

## **Description of Work Fatigue on Nurses at Naimata Mental Hospital Kupang**

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### **ABSTRACT**

*Work fatigue in nurses is one of the problems in human resource management in hospitals. Naimata Kupang Mental Hospital is a hospital that specifically treats patients with psychosocial disabilities or people with mental disorders, as well as being the first mental hospital in East Nusa Tenggara, which is the main reference for people with mental disorders. This study aims to describe work fatigue based on age, gender, marital status, nutritional status, work shifts, and workload on nurses at the Naimata Mental Hospital Kupang. This type of research is called descriptive research that is studied quantitatively. The study was conducted at the Naimata Mental Hospital in Kupang in July 2021. The population in this study amounted to 42 people. Sampling using the technique of total sampling. The results of this study indicate that the level of work fatigue in nurses is classified as severe as many as 26 people (61.9%), aged <35 years experienced heavy work fatigue as many as 18 people (42.9%), female sex as many as 16 people (38.1 %) classified as heavy category of work fatigue, marital status with married category as many as 17 people (40.5%) experienced work fatigue with heavy category, normal nutritional status who experienced heavy category work fatigue as many as 20 people (47.6%), shift night work as many as 10 people (23.8%) experienced heavy work fatigue and workload as many as 22 people (52.4%) experienced heavy work fatigue. It is recommended for nurses to stretch the muscles in between work or at rest.*

**Keywords:** work fatigue; nurses

### **ABSTRAK**

Kelelahan kerja pada perawat merupakan salah satu permasalahan dalam manajemen sumber daya manusia di rumah sakit. Rumah Sakit Jiwa Naimata Kupang merupakan rumah sakit yang khusus merawat pasien penyandang disabilitas psikososial atau penderita gangguan jiwa, serta menjadi rumah sakit jiwa pertama di Nusa Tenggara Timur (NTT) yang menjadi rujukan utama bagi penderita gangguan jiwa. Penelitian ini bertujuan untuk menggambarkan kelelahan kerja berdasarkan usia, jenis kelamin, status perkawinan, status gizi, shift kerja dan beban kerja pada perawat di Rumah Sakit Jiwa Naimata Kupang. Jenis penelitian ini adalah penelitian deskriptif yang dikaji secara kuantitatif. Penelitian dilakukan di Rumah Sakit Jiwa Naimata Kupang pada bulan Juli 2021. Populasi dalam penelitian ini berjumlah 42 orang. Pengambilan sampel menggunakan teknik *total sampling*. Hasil penelitian ini menunjukkan bahwa tingkat kelelahan kerja pada perawat tergolong berat sebanyak 26 orang (61,9%), usia <35 tahun mengalami kelelahan kerja berat sebanyak 18 orang (42,9%), berjenis kelamin wanita sebanyak 16 orang (38,1%) tergolong kelelahan kerja kategori berat, status pernikahan dengan kategori sudah menikah sebanyak 17 orang (40,5%) mengalami kelelahan kerja dengan kategori berat, status gizi normal yang mengalami kelelahan kerja kategori berat sebanyak 20 orang (47,6%), shift kerja malam sebanyak 10 orang (23,8%) mengalami kelelahan kerja berat dan beban kerja sebanyak 22 orang (52,4%) mengalami kelelahan kerja berat. Disarankan kepada perawat untuk melakukan peregangan secara rutin disela-sela bekerja atau saat istirahat.

**Kata kunci:** kelelahan kerja; perawat

### **INTRODUCTION**

The hospital is a community-based health-care institution with characteristics influenced by the advancement of health sciences, technological advancements, and the socioeconomic life of the community. It must continue to be able to provide more qualified and affordable services in order for the community to achieve the highest level of health. Mental hospitals are included in special hospitals because they serve patients suffering from more specific diseases, such as mental illness, heart disease, eye disease, and others<sup>(1)</sup>.

One of the human resources in the hospital is a nurse. A nurse is someone who has graduated from higher nursing education, both at home and abroad, which is recognized by the government by the provisions of the legislation<sup>(2)</sup>. Nurses are one of the main health workers who play a role in providing

health services because nurses generally have the largest number of patients in hospitals, around 50–60%. Nurses are the most important resource in carrying out health services in a hospital, so nurses are required to have intellectual abilities, technical and interpersonal communication skills, because nurses are most directly related to patients. The services provided by nurses are inpatient, outpatient, and emergency services. Mental hospital nursing services are carried out by mental health nurses. Mental health nurses are part of general nurses but specialize in treating patients with mental disorders and generally work in mental hospitals<sup>(3)</sup>.

Work fatigue occurs in all occupations, including in the healthcare sector. A nurse is one of the human resources in the health-care industry who suffers from work fatigue. Work fatigue in nurses is one of the problems in human resource management in hospitals. According to the results of a 2006 survey conducted by the Indonesian National Nurses Association, around 50.9 percent of nurses working in four Indonesian provinces experience work stress, often feeling dizzy, weary, and unable to rest due to a heavy and time-consuming workload<sup>(4)</sup>.

Work fatigue refers to a variety of issues that are accompanied by a decrease in productivity and endurance at work<sup>(5)</sup>. Work fatigue can lead to several conditions, namely decreased work performance. Work fatigue has been proven to contribute more than 60% of the incidence of work accidents. Factors influencing the occurrence of work fatigue include worker monotony, work intensity, and high mental and physical work resistance, workplace weather, inadequate lighting and noise, and other working environments, psychological factors, sense of responsibility, tension and conflict, disease, pain, and nutrition, and circadian rhythms. It was informed that in terms of the incidence of work fatigue, night shifts have a chance of sleep disturbances in the range of 80–90%<sup>(6)</sup>.

Naimata Mental Hospital is a hospital that specifically treats patients with psychosocial disabilities or people with mental disorders, as well as being the first mental hospital in East Nusa Tenggara, which is the main reference for people with mental disorders. The findings of a survey that was conducted on nurses at the Naimata Mental Hospital Kupang found that the monotonous nature of work, hot working conditions, excessive workload, and psychological factors can cause work fatigue. In addition, there were also several complaints experienced by nurses, such as drowsiness, heavy heads, aches in all limbs, in the eyes, neck, back, and legs. The complexity of the work carried out is very necessary for physical and mental readiness for every nurse in dealing with mental patients; if not, work fatigue will be felt at any time.

## METHOD

This study is a quantitative descriptive study; the research was conducted to illustrate or describe situations or events objectively. This research was conducted at the Naimata Mental Hospital Kupang in July 2021. The population in this study was all 42 nurses who worked at the Naimata Mental Hospital Kupang. Sampling using the technique of *total sampling*. Data were gathered through interviews using

a questionnaire with 15 statement items for the workload variable and a subjective feeling of fatigue questionnaire with 30 statement items adapted from the Industrial Fatigue Research Committee (IFRC) Japan. The data is processed using a program or *software* computer and then analyzed by univariate analysis. The data will be presented in the form of tables and narratives. The Health Research Ethics Commission, Faculty of Public Health, University of Nusa Cendana, granted ethical feasibility to this study with the number 2021081-KEPK.

## RESULTS AND DISCUSSION

A univariate analysis, which includes age, gender, marital status, nutritional status, work shift, workload, and work fatigue, is presented in table 1 below:

**Table 1. Respondent Distribution Based on Age, Gender, Marital Status, Nutritional Status, Work Shift, Workload, and Work Fatigue on Nurses at the Naimata Kupang Mental Hospital**

Independent Variables	Total	Percentage
<b>Age:</b>		
< 35 Years	29	69,0
≥35 Years	13	31,0
<b>Gender :</b>		
Male	15	35,7
Female	27	64,3
<b>Marital Status :</b>		
Married	28	66,7
Not Married	14	33,3
<b>Nutritional Status :</b>		
Undernourished	3	7,1
Normal	27	64,3
Over Nutrition	12	28,6
<b>Work Shift :</b>		
Morning	14	33,3
Afternoon	14	33,3
Night	14	33,3
<b>Workload :</b>		
Light	7	16,7
Heavy	35	83,3
Dependent Variable	Total	Percentage
<b>Work Fatigue :</b>		
Light	16	38,1
Heavy	26	61,9

The table above shows that of the 42 respondents, the majority seen from the age variable are in the age category of less than 35 years, as many as 29 people (69.0%), the majority are women, as many as 27 people (66.7%), the majority of the status variables nutrition is the same, namely 14 people (33.3%), and the workload variable is the majority in the heavy category, as many as 35 people (83.3%).

%) seen from work fatigue, the least in the light category were 16 people (38.1%), and the most in the heavy category, namely 26 people (61.9%).

The frequency of work fatigue according to age, gender, marital status, nutritional status, work shifts, and workload on nurses at the Naimata Kupang Mental Hospital, East Nusa Tenggara Province, is presented in table 2 below:

**Table 2. Work Fatigue Frequency Distribution on Nurses at Naimata Mental Hospital Kupang, East Nusa Tenggara Province, Based on Age, Gender, Marital Status, Nutritional Status, Shift Work, and Workload**

Independent Variables	Work Fatigue Level			
	Light		Heavy	
	Total	Percentage	Total	Percentage
<b>Age :</b>				
< 35 Years	11	26,2	18	42,9
≥35 Years	5	11,9	8	19,0
<b>Gender :</b>				
Male	5	11,9	10	23,8
Female	11	26,2	16	38,1
<b>Marital Status :</b>				
Married	11	26,2	17	40,5
Not Married	5	11,9	9	21,4
<b>Nutritional Status :</b>				
Undernourished	3	7,1	0	0
Normal	7	16,7	20	47,6
Over Nutrition	6	14,3	6	14,3
<b>Work Shift :</b>				
Morning	7	16,7	7	16,7
Afternoon	5	11,9	9	21,4
Night	4	9,5	10	23,8
<b>Workload :</b>				
Light	3	7,1	4	9,5
Heavy	13	31,0	22	52,4

The table above shows that, of the 42 respondents, those aged less than 35 years experienced the most severe work fatigue by 42.9%. By 38.1%, the majority of female respondents were exhausted from their jobs. Respondents with married status who are married the most experience heavy work fatigue by 40.5%. Respondents with normal nutritional status experienced the most severe work fatigue by 47.6%. Respondents with night shifts experienced the most severe work fatigue by 23.8%. Respondents with heavy workloads experienced heavy work fatigue by 52.4%.

**1. Description of Work Fatigue by Age on Nurses at Naimata Mental Hospital Kupang**

One of the things that affect a person's ability to work is age. An individual's basal metabolism is affected by their age. The older a person gets, the more tired they become. Physiological functions that change with age have an impact on a person's endurance and ability to perform<sup>(5)</sup>. The findings of

the study, based on the distribution of data, revealed that respondents under the age of 35 experienced higher work fatigue than those aged 35 and over. This study is supported by the findings of Febriyana (2017) that there is a relationship between age and work fatigue in nurses at the Tampan Mental Hospital, Riau Province<sup>(3)</sup>. Oksandi and Karbito's research (2020) at the dr. H. BOB Bazar Kalianda in South Lampung Regency also found that there was a relationship between age and the occurrence of work fatigue in nurses<sup>(7)</sup>.

The results of this study indicate that with increasing age, the body will experience a decrease in the capacity of certain functions needed by a worker. With age, oxygen intake will decrease, so the oxygen needed to produce energy will also decrease. This can trigger work fatigue. Work fatigue that occurs at the age of less than 35 years is caused by feelings of fatigue that are more general in nature and are easily felt by anyone, including young people, because it involves a person's physical health, the work system applied and the length of work. The time it takes to rest varies. In addition, young workers feel they have strong energy, so they force themselves to continue working without thinking about taking a break.

Age is closely related to performance because, as we age, we will be followed by a process of organ degeneration, so that in this case, the ability of the organ will decrease due to changes in the body's organs, particularly the cardiovascular and hormonal systems. With the decreased ability of the body's organs, the body requires more energy for metabolic needs. So the pulse rate increases and requires a longer rest time. If the supply of energy or oxygen is not sufficient, it will disrupt the body's metabolic system. This is what can cause a person to easily experience fatigue both physically and mentally<sup>(8)</sup>.

## **2. Description of Work Fatigue by Gender on Nurses at Naimata Mental Hospital Kupang**

Gender is a physical and biological characteristic possessed by a person that can distinguish between men and women. Gender affects the level of risk of muscle fatigue. This occurs because women's muscle ability is physiologically inferior to men's. Physically, men are stronger than women<sup>(9)</sup>. The results of the study based on distribution data showed that female respondents experienced more work fatigue than male respondents. However, based on the measurement results, it was found that gender was not related to work fatigue because the number of samples of female nurses and male nurses was disproportionate, namely the number of female nurses was greater than male. This study is supported by the findings of Febriyana (2017), which did not find a relationship between gender and work fatigue in nurses at the Tampan Mental Hospital, Riau Province<sup>(3)</sup>. Research conducted by Girsang (2018) also did not find a relationship between gender and work fatigue in nurses after conducting research at Horas Insani Hospital Pematangsiantar<sup>(10)</sup>.

According to the findings of this study, most women feel substantial work fatigue as a result of mood swings and cognitive issues. In addition, reduced sleep quality in female workers affects stress,

susceptibility to infection, changes in mood, and somatic distress. Female hormones cause a woman's physique to be smoother. Besides that, a female worker, besides working outside the home, also becomes a housewife who is burdened by household tasks that are not small and require energy. This causes women to easily experience heavy work fatigue. Heavy work fatigue is also experienced by male nurses because men rely more on muscle strength at work.

Men and women differ in their physical abilities, body size, and muscle strength. This is due to the physiological and anatomical differences between men and women. In general, women only have the physical strength of about 2/3 of the physical ability or muscle strength of men. Female workers also experience a biological cycle (menstruation) every month, which affects their physical and psychological conditions. This causes the level of female fatigue to be greater than that of male fatigue<sup>(5)</sup>. According to Kroemer and Grandjean in Tarwaka (2004), problems in female workers can be caused by hormonal periods of body functions and household chores, so that menstrual disorders, sleep disorders, and fatigue often occur. Thus, to obtain appropriate work results, it is necessary to strive for the division of tasks between men and women. This must be tailored to each individual's abilities, limitations, and capabilities<sup>(9)</sup>.

### **3. Description of Work Fatigue Based on Marital Status on Nurses at Naimata Kupang Mental Hospital**

Marital status is often used as a determinant of physical work fatigue because it is associated with reduced rest time for recovery after finishing work, but psychologically, it does not necessarily exacerbate work fatigue. Based on the results of research based on distribution data, respondents who are married experience more work fatigue than respondents who are not married. This study is in line with the findings of Febriyana (2017) at the Tampan Mental Hospital in Riau Province, which revealed that there was a substantial relationship between marital status and work fatigue in nurses<sup>(3)</sup>. Research published by Girsang (2018) found a similar finding, namely that there was a relationship between marital status and work fatigue for nurses at Horas Insani Hospital Pematangsiantar<sup>(10)</sup>.

Based on the findings in this study, most of the married nurses tended to experience heavy work fatigue because married female nurses had to do homework before working, while married male nurses said that after carrying out their duties as nurses, they also had other activities, like doing a side business. Activities like this can reduce their rest time, causing nurses to experience fatigue more quickly when they are in the work environment. In addition, psychological factors can also cause fatigue in married nurses because of responsibilities, anxiety, and conflict. This conflict can arise as a result of events in the household. Married nurses have a burden on their minds about their families, so they sometimes find it difficult to concentrate on the work they are doing. Meanwhile, work fatigue experienced by unmarried nurses is because they do not use their rest time properly. They are used to using their break to do other activities such as playing online games, watching Korean dramas, scrolling through social

media, and hanging out with their peers until late at night. This is what causes unmarried nurses to experience work fatigue too often.

A person's marital status affects their level of fatigue. Married people experience fatigue faster than unmarried people because rest time is not used optimally because the condition of their family also needs to get enough attention. Married workers will experience more severe work fatigue because the time to rest after work will be reduced by the time taken to take care of family members and do other household chores<sup>(11)</sup>.

#### **4. Description of Work Fatigue Based on Nutritional Status on Nurses at Naimata Kupang Mental Hospital**

Nutritional status is an important part of a person's health because it indicates a state of self-caused by consumption, absorption, and use of nutrients from food in the long term. One way that is often used to assess nutritional status is Body Mass Index (BMI). BMI is a simple method for assessing an adult's nutritional status, particularly those related to being underweight or overweight, in order to help them maintain a normal weight and live longer. The use of BMI only applies to adults over the age of 18<sup>(12)</sup>. According to the findings of this study, respondents with normal nutritional status had more work fatigue than those with low nutritional status or high nutritional status. This research is supported by the findings of Santoso (2015) which found that there was no relationship between nutritional status and subjective work fatigue in class III inpatient installation nurses at A. M. Parikesit Tenggarong Kutai Kartanegara Hospital<sup>(13)</sup>. The findings by Dwienda et al. (2021) at the Permata Hati Duri Hospital, Mandau District, Bengkalis Regency in 2019 also stated that there was no relationship between nutritional status and work fatigue in nurses<sup>(14)</sup>.

According to the findings of this study, nutritional status is one of the individual characteristics that contribute to work fatigue. A worker with a normal nutritional status will have a better working capacity and endurance compared to a worker with a poor nutritional status. Due to the lack of nutrients needed to produce energy while working, a person with a poor nutritional status will usually experience fatigue more quickly. Unmet nutritional needs can cause a person to feel sleepy and lose attention while working, thus affecting the quality of his work. Similarly, people with more nutritional conditions face a slower pace of movement, which in turn becomes a barrier to their daily tasks.

Under nutrition or excess nutritional status can cause a decrease in the health status of workers. Workers in conditions of nutritional status, even at the lightest levels, still affect the decline in work performance and concentration, so that the possibility of work fatigue can increase. The incidence of work fatigue occurs in workers who have poor nutritional status, so nutritional status greatly influences the incidence of work fatigue<sup>(15)</sup>.

According to Supariasa et al. (2016), a lack or excess of nutrition can affect the occurrence of certain diseases and affect work productivity. If there is a lack of nutrients, the nutrients stored in the

body will be used to meet those needs. If this condition lasts for a long time, then the nutrient stores will be depleted and can cause biochemical changes and a decrease in nutrients in the blood in the form of low Hb, serum vitamin A, and carotene. In addition, there will be an increase in some metabolic wastes such as lactic acid and pyruvate. If this condition lasts for a long time, it can have an impact on changes in body functions with several symptoms such as weakness, dizziness, fatigue, shortness of breath, and others<sup>(12)</sup>.

The ability to work is strongly influenced by the nutritional status of a worker. The number of calories needed to do work must be met from the food and drinks consumed. If the nutritional intake is insufficient, the ability of the workforce to work will be reduced and they will tire more easily<sup>(11)</sup>.

## **5. Description of Work Fatigue Based on Shift Work on Nurses at Naimata Kupang Mental Hospital**

Shift work is the pattern of work time assigned to a night worker. The results of the study based on distribution data showed that respondents with night shifts experienced more fatigue than respondents with morning shifts and afternoon shifts. This research is supported by the findings of Siregar (2016) at the Ibu Kartini General Hospital Kisaran, which shows that there is a shift in relationship with the occurrence of work fatigue in nurses<sup>(16)</sup>. Research conducted by Wiyarso (2019) also found that there was a relationship between work shifts and work fatigue for nurses working in the inpatient unit of the GMIM Pancaran Kasih Hospital, Manado<sup>(17)</sup>.

The results of this study found that the work carried out by nurses on the morning shift, afternoon shift, and night shift was similar in that there was no difference in the work carried out by each nurse. However, most nurses who work night shifts feel tired more easily because of differences in sleep patterns. Shift at night causes the nurse's sleep time to be disturbed because they are required to be ready and not be careless so that they can continue to monitor the patient. This is why nurses frequently feel sleepy and wish to lie down, resulting in a higher level of weariness than in the morning and afternoon. However, some nurses admitted that when they were about to work on the night shift, they had prepared themselves and had rested during the day so that when they worked at night they could still concentrate and not feel weak doing their work.

One of the causes of fatigue that occurs on the night shift is the disruption of the body's circadian rhythm. According to Winarsunu, humans have a circadian rhythm. Specifically, for 24 hours, the body has 2 phases, namely the phase *ergotropic*, where during the day all organs and body functions are ready to act, and the phase *trophotropic*, where at night the body's energy reserves renew or strengthen again. Working at night can disrupt sleep habits, disrupting the natural 24-hour circadian cycle in which people are awake during the day and sleep at night. Activity at night, when the circadian rhythm is conditioned for sleep but used for activity, and during the day, when the circadian rhythm is conditioned for sleep but used for activity, can have negative consequences, one of which is fatigue in night shift



workers. This circadian rhythm disturbance causes nurses to often feel tired all over during the night shift. Furthermore, responsibilities that must be carried out at night also cause workloads that have an impact on the emergence of stress, one of which can cause fatigue because nurses are required to always be on standby when treating patients<sup>(16)</sup>.

## **6. Description of Work Fatigue Based on Workload on Nurses at Naimata Kupang Mental Hospital**

All tasks or activities carried out by a nurse while serving in a nursing service unit are included in the workload. This high workload has a significant impact on the productivity of health care employees, including nurses. One of the nurse's duties is to treat patients. The treatment of general patients and mental patients is certainly very different. General patients are more focused on the patient's biological needs (such as treating wounds) even though their psychological needs are not forgotten, while mental patients are more focused on psychological needs (such as providing therapy with a doctor's instructions) without compromising their biological needs<sup>(18)</sup>.

According to study findings based on distribution data, respondents with heavy workloads experienced more fatigue than those with light workloads. This study is supported by the findings of Maharja (2015) on nurses at RSU Haji Surabaya, who found a strong and unidirectional relationship between workload and work fatigue<sup>(19)</sup>. The findings by Febriyana (2017) also found that there was a significant relationship between workload and work fatigue for nurses at the Tampan Mental Hospital, Riau Province<sup>(3)</sup>. The findings by Handayani and Hotmaria (2021), who conducted research at the Kalideres Hospital, also found that there was a relationship between workload and work fatigue in nurses<sup>(20)</sup>.

The results of this study indicate that in carrying out nursing duties, nurses are required to be alert, fast, and skilled in providing nursing care to patients. This is because patients with mental disorders have different characteristics from patients in general, so the treatment and approach are different. In treating patients with mental disorders, nurses make observations and direct contact with patients strictly and continuously during working hours to monitor the mental development of patients. In addition, the lack of nurses compared to the number of patients causes the workload of nurses to increase. In addition to caring for patients, nurses are also required to make documentation of the nursing care performed and must convey the patient's health status and explain the procedures for the actions given to the patient's family. Not to mention that nurses have to deal with patients who are raging; therefore, mental and physical readiness, adequate knowledge, and skills are needed. Nurses are also always faced with making the right and fast decisions regarding the care and handling of mental patients, especially when patients have tantrums. With a complex workload, nurses are very susceptible to work fatigue.

The physical capacities, cognitive talents, and limitations of the person receiving the task must all be considered. Workload is intimately linked to performance, which in turn is linked to job performance. The severity of a worker's workload can be used to assess how long he or she can accomplish his or her job to the best of his or her ability<sup>(21)</sup>

## **7. Description of Work Fatigue on Nurses at Naimata Mental Hospital Kupang**

Work fatigue is a state of inefficiency, poor work performance, and a lack of physical power or endurance to complete the tasks at hand<sup>(22)</sup>. Work fatigue is also a complex criterion that does not only concern physiological and psychological fatigue. However, the dominant relationship is associated with a decrease in physical performance and also feelings of fatigue and a decrease in motivation. Besides that, there is also a decrease in work productivity. Work fatigue is a phenomenon that is often experienced by workers, so it cannot be ignored because it is related to the protection of workers' health. Even from the results of the study, it was stated that 80% of human errors were caused by work fatigue<sup>(23)</sup>.

Work fatigue is a term that represents the entire body's reaction to the activities performed and the exposure received while at work. When the body is engaged in activities for eight hours, it is prone to fatigue. Work fatigue is a subjective feeling. Everyone has a different perception of what fatigue is. The measurement of work fatigue in this study was carried out using a questionnaire adopted by the Industrial Fatigue Research Committee (IFRC) of Japan. The results showed that out of 42 respondents, 16 experienced light work fatigue and as many as 26 experienced severe work fatigue. Based on the measurement results, work fatigue is characterized by symptoms of weakened activities such as head fatigue, whole body feeling tired, yawning, drowsiness, heavy eyes (wanting to close), and wanting to lie down. Work fatigue is also characterized by symptoms of weakened work motivation such as feeling tired of talking, having trouble concentrating, having trouble focusing on something, tending to forget, and feeling anxious about something. Work fatigue is a picture of physical fatigue that is also experienced by nurses, such as pain in the head, pain in the back, thirst, dizziness, feeling unwell and other symptoms of physical fatigue.

Work fatigue can have an unfavorable effect on nurses, but these effects can be prevented. However, this requires the awareness of the nurses themselves and the cooperation of the hospital. Nurses should use the rest time that has been given well and get used to stretching muscles on the sidelines of work or at rest, with the aim that the body is not too long in a static state that occurs repeatedly.

## **CONCLUSION**

The effects of work fatigue on nurses at Naimata Mental Hospital Kupang are influenced by factors of age, gender, marital status, nutritional status, work shifts, and workload. It is recommended

for nurses to be able to stretch muscles on the sidelines of work or at rest and be able to take advantage of the rest time well so that the fatigue felt can be reduced.

The level of work fatigue in nurses is classified as severe, aged <35 years experienced heavy work fatigue, most of nurses are female classified as heavy category of work fatigue, marital status with married category as many as 17 people (40.5%) experienced work fatigue with heavy category, normal nutritional status who experienced heavy category work fatigue as many as 20 people (47.6%), shift night work as many as 10 people (23.8%) experienced heavy work fatigue and workload as many as 22 people (52.4%) experienced heavy work fatigue

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