



## Determinants Of Stress Levels In Nurses Tgk Chik Di Tiro Hospital Year 2023

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### Keywords

Workload, Work  
Fatigue, Work Shift,  
Age, Job Security,  
Stress Level

**Abstract.** Stress experienced by nurses is stress that is obtained or experienced at work which is included in work stress. This study aims to determine the factors that influence the stress level of nurses who work in the inpatient room at Hospital. This research is an analytical study with cross sectional. The population in this study were all nurses totaling 115 people. The research sample uses the Slovin Formula so that the number of samples is 54 people. Data collection was obtained through a questionnaire. The data processing process starts from editing, coding, and tabulation. Data analysis consisted of univariate and bivariate analysis with Chi Square test. Multivariate analysis with simple linear regression test. Research results There is a relationship between workload and stress levels in inpatient nurses based on the results of the chi-square statistical test analysis obtained  $p$  value =  $0.000 < 0.05$ . There is a relationship between work fatigue and stress levels in inpatient nurses based on the results of the chi-square statistical test analysis obtained  $p = 0.000 < 0.05$ . There is a relationship between work shifts and stress levels in inpatient nurses based on the results of the chi-square statistical test analysis obtained  $p$  value =  $0.000 < 0.05$ . There is a relationship between age and stress levels in inpatient nurses based on the results of the chi-square statistical test analysis obtained  $p$  value =  $0.000 < 0.05$ . There is a relationship between job security and stress levels in inpatient nurses. Based on the results of the chi-square statistical test analysis, the value of  $p = 0.000 < 0.05$  was obtained. The most dominant factor influencing the stress level of inpatient nurses at Hospital is job security. As for suggestions for nurses at Hospital in order to improve self-coping so that stress does not occur at work, especially stress occurs because of job security.

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### 1. INTRODUCTION

Health is a state of health, both physically, mentally, spiritually and socially, which enables everyone to live a productive life socially and economically. Resources in the health sector are all forms of funds, personnel, health supplies, pharmaceutical preparations and medical devices as well as health service facilities and technology used to carry out health efforts carried out by the Government, regional governments and/or the community. A health worker is any person who dedicates themselves to the health sector and has knowledge and/or skills through education in the health sector, which for certain types requires authority to carry out health efforts (Law No. 36 of 2009 concerning Health).

Currently, work stress is a global issue that affects all professions and workers in developed and developing countries. 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. The stress experienced by nurses is stress obtained or experienced at work which is included in work stress. (Budyanto, AJM Rattu, 2019). The Indonesian government, through the Ministry of Health, provides health services, one of which is through hospitals. A hospital is a health service institution that provides complete individual health services, providing inpatient, outpatient and emergency services. Hospitals must have permanent staff which includes medical and medical support staff, nursing staff, pharmaceutical staff, hospital management staff, and non-health staff (Law No. 44 of 2009 concerning Hospitals).

Stress is a physical and psychological condition caused by a person's adaptation to their environment. In addition, stress is an "unconscious preparation" by a person to avoid or face the demands of their environment. Work-related stress is defined as a disturbing or detrimental emotional



and physical response that occurs when task demands do not match the worker's capabilities, resources, or desires. A person can be categorized as experiencing work stress, if the stress experienced also involves the company organization where the person concerned works. (Kasmarani, 2012)

Stress is the result of interactions between individuals and the work environment where this can threaten and put pressure physiologically and psychologically. Many factors play a role in the emergence of stress, both internal which includes physiological and psychological conditions and external which includes organizational factors and the work environment. Sleep disturbances due to night shifts can also trigger stress, stress can last for a short or prolonged period. (Febriana, 2016).

Work stress is an individual's inability to meet the demands of his or her work so that he or she feels uncomfortable and uneasy. The stress experienced by a person results in a weakening of the supply of adrenaline hormones and the body's endurance. So, if someone experiences work stress, that person will easily get sick. Apart from that, productivity or work performance decreases, which will have a negative impact on the work unit or place where the person works (Mulyati & Aiyub, 2018).

Work stress is defined as an interaction between working conditions and worker characteristics that changes normal physical and psychological functions. Job stress is a job demand that does not refer to work conditions that threaten the individual, job stress arises as a form of individual disharmony with the work environment. Work stress is a form of the body's response to pressures, physical or environmental demands and situations that interfere with the implementation of nurses' duties. (Ismail & Supriyadi, 2018)

Stress is a common problem in modern life, including work-related stress (ILO, 2016). Work stress is a dangerous physical and emotional response and can occur when job demands exceed the worker's ability or work control (Government, 2014). Work stress becomes a risk to the health and safety of workers when the work carried out exceeds the capacity, resources and abilities of workers for a long time (ILO, 2016). In America, work stress is a common and detrimental problem for workers (NIOSH, 2014). Work stress can cause health problems such as feeling tired/tired, running out of energy, dizziness, and digestive disorders (HM, 2016).

The quality of nursing services cannot be separated from the role of patient classification in the inpatient ward, because with this classification patients feel more respected according to their rights and it is possible to know the conditions and workload of nurses in each ward. The conditions and workload in the inpatient room need to be known so that the quantity and quality of nursing staff needed can be determined. Factors that influence nurses' workload are patient conditions that are always changing, and the average number of nursing hours required to provide direct service to patients exceeds a person's capabilities. Likewise with the workload, both in quantity, where the tasks that have to be done are too many/little, and in terms of quality, where the tasks that have to be done require expertise. If the number of tasks is not commensurate with physical abilities, skills and available time, it will become a source of stress. (Maharani & Budianto, 2019). Work stress can have a negative impact on mental conditions if it is not dealt with. Stress can cause a variety of detrimental effects, ranging from poor health to suffering from disease. Job demands that are not in accordance with the worker's abilities or skills and aspirations that are not channeled as well as job dissatisfaction can be causes of stress. For example, working night shifts causes physical and emotional disorders. Apart from shift work, other things that can cause stress are workload and work environment. Another bad impact that can arise if a nurse experiences stress is that it can interfere with social interactions, be it with colleagues, doctors or patients. Work effectiveness can also be disrupted, because in general when someone experiences stress,

Nurse work stress can occur if the nurse on duty receives a workload that exceeds her abilities so that the nurse is unable to fulfill or complete her duties, then the nurse is said to be experiencing work stress. Manifestations of nurses' work stress, including due to patient characterization, patient assessment, and disturbing aspects of the work environment, are the first steps in dealing with emerging problems regarding emergency room density levels, efficiency in carrying out tasks, and the demand to save patients. If stress reaches a peak point that roughly corresponds to the employee's maximum performance capability, then at this point additional stress tends not to result in improved

performance. Getting an inpatient assignment is also a burden of responsibility that is faced by the nurse on duty. So the Regional Public Service Agency (BLUD) of the Banjar City General Hospital (RSU), West Java has regulations that have been made regarding the work shifts of nurses, namely morning, afternoon and evening, each of which is 8 hours per day. In the last five years, there have been quite a lot of internal medicine inpatient visits and a need for professional medical personnel. (Maharani & Budianto, 2019) In the last five years, there have been quite a lot of internal medicine inpatient visits and a need for professional medical personnel. (Maharani & Budianto, 2019) In the last five years, there have been quite a lot of internal medicine inpatient visits and a need for professional medical personnel. (Maharani & Budianto, 2019). According to Cox, citing a study report conducted by Dewe on 2010 nurses from 29 hospitals in New Zealand, identified five sources of work stress, namely: workload, difficulties relating to other staff, difficulties being a nurse in a critical care unit, patient treatment requirements, and difficulty dealing with hopeless patients. (Kasmarani, 2012)

Then research was also carried out by Mc Grath et al on nurses who worked in various different settings in England, finding that 67% of respondents stated that insufficient time to carry out tasks satisfactorily was the highest source of stress. A survey conducted by Dewe in 1801 of nurses studied stress in terms of tension and fatigue and the methods used. Found data that the five main sources of stress are excessive stress load, difficulty establishing relationships with other staff, difficulty caring for critical patients, medication or patient care that fails to improve. (Murharyati & Kismanto, 2015)

Apart from that, research conducted by the Indonesian National Nurses Association (PPNI) in Prihatini stated that 50.9% of nurses in four provinces in Indonesia experienced work stress which was caused, among other things, by high workloads. Work stressors for nurses in order are workload 82%, unfair wages 58%, working conditions 52%, not being included in decision making 45%. The results of other research conducted by Diah Pitaloka showed that there was a significant influence between working conditions and workload on the work stress of nurses in the Kabanjahe RSU inpatient room. (Kasmarani, 2012)

Then PPNI also conducted a survey in 2006 with the results that around 50.9% of nurses experienced stress, often had headaches, were tired, could not rest and took up time, low salaries without adequate incentives. Martina, in her research stated that 80 nurses who worked in the RSPG Cisarua Bogor inpatient room experienced work stress at a moderate level (86%). He also mentioned that the level of work stress based on length of work showed that nurses with a work period of 6 months to 3 years had a high level of work stress, namely 12.5%. (Ismail & Supriyadi, 2018)

Based on the results of an initial survey conducted in February 2023, this hospital is a private non-teaching type B hospital. Patient visits to this hospital have increased every year, especially in inpatient services which have increased by 14% from 2021 to 2023. The increase in patient visits can be an encouragement for the hospital to realize its vision of becoming a leading hospital in the area. The increase in the number of patients is not matched by an increase in the number of nursing staff. According to Minister of Health Regulation Number 56 of 2014, the number of nursing staff needed is the same as the number of beds in inpatient installations (ratio 1). However, there is a shortage of nurses in inpatient rooms. Based on the results of interviews with 6 nurses in the inpatient room, it was discovered that 4 nurses experienced high levels of work stress. Meanwhile, the other 2 nurses experienced low levels of work stress. This shows that there are work stress problems felt by nurses. Efforts to prevent and overcome work stress need to be made to prevent nurses from the various impacts that can occur. One effort that can be made is measuring the level of work stress and its determinants.

## 2. METHOD

This research is an analytical research to determine the determinants of stress levels in nurses at Tgk Chik Di Tiro Regional General Hospital in 2023. The research uses a cross sectional research design approach, namely a research design where the independent and dependent variables are measured at the same time. The population in this study were all nurses at the Tgk Chik Di Tiro Regional General Hospital totaling 92 people and the sample size was 46 people.

### Operational definition

1. Workload and long working hours are everything that is done while working and the time spent doing work from the time you come in until the time you go home.
2. Fatigue is a condition that occurs from work activities.
3. Job security is the condition when working, including facilities and infrastructure.
4. A work shift is the hours a nurse spends while doing work.
5. Age is a person's age calculated from the day of birth until the time of age calculation.
6. Stress level is the result of an assessment of the severity of the stress experienced.

**Table 1.** Aspects of Independent Variable Measurement (x)

NO	Independent Variable (x)	Number of Statements	Methods and Measuring Tools	Measure Results	Value	Measuring Scale
1	2	3	4	5	6	7
1	Workload	Questionnaire 10	Count Answer scores are in accordance with the provisions in the score table. Yes: 1 No : 0	(6-10) (1-5)	Height (2 ) Low (1)	Ordinal
2	Fatigue	Questionnaire 10	Calculate the answer score according to the provisions in the score table. Yes: 1 No : 0	(6-10) (1-5)	Tired (2 ) Not Tired (1)	Ordinal
3	Shift work	Questionnaire 2	Calculate the answer score according to the provisions in the score table. Yes: 1 No : 0	(2) (1)	Good (2 ) Not Good (1)	Ordinal
4	Age	Questionnaire 1	Look at the nurse's age	<29 Years (Active Age) 30-39 Years (Peak Age) >40 Years (Senior Age)	Active Age (3) Peak Age (2) Senior Age (1)	Ordinal
5	Job Security	Questionnaire 10	Calculate the answer score according to the provisions in the score table. Yes: 1 No : 0	(6-10) (1-5)	Safe (2 ) Unsafe (1)	Ordinal

**Table 2.** Measurement Aspects of the Dependent Variable (y)

NO	Dependent Variable (y)	Number of Statements	Methods and Measuring Tools	Measure Results	Value	Measuring Scale
1	2	3	4	5	6	7
1	Stress Level	Questionnaire 14	Calculate the answer score according to the provisions in the score table. 0 : none or never 1: According to what is experienced to a certain degree, or sometimes 2 : Often 3: Very consistent with what is experienced, or almost all the time	(0 –14) (15– 18) (19– 25) (26– 33) (>34 )	Normal (5) Mild Stress (4) Moderate Stress (3) Severe Stress (2) Very Severe Stress (1)	Ordinal

Data collection in this research uses primary data using interviews.

### Data Management

Data Check (editing). After the questionnaire has been filled in by the respondent, the researcher cross checks the questionnaire sheet to see whether the identity and questionnaire are filled in for completeness of the data so that it can be coded. The questionnaires distributed are checked for completeness, given a value and entered into an excel table. Giving Codes (coding) In this step the researcher gives coding (numbers) to the variables studied. 3. Tabulation (tabulating) All data that has been input into the computer application is processed according to the needs of the research. After Excel is finished, enter the data into a computer application to create univariate, bivariate and multivariate test results so that you get output research results so that researchers can make results, discussion and suggest conclusions from the research that has been carried out. The data collected is processed by computer. After collecting the data, it will be analyzed using univariate, bivariate and multivariate analysis techniques.

### 3. RESULTS AND DISCUSSION

Table 3 shows that 90.7% of the respondents in this study were female and 9.3% were male. Based on the education level of the respondents, 59.3% had a Bachelor's/Equivalent education, and 40.7% had a D3 education.

**Table 3.** Characteristics of Research Respondents

Characteristics	Indicator	n	%
Gender	Woman	49	90.7
	Man	5	9.3
Level of education	S1/Equivalent	22	40.7
	D3	32	59.3
<b>Amount</b>		<b>54</b>	<b>100</b>

### Univariate Analysis

The univariate analysis presented below includes: workload, fatigue, shifts, age, job security and stress levels among inpatient nurses at Elisabeth Hospital Medan in 2021.

**Table 4.** Workload for Inpatient Nurses in Hospitals in 2023

No	Workload on Inpatient Nurses	n	%
1	Tall	31	57.4
2	Low	23	42.6
<b>Amount</b>		<b>54</b>	<b>100</b>

Table 4 shows that the workload for inpatient nurses in hospitals is high at 57.4% and the workload for inpatient nurses at hospitals is low at 42.6%.

**Table 5.** Fatigue among Inpatient Nurses in Hospitals in 2023

No	Workload on Inpatient Nurses	n	%
1	Tired	30	55.6
2	Not tired	24	44.4
<b>Amount</b>		<b>54</b>	<b>100</b>

Table 5 shows that fatigue among inpatient nurses in hospitals is 55.6% tired and fatigue among inpatient nurses in hospitals is not tired as much as 44.4%.

**Table 6.** Work Shifts for Inpatient Nurses in Hospitals in 2023

No	Work Shifts for Inpatient Nurses	n	%
1	Not good	31	57.4
2	Good	23	42.6
<b>Amount</b>		<b>54</b>	<b>100</b>

Table 6 shows that 57.4% of the work shifts for inpatient nurses in hospitals were not good and 42.6% of the work shifts for inpatient nurses in hospitals were good.

**Table 7.** Age of Inpatient Nurses in Hospitals in 2023

No	Age in Inpatient Nurses	n	%
1	Active	24	44.5
2	Peak	20	37.0
3	senior	10	18.5
<b>Amount</b>		<b>54</b>	<b>100</b>

Table 7 shows that the age of inpatient nurses in active hospitals is 44.5%, the age of inpatient nurses in peak hospitals is 37.0%, and the age of inpatient nurses in senior hospitals is 18.5%.

**Table 8.** Job Security for Inpatient Nurses in Hospitals in 2023

No	Job Security in Inpatient Nurses	n	%
1	Not good	34	63.0
2	Good	20	37.0
<b>Amount</b>		<b>54</b>	<b>100</b>

Table 8 shows that job security for inpatient nurses in hospitals is not good at 63.0%, job security for inpatient nurses at peak hospitals is 37.0%.

**Table 9.** Stress Levels for Inpatient Nurses in Hospitals in 2023

No	Stress Levels in Inpatient Nurses	n	%
1	Moderate Stress	32	59.3
2	Mild Stress	22	40.7
<b>Amount</b>		<b>54</b>	<b>100</b>

Table 9 shows that the stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%.

### Bivariate Analysis

The results of bivariate analysis via the chi-square test for each variable can be seen in the following description.

**Table 10.** Relationship between burden and stress levels among inpatient nurses in hospitals

No	Workload	Stress Level				Amount		p value
		Moderate Stress		Mild Stress		n	%	
		n	%	n	%	n	%	
1	Tall	27	87.1	4	12.9	31	100	0,000
2	Low	5	21.7	18	78.3	23	100	
<b>Amount</b>		<b>32</b>	<b>59.3</b>	<b>22</b>	<b>40.7</b>	<b>54</b>	<b>100</b>	

Based on Table 10, it can be seen that the workload for inpatient nurses in hospitals is high at 57.4% and the workload for inpatient nurses at hospitals is low at 42.6%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000

( $p < 0.05$ ), which means that there is a relationship between workload and stress levels for inpatient nurses in hospitals in 2023.

**Table 11.** Relationship between work fatigue and stress levels among inpatient nurses in hospitals

No	Fatigue	Stress Level				Amount		p value
		Moderate Stress		Mild Stress		n	%	
		n	%	n	%			
1	Tired	26	86.7	4	12.9	30	100	0,000
2	Not tired	6	13.3	18	78.3	24	100	
<b>Amount</b>		<b>32</b>	<b>59.3</b>	<b>22</b>	<b>40.7</b>	<b>54</b>	<b>100</b>	

Based on Table 11, it can be seen that fatigue among inpatient nurses in hospitals is 55.6% tired and fatigue among inpatient nurses in non-tired hospitals is 44.4%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between work fatigue and stress levels in inpatient nurses in hospitals in 2023.

**Table 12.** Relationship between work shifts and stress levels among inpatient nurses in hospitals

No	Shift work	Stress Level				Amount		p value
		Moderate Stress		Mild Stress		n	%	
		n	%	n	%			
1	Not good	25	80.6	6	19.4	31	100	0,000
2	Good	7	30.4	16	69.6	23	100	
<b>Amount</b>		<b>32</b>	<b>59.3</b>	<b>22</b>	<b>40.7</b>	<b>54</b>	<b>100</b>	

Based on Table 12, it can be seen that 57.4% of the work shifts for inpatient nurses in hospitals were not good and 42.6% of the work shifts for inpatient nurses at hospitals were good. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between work shifts and stress levels among inpatient nurses in hospitals in 2023.

**Table 13.** Relationship between age and stress levels among inpatient nurses in hospitals

No	Age	Stress Level				Amount		p value
		Moderate Stress		Mild Stress		n	%	
		n	%	n	%			
1	Active	20	83.3	4	16.7	24	100	0,000
2	Peak	6	30.3	14	70.0	20	100	
3	senior	6	60.0	4	40.0	10	100	
<b>Amount</b>		<b>32</b>	<b>59.3</b>	<b>22</b>	<b>40.7</b>	<b>54</b>	<b>100</b>	

Based on Table 13, it can be seen that the age of inpatient nurses in active hospitals is 44.5%, the age of inpatient nurses in peak hospitals is 37.0%, and the age of inpatient nurses in senior hospitals is 18.5%. . The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between age and stress levels among inpatient nurses in hospitals in 2023.

**Table 14.** Relationship between job security and stress levels among inpatient nurses in hospitals

No	Job Security	Stress Level				Amount		p value
		Moderate Stress		Mild Stress		n	%	
		n	%	n	%			
1	Not good	29	85.3	5	14.7	34	100	0,000
2	Good	3	15.0	17	85.0	20	100	
<b>Amount</b>		<b>32</b>	<b>59.3</b>	<b>22</b>	<b>40.7</b>	<b>54</b>	<b>100</b>	

Based on Table 14, it can be seen that job security for inpatient nurses in hospitals is not good at 63.0%, job security for inpatient nurses at peak hospitals is 37.0%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress



hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between job security and stress levels among inpatient nurses in hospitals in 2023.

### Multivariate Analysis

Multivariate analysis in this study used Multiple Logistic Regression which was carried out as a follow-up to the statistical analysis of bivariate tests by including variables that had a p value  $< 0.25$  as the selection limit. The variables tested in the first stage of binary multiple regression (logistic regression) are all independent variables that have been declared significant at  $p < 0.25$  in bivariate analysis.

**Table 15.** Results of Multiple Logistic Regression Analysis of Workload Variables, Work Fatigue, Work Shifts, Age and Job Security as Candidate Models

Stage	Variable	B	Sig	Exp (B)
Stage 1 <sup>a</sup>	Workload	2,220	0.027	9,209
	Work Fatigue	0.724	0.626	0.485
	Shifts	0.303	0.776	1,354
	Age	0.262	0.692	1,299
	Job Security	2,858	0.052	17,424
Stage 2 <sup>a</sup>	Workload	2,110	0.013	8,251
	Job Security	2,519	0.004	12,414
	Constant	7,001	0,000	0.001

Based on table 15, it is known that in Stage 1, the independent variable whose significance value is  $> 0.05$  is the fatigue variable with a significance value of 0.626, the shift variable with a significance value of 0.776, the age variable with a significance value of 0.692, while the independent variable has a significance value of The significance  $< 0.05$  is workload, which is 0.027, and job security is 0.052. Then the perception variable was removed and then declared significant and tested again using the second stage of the binary logistic regression test. The variables tested in the first stage of binary multiple regression (logistic regression) are all independent variables that have been declared significant at  $p < 0.05$  in bivariate analysis. The independent variable with a significance value  $< 0.05$  is workload, which is 0.013,

### Discussion

#### The relationship between workload and stress levels among inpatient nurses in hospitals

The workload for inpatient nurses in hospitals is high at 57.4% and the workload for inpatient nurses at hospitals is low at 42.6%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between workload and stress levels for inpatient nurses in hospitals in 2023.

Workload is the relationship between work demands placed on workers with a certain amount of time and resources. Workload indicates the extent to which workers feel burdened in terms of mental effort, work complexity and work speed. Workload was cited as the most important predictor of burnout and stress. Apart from that, long workloads have physical and cognitive effects on medical personnel, especially nurses, causing stress. Large workloads cause decreased function and contribute to injuries and errors, workloads also cause increased working hours, long working hours prolong exposure to occupational hazards and shorten the recovery period. So a large workload greatly influences the occurrence of stress (Manyisa & van Aswegen, 2017). The researcher's assumption is that a high workload can cause nurses to experience moderate levels of stress and if nurses experience a low workload, the stress level for nurses is mild stress.

#### The Relationship between Work Fatigue and Stress Levels in Nursing Nurses Stay in Hospital

Fatigue among inpatient nurses in hospitals is 55.6% tired and fatigue among inpatient nurses in hospitals is not tired as much as 44.4%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between work fatigue and stress levels in inpatient nurses in hospitals in 2023.



This research is in line with Ledombela's research (2017) entitled the relationship between work stress and work fatigue of nurses at the inpatient hospital at RSU GMIM Kalooran Amurang. Chi-Square results were obtained with a significance level of 95% ( $\alpha \leq 0.05$ ) and a p value of  $0.012 < 0.05$  was obtained. Researchers assume that the stress that occurs in each individual varies depending on the problems faced and the ability to solve these problems. If someone experiences too much stress, it will interfere with a person's ability to deal with their environment and work.

### **The Relationship between Work Shifts and Stress Levels in Inpatient Nurses in Hospitals**

The work shift for inpatient nurses in hospitals was not good as much as 57.4% and the work shift for inpatient nurses at hospitals was good as much as 42.6%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between work shifts and stress levels in inpatient nurses in hospitals in 2023. Nurses' work stress can occur when a nurse on duty receives a workload that exceeds her abilities so that the nurse is unable to fulfill or complete her duties, then the nurse is said to be experiencing work stress. Manifestations of nurses' work stress, including due to patient characterization, patient assessment, and disturbing aspects of the work environment, are the first steps in dealing with emerging problems regarding emergency room density levels, efficiency in carrying out tasks, and the demand to save patients. If stress reaches a peak point that roughly corresponds to the employee's maximum performance capability, then at this point additional stress is unlikely to result in improved performance. Getting an inpatient assignment is also a burden of responsibility that is faced by the nurse on duty. So that the Regional Public Service Agency (BLUD) of the General Hospital (RSU) of Banjar City, West Java has regulations that have been made regarding the work shifts of nurses, namely morning, afternoon, and night, each of which is 8 hours per day. In the last five years, there have been quite a lot of internal medicine inpatient visits and a need for professional medical personnel. (Maharani & Budianto, 2019). The researcher's assumption that work shifts can increase stress in nurses is that shifts that have a large workload, such as morning shifts, increase stress in nurses more than night shifts.

### **The Relationship between Age and Stress Levels in Inpatient Nurses in Hospital**

The age of inpatient nurses in active hospitals was 44.5%, the age of inpatient nurses in peak hospitals was 37.0%, and the age of inpatient nurses in senior hospitals was 18.5%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between age and stress levels among inpatient nurses in hospitals in 2023. Work stress is more common in younger workers compared to older workers. This happens because as people get older, they become more skilled and mature. Age has a relationship with stress. When a person reaches a certain age, it becomes unbearable for him to bear the workload. (Zehra et al., 2017).

### **The Relationship between Job Security and Stress Levels in Nursing Nurses Stay in Hospital**

Job security for inpatient nurses in hospitals was not good at 63.0%, job security for inpatient nurses at peak hospitals was 37.0%. The stress level for inpatient nurses at moderate stress hospitals was 59.3%, and the stress level for inpatient nurses at mild stress hospitals was 40.7%. The results of statistical analysis using chi-square obtained a p-value of 0.000 ( $p < 0.05$ ), which means that there is a relationship between job security and stress levels among inpatient nurses in hospitals in 2023. In line with Lumingkewas' research (2005) concerning the Relationship between Working Conditions and Work Stress of Nurses in the Medical Emergency Room at RSUP. Prof. Dr. RD Kandou Manado. The research results showed that there was a very real relationship between working conditions and nurse job stress ( $p = 0.001$ ). Based on the research results, it is concluded that working conditions are in the comfortable category for 22 (71%) respondents, and work stress is mostly included in the mild category, namely 25 (80.6%) respondents, therefore working conditions should be adjusted to schedule and time. Enough free time to avoid stress at work.

Stress is the body's reaction to stressful conditions, changes, high emotions and others. Working conditions are a series of conditions or conditions of the working environment of a company that is a

place of work for employees who work in that environment and what is meant here is good working conditions, namely comfortable and supporting workers to be able to carry out their activities well. These things include everything in the employee's work environment that can affect work performance and safety and security, temperature, humidity, ventilation, lighting, cleanliness, etc. Stress is what occurs when someone cannot meet job demands or job requirements. In the journal, differences in work stress between inpatient unit nurses and emergency department nurses, According to Breuklin, stress among health workers is well known, such as stress among nurses who work in hospital environments. Five sources of work stress for nurses in general are excessive workload, difficulty relating to other staff, difficulty caring for critical patients, dealing with medication and patient care and failure to care (Supardi, 2017) with the level of stress in inpatient nurses in hospitals.

#### 4. CONCLUSION

There is a relationship between work fatigue and stress levels in inpatient nurses in hospitals. Based on the results of the chi-square statistical test analysis, the value was  $p = 0.000 < 0.05$ . There is a relationship between work shifts and stress levels in inpatient nurses in hospitals. Based on the results of the chi-square statistical test analysis, the value of  $p = 0.000 < 0.05$ . There is a relationship between age and stress levels in inpatient nurses in hospitals based on the results of the chi-square statistical test analysis, which obtained a value of  $p = 0.000 < 0.05$ . There is a relationship between job security and stress levels among inpatient nurses in hospitals. Based on the results of the chi-square statistical test analysis, the value of  $p = 0.000 < 0.05$ . The most dominant factor influencing the stress level of inpatient nurses in hospitals is job security. For nurses in hospitals to improve their self-coping at work, especially in terms of work safety in the use of PPE. The level of stress experienced by inpatient nurses can be caused by safety factors that are considered to still need improvement. The safety factor in question is the completeness of facilities and infrastructure when providing services to patients. Hospitals can take precautions to prevent stress on nurses and can reduce the number of nurses leaving the hospital.

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