FACTORS RELATED TO NURSE OCCUPATIONAL STRESS AT HOSPITAL AULIA JAKARTA, 2022

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Abstract. *Based on the results of the observations that the authors took using the questionnaire filling method, it can be concluded from the 27 nurses at the hospital. Aulia Jakarta, 17 of them (63.0%) experienced moderate work stress. Moderate work stress can be a risk for health problems and accidents for workers. If not managed properly, stress on nurses can cause errors in patient care and endanger patient safety. Therefore, researchers are interested in conducting research on factors related to work stress of nurses in hospitals Aulia. This research was conducted to determine the factors associated with the work stress of nurses in hospitals. Aulia Jakarta in 2020. The population of this study are nurses who work in hospitals. Aulia as many as 27 people and the sample used is a total population of 27 people. This study uses a quantitative method with a cross sectional research design. More work stress was experienced by nurses who were in a less good work environment as many as 16 respondents, of which 6 (37.5%) experienced mild work stress, and 10 (62.5%) experienced moderate work stress. Compared to nurses who were in a good work environment, there were 7 respondents, of which 7 (63.6%) experienced mild stress and 4 (36.4%) experienced moderate work stress. However, the analysis results from the Chi-Square statistical test obtained a p-value of 0.000 (p <0.05). So it can be concluded that there is a significant relationship between work stress and the work environment for nurses in hospitals. Aulia Jakarta in 2022. The OR calculation yields a value of 9750.*

Keywords: nurse; work stress; Work environment

1. INTRODUCTION

Currently work stress is a global issue that affects all professions and workers in both developed and developing countries (ILO, 2016). Based on data from WHO, around 450 million people in the world experience mental and behavioral disorders (WHO, 2003). WHO predicts that work stress will become a major threat to human health by 2020 (Makhbul et al, 2003).

Many factors cause work stress on nurses including night shifts, multiple role conflicts, lack of social support, conflicts between work and family, diverse and incompetent task demands, excessive workload, uncomfortable working conditions, job uncertainty, inadequate there are rewards, and the unequal ratio of the number of nurses to the number of patients (Martina, 2012). In addition, nurses have very high duties and responsibilities towards the safety of human life, are encouraged to always be optimal in serving patients, record patient conditions regularly and continuously, maintain patient conditions so that they do not worsen, and convey all patient conditions honestly to other parties. family (Astuti, 2016).

Based on the results of a preliminary study on 27 nurses at Aulia Hospital Jakarta, it was found that 17 nurses (63.0%) experienced moderate levels of work stress, while 10 nurses (37.0%) experienced mild levels of work stress. This shows that there is a problem of work stress felt by nurses.

2.   LITERATURE REVIEW

2.1 Stress Definition

Stress has a different meaning for everyone and the word stress has an emotional content which indicates the existence of a related concept that causes the appearance of various different definitions of stress. The term stress was introduced by Selye in 1930 in the fields of psychology and medicine, defining stress as the reaction of the organism to situations that are burdensome or life-threatening (Pramudya, 2008). Every individual living in the world is never free from stress. Every day and every time, there are always events that make a person feel stressed. There are guidance from other people towards individuals, difficulties, threats experienced in living life that make a person dizzy or have headaches (Muthmainah, 2012).

According to Jhohana (2010) work stress is an internal condition, which can be caused by physical demands (bodies), or the environment, and social situations. Stress is also defined as an internal or external response or process that reaches a level of physical and psychological tension, up to the limit or exceeding the subject's ability. Stress that originates from and is related to everything from the work environment is called work stress (Hadiansyah, 2019). Stress as a reaction is one part of the three divisions of the stress model. In detail, the division of the stress model consists of a stress model which has the concept that stress is based on a stimulus, a model which has the concept that stress is a combination of the two concepts. While the distribution is based on responses and models which have the concept that stress is based on a theoretical approach, stress is defined into the disciplines of physiology, psychology, and sociology (Nurazizah, 2017).

2.2 *Work Stress*

Handoko (2001) revealed stress is a condition of tension that affects one's emotions, thought processes and conditions. Excessive stress can threaten a person's ability to deal with the environment. Stress is based on the assumption that what is inferred from the symptoms and signs of physiology, behavior, psychological and somatic, is the result of no/lack of compatibility between people (in terms of their personality, talents and skills) and their environment, which results in an inability to faced various demands against him effectively (Munandar, 2001).

Work stress results from a discrepancy between demands and pressure and an incompatibility with knowledge and abilities. Situations like this are not only related to work pressure that exceeds the limits of the worker's ability to control it but also related to the knowledge and abilities of individuals that are not used properly, triggering problems for them. Work is owned to control the work, and support is received from the people around him (WHO, 2003).

2.3 Factors Associated with Work Stress

1.   Occupational Factors

Job factors are factors that include the environment and factors of the work itself. According to HSE (2014) and ILO (2016), job characteristics that can cause stress consist of working hours, workload, and work environment. The following is an explanation of each work factor:

2.   Non-Physical Work Environment

According to Sedarmayanti (2001) the non-physical work environment is all conditions that occur related to work relations, both relations with superiors and co-workers, or relations with subordinates. Wursanto (2009) defines a non-physical work environment as something that concerns the psychological aspects of the work environment

2.1.1 Sources of Work Stress

According to Umam (2010) states that the cause of stress (stressor) consists of four main things, namely:

1. Extra organizational stressor Consisting of social/technological changes, family,

relocation, economic and financial circumstances, race and class, and community/residential conditions.

2. Organizational stressor Which consists of organizational policies, organizational structure, physical conditions within the organization, and processes that occur within the organization.

3. Group stressor Which consists of a lack of togetherness in groups, lack of social support, and the existence of intra-individual, interpersonal and intergroup conflicts.

4. Individual stressor Consisting of conflicts and role ambiguity, as well as individual dispositions, such as type A personality patterns, personal control, learned helplessness, self-efficacy, and psychological resilience. In relation to tasks and work at work, the factors that cause stress are likely to be more specific. Clark and Wantoro classify the causes of stress (stressors) in the workplace into three categories, namely physical, psychophysical and psychological stressors (Tarwaka, 2004)

Furthermore, Cartwright et al. in Tarwaka (2004) tries to sort out the causes of work-related stress into 6 groups of causes, namely:

1. Intrinsic factors of work.
   There are several intrinsic factors in work which are very potential causes of stress and can result in a bad state of mind. These factors include uncomfortable physical conditions of the work environment (noisy, dusty, smelly, hot and humid temperatures, etc.), non-ergonomic work stations, shift work, long working hours, increasingly congested trips to and from work, high-risk and dangerous work, use of new technology, overload, adaptation to new types of work and others.

2. Individual role factor in work organization.
   The mental workload and responsibilities of a job are more stressful than the physical workload. Karasek et al in a study on work-related stress found that employees who have a higher psychological burden and are coupled with limited decision-making authority have a higher risk of developing coronary heart disease and blood pressure and have a tendency to smoke more than other employees.

3. Labor relations factor.
   Good relations between employees at work is a potential factor as a cause of stress. Suspicion between workers, lack of communication, discomfort in doing work are signs of work-related stress. Job demands that require a worker to work in an isolated place, so they cannot communicate with other workers (such as telephone operators, lighthouse keepers, and others) are also sources of stress.

3. RESEARCH METHODS

This study used a quantitative research type with an analytical type of research using a cross sectional approach. The population in this study were all nurses working at Aulia Hospital as many as 27 respondents. The sampling technique in this study is total sampling. Total sampling is a sampling technique where the number of samples is equal to the population.

a) Univariate analysis
   Univariate analysis was performed to analyze the frequency distribution of observed and measured variables so that an overview of each of these characteristics was obtained, then presented in tabular form. Then compared, discussed and explained descriptively with supporting theories and the results of observations made by researchers to see the facts in the field.

b) Bivariate analysis
   In this study, bivariate analysis was conducted to see the relationship between the independent and dependent variables of work stress for nurses in the hospital. The process of bivariate analysis in this study used chi-square. The magnitude of significance is determined by p value ≤ of 0.05. Whereas to determine the closeness of the relationship between the independent variable and the dependent variable using

the Odds Ratio (OR) value with a 95% confidence level

4. RESULTS AND DISCUSSION

4.1 Work Stress

Based on the results of data processing, the distribution of respondents based on work stress can be seen in the following table:

Table 1. Work Stress Variables

No	Work Stress	Frequency	**Percentage**
1.	Light	10	37.0
2.	Currently	17	63.0
Total		27	100.0

From the work stress table above, it is found that the number of mild research samples is 10 respondents (37.0%) and moderate is 17 respondents (63.0%)

4.2 *Work Environment*

Based on the results of data processing, the distribution of respondents based on the work environment can be seen in the following table:

Table 2. Work Environment Variables

No	Work environment	Frequency	**Percentage**
1.	Good	11	40.7
2.	Not good	16	59.3
Total		27	100.0

From the work environment table above, it is found that the number of samples of a good work environment research is 11 respondents (40.7%) and a bad work environment is 16 respondents (59.3%)

1. Workload

Based on the results of data processing, the distribution of respondents based on workload can be seen in the following

Table 3. of Workload Variables

No	workload	Frequency	**Percentage**
1.	Light	12	44.4
2.	Currently	15	55.6
Total		27	100.0

From the workload table above, it was found that the number of research samples in light workloads totaled 12 respondents (44.4%) and moderate workloads amounted to 15 respondents (55.6%).

2. Working Hours

Based on the results of data processing, the distribution of respondents based on working hours can be seen in the following table:

Table 4. Working Hours Variable Table

No	Working Hours	Frequency	**Percentage**
1.	8 Hours	23	85.2
2.	>8 Hours	4	14.8
Total		27	100.0

From the working hours table above, it is found that the number of research samples at 8 working hours is 23 respondents (85.2%) and > 8 working hours is 4 respondents (14.8%).

3. Working Period

Based on the results of data processing, the distribution of respondents based on years of service can be seen in the following table:

Table 5. Table of Working Period Variables

No	Working Period	Frequency	**Percentage**
1.	< 3 years	11	40.7 %
2.	>3 years	16	59.3 %
Total		27	100.0 %

From the work period table above, it is found that the number of research samples at <3 years of service is 11 respondents (40.7%) and > 3 years is 16 respondents (59.3%).

4.3 Results of Bivariate Analysis

1. Relationship between Work Environment and Work Stress

Table 6. Relationship between Work Environment and Work Stress for nurses at Aulia J Hospital in 2022.

Work Environment	Work Stress		Total	P-Value	OR (95% CI)
	Light	Currently			
	F (%)	F (%)	F (%)		
Good	4 (36.4%)	7 (63.6%)	11 (100.0%)		

Not Good	6 (37.5%)	10 (62.5%)	16 (100.0%)	0.000	9750 (3914-24.285)
Total	10 (37.0%)	17 (63.0%)	27 (100.0%)		

Based on table 5.1, it can be seen that 16 respondents experienced more work stress in a less favorable work environment, of which 6 (37.5%) experienced mild work stress, and 10 (62.5%) experienced moderate work stress. Compared to nurses who were in a good work environment, there were 7 respondents, of which 7 (63.6%) experienced mild stress and 4 (36.4%) experienced moderate work stress. However, the analysis results from the Chi-Square statistical test obtained a p-value of 0.000 (p <0.05). So it can be concluded that there is a significant relationship between work stress and the work environment for nurses in hospitals. Aulia in 2022. The OR calculation produces a value of 9750.

2. The Relationship between Workload and Work Stress

Table 7. Relationship between workload and work stress for nurses in Aula Hospital in 2022.

Workload	Work Stress		Total	P-Value	OR (95% CI)
	Light	Currently			
	F (%)	F (%)	F (%)		
Light	4 (36.4%)	7 (63.6%)	11 (100.0%)	0,025	2653 (1.196-5.887)
Currently	6 (37.5%)	10 (62.5%)	16 (100.0%)		
Total	11 (40.7%)	16 (59.35%)	27 (100.0%)		

Based on table 5.2, it can be seen that 16 respondents experienced more work stress with moderate workloads, of which 6 (37.5%) experienced mild work stress, and 10 (62.5%) experienced moderate work stress. Compared to nurses who have a workload of 11 respondents, of which 4 (36.4%) experienced mild stress and 7 (63.6%) experienced moderate work stress. However, the analysis results from the Chi-Square statistical test obtained a p-value of 0.025 (p <0.05). So it can be concluded that there is a significant relationship between work stress and workload on nurses in hospitals. Aulia in 2022. The OR calculation yields a value of 2,653.

3. Relationship between tenure and work stress

Table 8. Relationship between Work Stress and Nurses' Tenure in Hospitals. Aulia in 2022.

tenure	work stress		Total	P-Value	OR (95% CI)
	Light	Currently			
	F (%)	F (%)	F (%)		
<3 year	4 (36.4%)	7 (63.6%)	11 (100.0%)		

>3 year	6 (37.5%)	10 (62.5%)	16 (100.0%)	1.000	952 (194-4678)
Total	10 (37.0%)	17 (63.0%)	27 (100.0%)		

Based on table 5.3, it can be seen that 16 respondents experienced more work stress than working for >3 years, of which 6 (37.5%) experienced mild work stress and 10 (62.5%) experienced moderate work stress. Compared to nurses who worked for <3 years there were 11 respondents, of which 4 (36.4%) experienced mild work stress and 7 (63.6%) experienced moderate work stress. However, the analysis results from the Chi-Square statistical test obtained a p-value of 1,000 (p <0.05%). So it can be concluded that there is no significant relationship between work tenure and work stress on nurses in hospitals. Aulia in 2022

4. The Relationship between Working Hours and Work Stress

Table 9. Relationship between Work Stress and Working Hours of nurses in hospitals. Aulia in 2022.

Working Hours	Work Stress		Total	P-Value	OR (95% CI)
	Light	Currently			
	F (%)	F (%)	F (%)		
8 Jam Hour	9 (39.1%)	14 (60.9%)	23 (100.0%)	1.000	1929 (173-21.540)
>8 Jam Hour	1 (25.0%)	3 (75.0%)	4 (100.0%)		
Total	10 (37.0%)	17 (63.0%)	27 (100.0%)		

Based on table 5.4, it can be seen that 23 respondents experienced more work stress when they worked 8 hours of work, of which 9 (39.1%) experienced mild work stress, and 14 (60.9%) experienced moderate work stress. Compared to nurses who worked > 8 working hours, there were 4 respondents, where 1 (25.0%) experienced mild work stress and 3 (75.0%) experienced moderate work stress. However, the analysis results from the Chi-Square statistical test obtained a p-value of 1,000 (p <0.05%). So it can be concluded that there is no significant relationship between working hours and work stress on nurses in hospitals. Aulia in 2022.

CONCLUSION
1. Relationship between Work Environment and Work Stress
Based on table 5.1, it can be seen that 16 respondents experienced more work stress in a less favorable environment, of which 6 (37.5%) experienced mild work stress, and 10 (62.5%) experienced moderate work stress. Compared to nurses who were in a good work environment, there were 7 respondents, of which 7 (63.6%) experienced mild stress and 4 (36.4%) experienced moderate work stress. However, the analysis results from the Chi-Square statistical test obtained a p-value of 0.000 (p <0.05). So it can be concluded that there is a significant relationship between the work environment and the work stress of nurses in hospitals. Aulia year 2022. It is proven by a significance degree of 95% there are 9750 times for opportunities for work stress to occur in nurses. This is in line with research

conducted by Ahmad Koncoro (2015) based on the Chi-Square results it was found that there is a relationship between the work environment and work stress with a p-value of 0.000. The work environment is something that exists around the worker and influences him in carrying out the tasks assigned (Nitisemito, 1992).

According to researchers there are factors that cause work stress in the work environment. If the nurse is in a work environment that is not conducive it can affect system performance and performance. If nurses are in the work environment, one of the causal factors that can occur is work accidents or health problems in workers, such as (physical, mental, or emotional health disorders). Controls that can be carried out are by inspecting the work environment on a regular basis and monitoring aspects of safety and health, in order to create and improve a safe and comfortable work environment for workers.

2.   Relationship between Workload and Work Stress

Based on table 5.2 it can be seen that work stress is more experienced by nurses who have a moderate workload of 10 (62.5%) compared to respondents who have a light workload of 7 (63.6%). However, the analysis results from the Chi-Square statistical test obtained a p-value of 0.025 (p <0.05). So it can be concluded that there is a relationship between workload and work stress of nurses in hospitals. Aulia in 2022. It is proven by a significance degree of 95% that there are 2,653 opportunities for job stress to occur in nurses.

This is in line with research conducted by Nurazizah (2017) based on the Chi-Square results it was found that there is a relationship between workload and work stress with a value (P-value = 0.045). A diverse workload requires nurses to have various abilities and focus not only on one job. When job demands vary widely and exceed their abilities, this can cause complaints of work stress to nurses.

Excessive workload requires workers to have various abilities and focus not only on one job which allows them to not be able to perform effectively and efficiently because their physical abilities are reduced. The impact of excessive workload results in work stress, both physical and psychological and emotional reactions. The control that can be carried out is that the workload must be adjusted to the ability and work capacity of the worker concerned. Every worker must be given the opportunity to develop a career. Tasks must be designed to provide stimulation and opportunities so that workers can use their skills.

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