Overview of Work Stress of Nurses Providing Services at Madani Regional Hospital Palu

Wawan Ladamu [1], Akbar Harisa[2,*]

[1]*Sipatokkong Ogoamas Health Center, Donggala District Health Office, Donggala, Central Sulawesi, Indonesia.*
[2]*Mental Health Nursing, Faculty of Nursing, Hasanuddin University, Makassar, South Sulawesi, Indonesia.*
[*]*Corresponding author:* akbar.harisa.unhas@gmail.com

Abstract

Aims: To determine the description of the work stress of nurses who provide services at Madani Regional Hospital Palu.

Methods: This research is a quantitative research type with a descriptive design—sample selection using non-probability sampling type of purposive sampling as many as 149 nurses who provide nursing services. Data collection used the Indonesian version of the *Expanded Nursing Stress Scale (ENSS)* questionnaire, which has undergone validity and reliability tests.

Results: The results of this study showed that the characteristics of the majority of nurse respondents were early adulthood aged 26-35 years (65.1%), work experience <5 years (53%), female gender (60.4 %), and married status (76.5%). Description of work stress of nurses with low work stress levels (56.4%) and high work stress (43.6%). Description of work stress of nurses based on characteristics of early adulthood low work stress (64.3%) high work stress (66.1%), work experience >5 years low work stress (42.9%) high work stress (52.3%), female gender low work stress (60.7%) high work stress (60%), married status low work stress (82.1%) high work stress (69.2%).

Conclusion: This study's results show that most nurses experience low work stress, and almost half of nurses experience high work stress. High work stress is found at ages 26-35, with work experience >5 years, female gender, and married status. The factors causing high work stress were found in the subscale of problems with superiors and the subscale of workload.

Keywords: Work Stress, Nurses, Hospital

Introduction

Every workplace certainly has the potential for danger and can even have an impact on the health of the workforce, one of which is psychological disorders related to mental health. *Hawari* explained several factors of work stress: marital factors, parental problems, interpersonal relationships, work, environment, finances, law, development, physical illness/injury, and family factors. Factors that influence stress coping are also expressed by *Setianingsih,* including age, education, socioeconomic status, social support, gender, personality characteristics, and experience. The (Asih et al., 2018) length of service factor also affects a person's stress because the longer a

person's service, the greater the potential for boredom at work (Maris Prastyo et al., 2024).

Work-related stress is a global problem affecting various professions and workers in developed and developing countries. According to data from WHO, around 450 million people worldwide experience mental and behavioral health problems (Badrul Zaman et al., 2023); in the UK, found that 1,380 cases per 100,000 workers experienced work-related stress. (Awaliya et al., 2019). In a study conducted at the Harar Ethiopia government hospital, work stress was found in nurses; namely, 66.2% of nurses experienced work-related stress. Several factors found to have a statistically significant relationship with nurses' work stress were childcare, work units, work shifts, and chronic diseases. (Baye et al., 2020).

The results of the 2006 PPNI survey show that around 50.9% of nurses in Indonesia who work in services experience work stress with symptoms of frequent dizziness, fatigue, and inability to rest because the workload is too high and time-consuming. (Hidayat et al., 2021). An Ibnu Sina Islamic Hospital study found that most nurses experienced severe work stress. (Meri & Mustika, 2024).Research conducted by Ilkafah et al. at the Soegiri Lamongan Regional Hospital also found work stress in nurses in the moderate category (Ilkafah et al., 2023) . In a study with 19 respondents at Torabelo Sigi Regional Hospital in 2023, 15 respondents (93.8%) also experienced heavy workload and stress. (Susanti et al., 2023). According to hospital research, female nurses are not immune from work stress. (Karina et al., 2021).

Based on the results of interviews for the initial data survey of 6 nurses conducted in June 2024 at the Madani Palu Regional Hospital found that the six nurses interviewed experienced symptoms of work stress, which were marked by a pounding heart, increased breathing, headaches, feeling anxious and restless, decreased enthusiasm, difficulty sleeping at night, and changes in eating patterns, this is included in the symptoms of stress according to Robbins and Timothy(Asih et al., 2018).

Based on these data, signs of work stress were still found in nurses, so researchers were interested in the description of work stress in nurses who provide nursing services at Madani Palu Regional Hospital.

Methods
The design of this study is quantitative, with a descriptive approach. This quantitative descriptive approach was used to obtain a picture of work stress in nurses who provide services at Madani Palu Regional Hospital. The researcher did not use statistical tests. This study does not prove the relationship between variables.

This study is located at Madani Palu Regional Hospital in 14 nursing service rooms. Starting from August 19 to September 19, 2024. The sample selection used non-probability sampling with a purposive sampling type of 149 nurse respondents who provided nursing services with inclusion criteria: nurses who work in nursing service rooms and are willing to be respondents and fill out the consent form. *The Indonesian version of the Expanded Nursing Stress Scale (ENSS)* is a questionnaire for data collection in this study. This questionnaire consists of 57 questions with five answer choices, namely: Never causes stress, score one; Sometimes it is stressful, score two; Often causes stress, score three; Very Stressful, score four; Does not experience score zero (Hasto Harsono et al., 2024) . The measurement results in this questionnaire are

obtained by adding up all the respondents' results and obtaining the *mean value.* Low work stress if the score is lower than the *mean value,* and High work stress if the score is greater than *the mean*

The data taken in this study are primary, namely data obtained directly from the research object or respondents by providing questions in the form of an ENSS questionnaire. Previously, respondents filled in demographic data and continued by filling in the ENSS questionnaire consisting of 57 questions, then adding up all the results of the respondents' answers to get the mean value, low work stress if the score is lower than the *mean value* and high work stress if the score is greater than *the mean.* In this study, it is essential to maintain research ethics, namely Informed consent or approval from respondents, Anonymity or keeping the patient's name confidential by using the name's initials, and Confidentiality, strictly maintaining the Confidentiality of the results and the privacy of the respondents.

After the data was collected, the researcher then processed the data using IBM SPSS version 2.3 to obtain percentage data for each variable and determine the mean value of all questions to see nurses' work stress levels.

Ethical approval was issued by the Health Research Ethics Committee of the Faculty of Nursing, Hasanuddin University, Makassar, Indonesia, with letter number 1 645 /UN4.18.3/TP.01.02/2024, Protocol Number UH24071 67. In this study, the researcher applied the ethical principles of respecting others, doing good and not causing harm, and justice (Mappaware, 2016).

Results
A. Demographic Characteristics of Nurses

Table 1 Frequency distribution of nurse characteristics at Madani Regional Hospital, Palu (n=149)

Variables	Category	Frequency(n=149)	%
Age	17-25 years	4	2.7
	26-35 years	97	65.1
	36-45 years	42	28.2
	46-55 years	6	4
Work experience	<5 Years	79	53
	>5 Years	70	47
Gender	Man	59	39.6
	Woman	90	60.4
Marital status	Not married yet	35	23.5
	Marry	114	76.5

Table 1 above shows that the characteristics of nurses based on age at Madani Palu Regional Hospital are primarily in early adulthood, 26-35 years old, totaling 97 nurses (65.1%). The characteristics of nurses based on work experience here show that nurses with work experience <5 years are more, namely 79 nurses (53%). The characteristics of nurses based on gender are dominated by women, with 90 nurses (60.4%). Then, regarding marital status, the majority of nurses are married, with a total of 114 nurses (76.5%).

B. Overview of nurses' work stress

Table 2 Distribution of job stress profile of nurses at Madani Regional Hospital, Palu (n=149)

Variables	Frequency (n=149) (Mean + Std Deviation) (64.3+35.6)	%
Low Work Stress	84	56.4
High Work Stress	65	43.6

Table 2 above shows a picture of nurses' work stress at Madani Palu Regional Hospital, seen from a total of 149 nurse samples; it was found that 84 nurses (56.4%) had low work stress, and 65 nurses (43.6%) had high work stress. With these results, it can be concluded that more than half of the nurses who were respondents in this study experienced low work stress, and almost half had high work stress.

Table 3 Distribution of work stress based on subscales (n=149)

Job Stress Subscale	Light Work Stress (%)	High Work Stress (%)	Total (%)
Death and dying	57.7	42.3	100
Conflict with doctors	55	45	100
Not enough preparation	59	41	100
Problems with coworkers	54.4	45.6	100
Problems with the boss	50.3	49.7	100
Treatment ambiguity	57	43	100
Problems with patients	60.4	39.6	100
Workload	50.3	49.7	100
Discrimination	67.8	32.2	100

Table 3 shows that the work stress of nurses based on nine subscales found that the cause of high work stress experienced by nurses is in the subscale of problems with superiors and the subscale of workload, each with a total of 74 nurses.

C. Overview of nurses' work stress based on nurse characteristics

Table 4 shows that from 149 sample nurse respondents who work at Madani Palu Regional Hospital, it was found that almost half of the nurses experienced high work stress, namely 65 nurses (43.6%). Of the 65 nurses (43.6%), the dominant high-stress category was found in early adulthood 26-35 years, namely 43 nurses or 66.1%, work experience >5 years as many as 34 nurses or 52.3%, female gender with a total of 39 nurses or 60%, marital status is married with a total of 45 nurses or 69.2%.

Table 4. Distribution of the description of nurses' work stress based on nurse characteristics at Madani Regional Hospital, Palu (n=149)

Variables	Category	Low Work Stress		High Work Stress	
		f (n=135)	%	f (n=14)	%
Age	17-25 years	2	2.4	2	3.1
	26-35 years	54	64.3	43	66.1
	36-45 years	24	28.6	18	27.7
	46-55 years	4	4.7	2	3.1
	Total	85	100	65	100
work experience	<5 Years	48	57.1	31	47.7
	>5 Years	36	42.9	34	52.3
	Total	84	100	65	100
Gender	Man	33	39.3	26	40
	Woman	51	60.7	39	60
	Total	84	100	65	100
Marital status	Not married yet	15	17.9	20	30.8
	Marry	69	82.1	45	69.2
	Total	84	100	65	100

Discussion

1. Description of respondent characteristics

Based on the findings of this study, the characteristics of the respondents mainly were in early adulthood aged 26-35 years, as many as 97 nurses (65.1%), and more than half of the respondents with work experience <5 years, namely 79 nurses (53%). Meanwhile, the female gender was the majority in this study, with a total of 90 nurses (60.4%), and in terms of marital status, more than half of the respondents were married, with 114 nurses (76.5%). This study aligns with the study (Sembiring Friska & Rupang Ernita Rante, 2023), which stated that early adulthood was the majority in its study. Almost all of its respondents had a work period of >10 years, and the majority of its respondents were female; in terms of marital status, it was also seen that most of its respondents were married. In line with the research found(Hasbi et al., 2019), the female gender is more dominant in the research, with some respondents having a working period of <5 years.

2. Overview of nurses' work stress

Based on the results of the ENSS questionnaire that the respondents have filled out, this study found that nurses who are assigned to provide services at Madani Palu Regional Hospital experience low levels of work stress with the results of 84 nurses (56.4%) and those who experience high levels of work stress are 65 nurses (43.6%). High work stress is caused by several factors, including non-medical tasks that nurses must do, such as administrative tasks, work environment factors, and lack of staff to meet unit needs, increasing the workload. In line with research conducted by (Arja Adi Jaya Pohan Susilawati Susilawati, 2023), found that work stress is influenced by the level of work fatigue experienced by nurses, this finding is different from the results of research conducted by (Kowshik et al., 2024)where the level of moderate to high work stress is caused by a lower social support system among nurses. In the ENSS questionnaire with nine subscales, the causes of high work stress in nurses who

provide services at Madani Palu Regional Hospital are in the subscale of problems with superiors and the subscale of workload. Based on the answers to the subscale questions, the majority of respondents said this was caused by several things, such as conflict with superiors or ward heads, lack of motivation and support from superiors for nurse performance, constantly receiving criticism from the nursing department, inappropriate shift schedule arrangements, too many non-nursing tasks such as administrative tasks that nurses must do. Nursing management needs to evaluate the implementation of nursing in the ward and strengthen solidarity between nurses and their superiors so that there is solidarity and mutual respect for fellow professionals. The next cause of work stress is in the subscale of problems with coworkers, conflicts with doctors, unclear treatment, death and dying, insufficient preparation, problems with patients, and finally, the discrimination subscale. This study is in line with (Lowe et al., 2023) findings in his research that the workload is the most stressful subscale. However, it is different from the research conducted by (Kasidouli et al., 2024), finding that the subscale of problems with patients and death and dying are the most stressful factors in his research. Therefore, nurses need to build a relationship of mutual trust with their patients, mutual respect between professions, and the need for leadership roles in evaluating nurses' performance and mentality so that if symptoms of work stress are found, immediate action can be taken, such as giving them leave and being transferred to another treatment room.

3. Overview of nurses' work stress based on nurse characteristics

In the characteristics of respondents with work stress, it can be seen that out of 65 nurses who experienced high work stress in early adulthood, 26-35 years old, more showed high stress compared to late adulthood and early elderly. This study is in line with research conducted by (Pramadewi et al., 2021) , which showed that early adulthood is susceptible to stress due to career formation, starting to build relationships with the opposite sex, thinking about partners, and emotional factors that are not yet stable. Work experience >5 years has high work stress compared to work experience <5 years, in line with (Arum Khoirunnisa Giri et al., 2021), revealing that the length of time someone works can have a positive or negative impact on the worker, a long period of work will have a positive impact on nurses because of their experience and insight in carrying out their duties but can have a negative impact if the longer the nurse is in a place, they will experience boredom and fatigue and have an impact on the quality of service. The female gender has higher work stress compared to the male gender; this finding is in line with research (Nadia et al., 2024) that the female gender has a higher percentage of work stress because women are more easily sad, guilty, anxious, have sleep disorders, and decreased appetite, thus increasing the potential for work stress while working. In marital status have a higher level of work stress compared to unmarried nurses; this is in line with research (Sembiring & Rupang, 2023) also revealed that gender, the majority of nurses who are married have higher work stress due to a more significant workload than those who are unmarried. However, it differs from the research (Dodi Pratama et al., 2020) found no relationship between nurses' work stress and marital status, age, gender, and work experience.

Limitations
This study used the ENSS questionnaire instrument, which consisted of 57 questions. According to some respondents, it took time to fill out the questionnaire and understand the contents of the questions. Hence, the researcher had to explain in more detail to the respondents regarding questions that, according to the respondents, were not understood. The busyness of the nurse respondents who provided services made it difficult to fill out the questionnaire, especially in a special room, which made it difficult for respondents to concentrate on filling out and required a long time for the researcher to meet the respondents. So, the researcher had to use Google Forms to complete the questionnaire on time.

Contribution to global nursing practice
This study describes the work stress of nurses who provide services at Madani Palu Regional Hospital. The picture of the work stress of nurses is at a low level, and some are still found to have high work stress. This study shows that there is still work stress among nurses, a serious problem that can affect the quality of patient care, increase the risk of medical errors, and increase the risk of nurse health problems. Hospitals need to understand and address nurse work stress in order to improve the quality of patient care and nurse welfare.

Conclusion
From the results of this study, the stress levels are low-level of work stress. The picture of high work stress was primarily found in early adulthood, with work experience > 5 years, female gender, and married marital status.

Author Contribution
Manuscript writer: Wawan Ladamu; collected data, processed data, and compiled the manuscript. Research assistant Akbar Harisa provided direction, guidance, input, suggestions, and improvements in the preparation of the manuscript. All authors have accepted responsibility for the overall content of the manuscript and have agreed to its submission.

Conflict of interest
The author declares no conflict of interest.

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