed.

## **CONCLUSIONS**

Based on the results of research and discussion, the following conclusions can be drawn:

1. The workload of nurses at RSIA MutiaraBunda and RS TNI AU Sjamsudin Noor is in the moderate category.
2. The work stress of nurses at MutiaraBunda Hospital and RS TNI AU Sjamsudin Noor is in the lightlevel.
3. The nurse turnover at RSIA MutiaraBunda and RS TNI AU Sjamsudin Noor is in the low category.
4. There are differences in workload and work stress based on the turnover of nurses at RSIA MutiaraBunda and RS TNI AU Sjamsudin Noor.



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