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## Factors Related to the Work Stress of Nurses During the Covid-19 Pandemic in the Inpatient Rooms of Tk.II Marthen Indey Hospital

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### Abstract

**Background:** COVID-19 cases are increasing and nurses are at the forefront of handling COVID-19 patients, so they are at risk of contracting COVID-19. Data at Tk.II Marthen Indey Hospital, there were 12 nurses who tested positive for COVID-19. Lack of personal protective equipment affects nurses in carrying out their duties and work, this condition causes nurses to have pressure on their work which affects their physical, mental and social conditions. **Objective:** The purpose of this study was to determine the factors associated with the work stress of nurses during the COVID-19 pandemic in the inpatient room of Tk.II Marthen Indey Hospital.. **Methods:** This type of research is quantitative analytic with a cross sectional study design. This research was conducted at Tk.II Marthen Indey Hospital in an inpatient room which began in December 2020-January 2021. The population in this study were all nurses in the inpatient room of Tk.II Marthen Indey Hospital, with a sample using a total population of 85 people. Collecting data using online questionnaires, and processing and analyzing data for bivariate analysis using the Chi-square test, while to determine the dominant factor using multivariate analysis using logistic regression test with p-value = 0.05 with 95% CI. **Results:** The results showed that there was a relationship between workload (p-value = 0.000) and job satisfaction (p-value = 0.020) with work stress.

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Conversely, there is no relationship between gender (p-value = 0.501), age (p-value = 1,000), and education (p-value = 0.136) with job stress. The most dominant factor is workload (p-value 0,000 < 0.01).

**Keywords:** Nurse; work stress; inpatient room; Covid-19; Marthen Indey.

## **1. Introduction**

Corona virus disease (COVID-19) is a disease caused by SARS-COV2 and represents the causative agent for a potentially fatal disease which is a major global public health problem today. Therefore, it is suspected that COVID-19 was originally a zoonotic disease. Along with the rapid development of research related to COVID-19, it is known that the current transmission, this disease is a disease that can be transmitted from human to human via droplets. Coronavirus Disease 2019 (COVID-19) was first discovered in Wuhan, Hubei Province, China. The spread and transmission of COVID-19 is very fast, so WHO has designated COVID-19 as a case of a global pandemic [1]. The Indonesian government is currently making all efforts to overcome the pandemic, including the involvement of the Indonesian National Army (TNI), which has the main task of maintaining the territorial sovereignty of the Unitary State of the Republic of Indonesia in accordance with the provisions of Article 7 Paragraph (1) of Law No. 34 of 2004 concerning the TNI [2]. The involvement of the TNI in non-war military operations is also a mandate of Law no. 34 of 2004 which gave the TNI space to carry out military duties other than war. Since the beginning, the TNI has taken a direct role in dealing with the COVID-19 disaster. As a state institution that manages hospitals in various regions of the country, Tk.II Marthen Indey hospital is involved as a referral hospital in dealing with COVID-19. Even so, as an official hospital, there are specific policy references so that things can run without problems. In the framework of service, there are routine tasks carried out to provide health insurance to TNI soldiers and their families. On the other hand, as a state institution, it is obligatory for the government and the public to deal with COVID-19, especially the nurses at Tk.II Marthen Indey Hospital who also have to provide health services to the community. According to Soep (2012), nurses in carrying out their duties face various things that can trigger stress. Things that can cause stress to nurses, namely: dealing with a dying patient, having to be kind to people who may not be liked, talking with patient relatives and face to face with others, working long hours and in shifts, taking action which is traumatic in nature, facing technological advances, accountability to humans, a very large risk due to wrong decisions, the risk of transmission due to work, the expectations and demands of society, the risk of physical violence, and uncertain career development. One form of stress that can cause mental disorders except anxiety (anxiety) is also known as depression. Both anxiety and depression have symptoms of impaired function of the organs supplied by the autonomic nervous system [3]. Arisjulyanto (2018) stress can lead to narrowing of blood vessels and muscle stiffness which has an impact on increasing blood pressure which leads to hypertension, in overcoming this problem the importance of providing therapies that are easy to apply and able to deal with stress problems that occur in the midst of the COVID-19 pandemic like today [4]. The number of health workers who died due to the COVID-19 pandemic in Indonesia is increasing, according to the COVID-19 report records until December 28, 2020, a total of 507 health workers from 29 provinces in Indonesia consisting of 228 doctors, 167 nurses, 68 midwives, 13 dentists and health workers other. According to compass data, there are 307 health workers who have been exposed to COVID-19 in 20 cities and districts in Papua. Based on data from Marthen Indey Hospital (2020), the number of human resources at Tk.II Marthen Indey Hospital Jayapura

consists of 15 medical people, 118 nursing people, 25 midwives, 7 pharmacies, 2 public health people, 2 therapy people, 2 nutrition people, Biomedics 2 people and 56 people management. Based on this data, we can see that nurses are the largest number of workers and nurses have quite a heavy duty, because nurses who always interact directly 24 hours with patients and nurses are at the forefront of handling COVID-19 so they are at risk of contracting COVID-19 and this is what can trigger stress in the work of nurses. In dealing with COVID-19 patients, nurses must use complete personal protective equipment (PPE) when they have to make direct contact with patients. When using complete PPE in accordance with the SOP for handling COVID-19, the feeling of discomfort and the risk of contracting COVID-19 triggers a stress level for nurses in providing services. There were 765,000 positive cases of COVID-19 in Indonesia and 22,734 deaths, while in the city of Jayapura 13,277 confirmed cases of COVID-19 and 149 people died, positive cases and deaths continued to increase every day, with a total of nurses who were exposed to Covid 19, as many as 2983 people with cases deaths of 167 nurses (WHO, 2020). The latest COVID-19 patient data, stated that 12 nurses at Tk.II Marthen Indey Hospital Jayapura were confirmed positive for COVID-19 from 73 nurses on duty in the hospital. In addition to the increasing problem of COVID-19, the lack of PPE is due to the hospital's budget deficit, requiring hospitals to limit the use of hazmat suits to only 2 COVID nurses per shift, and in addition to using waterproof clothing and especially work pressure from superiors who in the TNI environment are very upholds the hierarchy of superiors and ranks, so that nurses on duty inevitably have to obey the orders of their superiors regardless of the risks of the work they have to undertake. The high workload that must be done, the work culture that adheres to a hierarchy of rank and position and the risk of contracting COVID-19 are the main triggers for the work stress of nurses at Tk.II Marthen Indey Hospital, Jayapura. This indirectly affects the physical and psychological health of nurses in carrying out their duties during the COVID-19 pandemic. Moreover, currently the Government requires all Health Workers to administer the COVID-19 vaccine, which if they do not vaccinate, they will receive a warning and even administrative sanctions. The effectiveness of the vaccine, which is only 65%, is able to prevent the transmission of COVID-19, making health workers a dilemma to accept the vaccines given, but the hierarchical culture is subject to superiors and the threat of sanctions by the Government makes nurses have to vaccinate. Based on the background description above, the researcher feels it is important to conduct research on "Factors Related to the Work Stress of Nurses during the COVID-19 Pandemic in the Inpatient Room of Tk.II Marthen Indey Hospital."

## **2. Materials and Methods**

The research design used in this study is a quantitative analytic study with a cross sectional study design by looking at the relationship between gender, age, education, job satisfaction and workload variables with the work stress variable of nurses and observed simultaneously at one time or the same period [5]. This research was conducted in the inpatient room of Tk.II Marthen Indey Hospital, from December 2020 to January 2021. The total sampling technique is sampling when all members of the population are sampled, and the sample in this study were all nurses who were in the inpatient room of Tk.II Marthen Indey Hospital, namely 85 people. Data were obtained using a questionnaire, and then analyzed using chi-square and binary logistic regression with a significant level of 5%.

**3. Result and Discussion**

**3.1. Univariate Analysis**

The univariate analysis is used to classify each variable of the sample. This study only shows the frequency and percentage of each variable. This can be found in Table 1:

Table 1 shows that regarding the level of work stress of respondents in the inpatient room of Marthen Indey Hospital, it can be seen that of the 85 respondents, 32 respondents (37.6%) experienced ligh work stress and 53 respondents (62.4%) experienced heavy work stress. Most of the respondents age < 35 years old (75.3%). The majority of respondents were those with low education (D1-D3) with a total of 42 respondents (78.8%). There were 49 respondents (57.6%) who have heavy workload. Forty six respondents (54.1%) feels satisfied in their job.

**Table 1:** Distribution of respondents by sex, age, education, workload, job satisfaction, and work stress in the Inpatient rooms of Tk.II Marthen Indey Hospital.

No	Variable	Frequency (n)	Percentage (%)
1	Sex		
	Male	15	17.6
	Female	70	82.4
2	Age		
	< 35 years old	64	75.3
	≥ 35 years old	21	24.7
3	Education		
	D1-D3	67	78.8
	D4-S3	18	21.2
4	Workload		
	Ligh	36	42.4
	Heavy	49	57.6
5	Job satisfaction		
	Satisfied	46	54.1
	Not satisfied	39	45.9
6	Work Stress		
	ligh	32	37.6
	Heavy	53	62.4
Total		85	100.0

Source: Primary Data, 2021

**3.2. Bivariate Analysis**

Bivariate analysis was performed to determine the relationship between independent and dependent variables, i.e. sex, age, education, workload, and job satisfaction. In order to assess the association between the risk factors and the work stress, the chi-square test was used at a significant level of 5%. The results of the bivariate analysis are shown in Table 2:

**a. The Relationship between Sex and the Work Stress of Nurses.**

Table 2 shows that out of 15 male nurses, only 4 (26.7%) experienced mild stress, and 11 (73.3%) experienced severe stress. Of the 70 female nurses, 28 (40.0%) experienced mild stress, and 42 (60.0%) experienced severe stress. The results of the chi-square statistical test showed a significance value of  $p = 0.501$  and a prevalence ratio (RP) of 0.667 (95% CI: 0.275–1.618). This shows that there is no significant relationship between gender and work stress on nurses at Marthen Indey Hospital.

**Table 2:** Distribution of Sex and Work Stress of Nurses in the Inpatient Rooms of Tk.II Marthen Indey Hospital.

Sex	Work Stress				Total	
	Ligh		Heavy		n	%
	n	%	n	%		
Male	4	26.7	11	73.3	15	100
Female	28	40.0	42	60.0	70	100
Total	32	37.6	53	62.4	85	100
P-value = 0.501; RP = 0.667; CI95%= (0.275 – 1.618)						

Source: Primary Data, 2021

**b. The Relationship between Age and the Work Stress of Nurses.**

Table 3 shows that of the 64 nurses aged <35 years, there were 24 people (37.5%) who experienced mild stress, and 40 people (65.2%) who experienced severe stress. Of the 21 nurses aged  $\geq 35$  years, there were 8 people (38.1%) who experienced mild stress, and 13 people (61.9%) who experienced severe stress. The results of the chi-square statistical test showed a significance value of  $p = 1,000$  and a prevalence ratio (RP) of 0.984 (95% CI: 0.524–1.849). This shows that there is no significant relationship between age and work stress on nurses at Marthen Indey Hospital.

**Table 3:** Distribution of Age and Work Stress of Nurses in the Inpatient Rooms of Marthen Indey Hospital.

Age	Work Stress				Total	
	Ligh		Heavy		n	%
	n	%	n	%		
< 35 years old	24	37.5	40	34.8	64	100
$\geq 35$ years old	8	38.1	13	40.0	21	100
Total	32	37.6	53	62.4	85	100
P-value = 1.000; RP = 0.984; CI95%= (0.524 – 1.849)						

Source: Primary Data, 2021

**c. The Relationship between Education and the Work Stress of Nurses.**

Table 4 shows that out of 67 nurses with a D1-D3 education, 22 (32.8%) experienced mild stress, and 45 (67.2%) experienced severe stress. Of the 18 nurses with a D4-S3 education, 10 (55.6%) experienced mild stress, and 8 (44.4%) experienced severe stress. The results of the chi-square statistical test showed a significance value of  $p = 0.136$  and a prevalence ratio (RP) of 0.591 (95% CI: 0.524–1.849). This shows that there is no significant relationship between education level and work stress on nurses at Marthen Indey Hospital.

**Table 4:** Distribution of Education and Work Stress of Nurses in the Inpatient Rooms of Marthen Indey Hospital.

Education	Work Stress				Total	
	Ligh		Heavy		n	%
	n	%	n	%		
D1-D3	22	32.8	45	35.0	67	100
D4-S3	10	55.6	8	40.0	18	100
Total	32	37.6	53	62.4	85	100
P-value = 0.136; RP = 0.591; CI95% = (0.346 – 1.011)						

Source: Primary Data, 2021

**d. The Relationship between Workload and the Work Stress of Nurses.**

Table 5 shows that out of 36 nurses with light workloads, 23 people (63.9%) experienced mild stress, and 13 people (36.1%) experienced severe stress. Of the 49 nurses with heavy workloads, only 9 (18.4%) experienced mild stress, and 40 (81.6%) experienced severe stress. The results of the chi-square statistical test obtained a significance value of  $p < 0.001$  and the prevalence ratio (RP) 3.478 (95% CI: 1.835–6.592). This shows that there is a significant relationship between workload and work stress on nurses at Marthen Indey Hospital. The value of  $RP = 3.478$  means that nurses with light workload tend to experience light work stress by 3.478 times compared to nurses with heavy workloads.

**Table 5:** Distribution of Workload and Work Stress of Nurses in the Inpatient Rooms of Marthen Indey Hospital.

Workload	Work Stress				Total	
	Ligh		Heavy		n	%
	n	%	n	%		
Ligh	23	63.9	13	36.1	36	100
Heavy	9	18.4	40	81.6	49	100
Total	32	37.6	53	62.4	85	100
P-value = 0.000 < 0.001; RP = 3.478; CI95% = (1.835 – 6.592)						

Source: Primary Data, 2021

**e. The Relationship between Job Satisfaction and the Work Stress of Nurses.**

Table 6 shows that out of 46 nurses with job satisfaction felt satisfied, there were 23 people (50.0%) who experienced mild stress, and also 23 people (50.0%) who experienced severe stress. Of the 39 nurses with job satisfaction who felt dissatisfied, there were only 9 people (23.1%) who experienced mild stress, and 30 people (76.9%) who experienced severe stress. The results of the chi-square statistical test obtained a significance value of  $p = 0.020$  and the prevalence ratio (RP) 2.167 (95% CI: 1,140–4,116). This shows that there is a significant relationship between job satisfaction and work stress on nurses at Marthen Indey Hospital. The value of  $RP = 2.167$  means that nurses who are satisfied with their work have a tendency to experience light work stress by 2.167 times compared to nurses who are not satisfied with their work.

**Table 6:** Distribution of Job Satisfaction and Work Stress of Nurses in the Inpatient Rooms of Marthen Indey Hospital.

Job Satisfaction	Work Stress				Total	
	Ligh		Heavy		n	%
	n	%	n	%		
Satisfied	23	50.0	23	50.0	46	100
Not satisfied	9	23.1	30	76.9	39	100
Total	32	37.6	53	62.4	85	100
P-value = 0.020; RP = 2.167; CI95%= (1.140 – 4.116)						

Source: Primary Data, 2021

**3.3. Multivariate Analysis**

**Table 7:** The result of Multiple Logistic Regression Analysis with Backward LR Method between Independent Variables on Work Stress of Nurses in the Inpatient Rooms of Marthen Indey Hospital.

Covariate	B	p	OR	95%CI	
Step-1					
Education	-0.839	0.179	0.532	0.127	1.469
Workload	1.805	0.001	6.079	2.135	17.314
Job Satisfaction	0.702	0.200	2.019	0.690	5.908
Constant	-1.120	0.085	0.326		
Step-2					
Education	-0.791	0.194	0.453	0.137	1.497
Workload	2.019	0.000	7.530	2.761	20.534
Constant	-0.857	0.152	0.424		
Step-3					
Workload	2.061	0.000	7.863	2.914	21.218
Constant	-1.492	0.000	0.225		

Source: Primary Data, 2021

Multivariate analysis used in this study was multiple logistic regressions. This analysis is a mathematical model used to study the relationship between two or several independent variables and one dichotomous dependent variable [10]. This analysis was intended to determine the most dominant risk factors for Work Stress of Nurses in the Inpatient Rooms of Marthen Indey Hospital. The results of multivariate analysis can be found in Table 7.

Based on the results of multiple logistic regression analysis, the most dominant risk factors for Work Stress of Nurses in the Inpatient Rooms of Marthen Indey Hospital was Workload ( $p < 0.01$ ; OR = 7.863; 95%CI: 2.914 – 21.218).

## **4. Discussion**

### ***4.1. The Relationship between Sex and the Work Stress of Nurses***

The results of this study indicate that there is no relationship between gender and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital. The results showed that out of 15 male nurses, only 4 (26.7%) experienced mild stress, and 11 (73.3%) experienced severe stress. Of the 70 female nurses, 28 (40.0%) experienced mild stress, and 42 (60.0%) experienced severe stress. Women are more likely to have high stressors, due to lack of adaptation to stressors. There is still a fear of being late or not having an apple, there is a fear of being wrong to superiors or seniors, especially nurses who are new or still junior. Besides that, the number of female nurses at Tk.II Marthen Indey Hospital is more than male nurses. Similar research conducted by Fitri (2013) found the results of the relationship test between the respondents' Gender and Work Stress using the Biserial correlation test, the p-value obtained was 0.805 ( $> 0.05$ ) which meant that there was no relationship between Gender and Work Stress. . This may be due to gender differences that do not really contribute to job stress. A person with a masculine personality is better able to deal with stressors that come without excessive emotional feelings and with a lower level of anxiety than someone with a more feminine personality [6]. This research is also in line with research conducted by Sari, Rukayah, & Barsasella (2017), which found that the relationship between sex and work stress shows a p value of 0.175  $> 0.05$ , which means that there is no significant relationship between sex and work stress [7].

### ***4.2. The Relationship between Age and the Work Stress of Nurses***

The results of this study indicate that there is no relationship between age and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital. The results showed that out of 64 nurses aged  $< 35$  years, there were 24 people (37.5%) who experienced mild stress, and 40 people (65.2%) who experienced severe stress. Of the 21 nurses aged  $\geq 35$  years, there were 8 people (38.1%) who experienced mild stress, and 13 people (61.9%) who experienced severe stress. This study is in line with research conducted by Sari and his colleagues (2017) which found that there was no significant relationship between age and work stress of nurses ( $p = 0.623$ ) [7]. According to Ibrahim, Amansyah, & Yahya (2016), it shows that respondents who experience the most stress are under 40 years of age. This shows that workers under 40 years of age experience more work stress than workers who are over 40 years of age. Workers who are in the old age group or above 40 years old can be said to have more ability to control stress [8]. This is consistent with Potter & Perry's (2010) statement that middle



adulthood is a phase of calm or a phase of success. Ideally, according to the data the results of this study belong to the middle adult category. At that age a person's productivity will increase because it includes a phase of calm and a phase of success [9].

#### ***4.3. The Relationship between Education and the Work Stress of Nurses***

The results of this study indicate that there is no relationship between education and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital. Obtained p value  $0.136 > 0.05$ . The D3 education level experiences more severe stress than the S1 education level, because the level of education is higher, light stress is also lighter because the workload is also lighter, besides that the nurses at Tk.II Marthen Indey hospital have more D3 education than S1. This research is in line with research conducted by Sari and his colleagues (2017), which obtained a p value of  $0.114 > 0.05$ , which states that there is no relationship between education and work stress of nurses [7]. This is in line with research conducted by Sukmono (2012) that there is no significant relationship between education and work stress, because one's education is not necessarily a trigger for work stress because there are other factors such as task demands, role demands, interpersonal demands, structure. organizations that may be triggers for stress [10]. This research is in line with Pramadi and Lasmono (2003) that the level of education of a nurse is not necessarily a trigger for stress, stressors for each individual can differ depending on the understanding of stress management and work stress can occur because the number of actions that must be completed is not proportional to the number of nurses who there, so education does not necessarily affect job stress [11].

#### ***4.4. The Relationship between Workload and the Work Stress of Nurses***

The results of this study indicate that there is a relationship between workload and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital. The workload at Tk.II Marthen Indey hospital, the number of patients is more than the number of nurses, only 2 people in the afternoon and evening shifts, not proportional to the number of patients treated in the room, not to mention if there are patients who are in danger or under surveillance. During this pandemic, the workload of nurses was also higher, they were more careful in handling patients, had to comply with SOPs, use of PPE, and health protocols. This research is in line with the research conducted by Aini & Purwaningsih (2013), there is a relationship between workload and work stress of nurses in Semarang District Hospital [12]. A similar study was also conducted by Fahamsyah (2017) which shows that there is a significant relationship between workload and work stress events [13]. Work stress can be interpreted as an adaptive response felt by the workforce that comes from the interaction between working conditions and work characteristics that can interfere with mental, physical, and chemical functions in the body if not responded positively, but stress also has a positive value as a trigger. enthusiasm in completing work or assignments properly, correctly, and full of creativity [14]. It is also supported by research by Emilda (2014) which states that there is a significant relationship between workload and work stress performed on emergency room nurses [15]. Similar research conducted by Dimkatni and his colleagues (2020) shows a relationship between workload and work fatigue which ultimately has an impact on work stress [16]. Work stress is important to pay attention to because it can cause work fatigue which has an impact on work productivity, work motivation of nurses, and nurse attendance levels. If the nurse works comfortably and guarantees occupational

safety and health, the work done will be successful which will also have an impact on the health of the patient and the institution where the nurse works.

#### **4.5. The Relationship between Job Satisfaction and the Work Stress of Nurses**

The results of this study indicate that there is a relationship between job satisfaction and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital. Dissatisfaction is due to the hospital management that has not given appreciation in the work process, a feeling of inadequate or insufficient salary, a feeling of unfair promotion, a heavy workload. This research is supported by research by Safitri & Astutik (2019), that the job satisfaction of nurses is very much determined by the size of the workload and work stress of the nurse [17]. The impact of workload and work stress can reduce one's job satisfaction. According to research conducted by Chuzaeni (2017), workload and work stress have a negative effect on job satisfaction, meaning that if workload and work stress increase, it will cause a decrease in job satisfaction [18]. Reduced satisfaction is also indicated by dissatisfaction with compensation that is not in accordance with the District Minimum Wage (UMK). Due to the increasing price of basic necessities, plus the majority of nurses who are married, they are worried and wondering whether this compensation will be sufficient to meet the needs of their families. Indirectly, job satisfaction has an impact on job stress, there are impacts that can arise due to job stress, including organizational impacts. Subjective effects can be in the form of anxiety / anxiety, complacency, boredom, depression, fatigue, frustration, loss of patience, feelings of isolation and feeling lonely. Then, the impact on worker behavior at work (behavioral effect) can include emotional outbursts and impulsive behavior. Cognitive effects (cognitive effect) can be in the form of inability to make healthy decisions, decreased concentration, lack of attention / short attention span, very sensitive to criticism / criticism and mental obstacles. Meanwhile, the physiological effects can be in the form of increased blood glucose, increased heart rate and blood pressure, dry mouth, sweating, widened eyes and body chills. Furthermore, this can have an impact on health (health effects) such as headaches and migraines, nightmares, difficulty sleeping, and psychosomatic disorders. In the end, these impacts can have an impact on the organization (organizational effect) because employee productivity decreases/low, is alienated from work partners, causes job dissatisfaction, decreases work power and loyalty to agencies [19].

## **5. Conclusion**

On the basis of the findings of the data analysis and the hypothesis testing, it can be concluded as follows:

1. There is no significant relationship between gender and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital ( $p=0.501 > 0.05$ ;  $RP = 0.667$  (95% CI: 0.275–1.618)).
2. There is no significant relationship between age and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital ( $p=1.000 > 0.05$ ;  $RP = 0.984$  (95% CI: 0.524–1.849)).
3. There is no significant relationship between education and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital ( $p=0.136 > 0.05$ ;  $RP = 0.591$  (95% CI: 0.346–1.011)).
4. There is a significant relationship between workload and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital ( $p=0.000 < 0.01$ ;  $RP = 3.478$  (95% CI: 1.835–6.592)).

5. There is a significant relationship between job satisfaction and work stress of nurses in the inpatient room of Tk.II Marthen Indey Hospital ( $p=0.020 < 0.05$ ;  $RP = 2.167$  (95% CI: 1.140–4.116)).
6. The most dominant risk factors of work stress of nurses in the inpatient room of Tk.II Marthen Indey is workload ( $p=0.000 < 0.01$ ;  $OR = 7.863$  (95% CI: 2.914–21.218)).

## **6. Suggestion**

1. Nurse: a) Providing work stress relief among nurses; b) Performing early screening for the risk of work stress and adapting to stress positively.
2. Hospital: a) Providing psychologists to vent so as to reduce the burden of stress, providing nutritious supplemental food and free vitamins for nurses; b) Increase the number of nurses to reduce the workload of nurses; c) Provide a position or promotion in accordance with the level of education; d) Providing rewards (incentives, developing careers) for the performance of nurses; e) Re-evaluate and consider the workload factor of nurses according to their abilities and duties.
3. Next researcher: It is necessary to do further research related to work stress among nurses at the hospital, by adding qualitative methods to dig deeper information related to phenomena that affect the completeness of data entry.

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