



Several Factors Affecting the Work Stress of Nurses at Dr. Hadrianus Sinaga Hospital, Samosir Regency in 2023

¹Sri Agustina, ²Toni Wandra, ³Henny Syapitri

^{1,2,3}Universitas Sari Mutiara Indonesia

Email: sriagustina7928@gmail.com, heny_syahfitri86@yahoo.com

Keywords

Work stress, nurse,
RSUD Dr. Hadrianus
Sinaga, Samosir

Abstract. Work stress in nurses, such as burnout, anxiety, and depression, can interfere with the performance of nurses due to reduced physical and cognitive abilities due to mental health disorders. The research objective was to determine the factors that influence the work stress of nurses at Dr. Hadrianus Sinaga, Samosir Regency, 2023. The research design used a cross-sectional study. The research population is all nurses who work in RSUD, Dr. Hadrianus Sinaga, Samosir Regency, consisting of 144 people, with the total sample being the total population. Data analysis using univariate analysis, bivariate, and multivariate analysis. The results showed that the individual factors, namely age, gender, education level, status, and length of work, did not show a significant relationship ($p > 0.05$). The work factors, which include workload and work conflict, also did not show a significant relationship ($p > 0.05$). Likewise, the supporting factors did not show a significant relationship ($p > 0.05$). Although it did not show a significant relationship, the proportion of work stress was higher for nurses who received less support from the hospital than nurses who received good support. For this reason, the hospital continues to support nurses, including certificates of appreciation or incentives/medical services according to the hospital's capabilities.

1. INTRODUCTION

Nurses are the most stressful profession in the world, where nurses face high stress at work and various workloads such as shortage of nursing personnel in one team, conflicts of interest in the team, witnessing the suffering and death of patients. So nurses tend to experience mental health problems. This can affect nurse performance (includes: absenteeism, quality and safety of patient care) (Davey et al., 2009; Stelnicki & Carleton, 2021). Therefore, work stress is a dangerous emotional and physical condition resulting from the interaction of workers and the environment where the demands of the work exceed the capabilities of workers and their resources.

During the COVID-19 pandemic, many studies have been conducted to evaluate the mental health of nurses who play an important role during the care of patients with COVID-19. The World Health Organization through World Patient Safety Day 2019 reports that nurses play a major role in contributing to or preventing 136 million unwanted events in patients and 2.6 million patient deaths per year worldwide (World Health Organization, 2019). Several studies have shown that there has been an increase in mental health disorders in nurses during the COVID-19 pandemic, which has led to a decrease in the number of nursing workers worldwide. Havaei et al. (2022) reported that many nurses are increasingly showing clinical features of mental health disorders during the COVID-19 pandemic compared to pre-pandemic times. This correlates with the declining quality of care and patient safety standards provided to the care unit by nurses. In addition, Li Y. et al. (2023) also reported that as many as 138,279 respondents working in 243 different hospitals showed symptoms of fatigue (34%), depression (55.5%), and anxiety (41.8%). This increase is also in line with the uneven economic development in various regions in China (Havaei et al., 2021, 2022; Li et al., 2022).

Mental health issues are important to maintain the welfare of workers and the quality of organizations or hospitals to provide optimal health services. Poor worker well-being can lead to more absenteeism, decreased productivity, low job satisfaction and increased willingness to move. Therefore, the perception of organizational support in this case hospitals towards nurses is important in improving the mental health of workers, especially nurses in hospitals (Putri & Anggraini, 2020; Sulistiawanti & Fitriyana, 2022).

The risk of exposure is obtained from colleagues, from patients as well as from people who appear healthy but apparently carry the virus that causes Covid-19. This incident caused anxiety and psychological stress for nurses in carrying out their duties. Fears of transmitting diseases to families, changes in work patterns, the use of personal protective equipment for a long time, limited Personal

Protective Equipment (PPE), physical fatigue and community stigma are factors of psychological stress faced by nurses. Watching sick coworkers even die, all these things drain the nurse's physical and mental energy. (Shen X, Zou X, Zhong X, Yan J, Li L., 2020)

The hospital as one of the advanced health facilities that can be organized by the government or private parties, in organizing inpatient services will stratify or group patients based on patient needs and the availability of quantity and quality of nurses. This aims to equalize the workload of nurses in the inpatient unit, in order to maintain the mental health aspects of nurses in the inpatient unit. Self-reported Workrelated Illness (SWI) in the European Agency for Safety and Health at Work reports a high prevalence of stress in nurses related to occupational stress, where it was found that 67% of health workers such as hospital heads and supervisors experience high stress in health services, while work stress in nurses ranks at the top of forty cases of work stress in Indonesia. Therefore, workload is one of the factors against stress such as burnout, stress, anxiety, to depression. Where in the end this can interfere with the performance of nurses due to reduced physical and cognitive abilities as a result of mental health disorders (Andrianti et al., 2020; Hart & Staveland, 1988; Padila & Andri, 2022).

Various studies have been conducted to assess the factors that influence nurses' work stress. Research on this theme has been carried out a lot lately, especially during the pandemic. (Mulyati & Aiyub, 2018) reported that the factors that influence the occurrence of stress in nurses at the dr. Zainoel Abidin Regional General Hospital Banda Aceh are environmental factors (P Value = 0.007), organization (P Value = 0.012), and individuals (P Value = 0.006). Furthermore, Budiyo et al. (2019) analyzed in more depth the factors that influence the occurrence of stress including workload, organizational climate, facilities / infrastructure, nursing supervision, and work discipline; Of all these factors, what significantly affects the occurrence of stress in nurses at Bethesda GMIM Tomohon General Hospital is workload (P Value = 0.018) and facilities / infrastructure (P Value = 0.018). Similar results were also reported by Rangkuti et al. (2022), where factors that influence the occurrence of stress in nurses at Rantauprapat Hospital, Labuhanbatu Regency include workload, work environment, career development, and multiple role conflicts. However, there are still not many studies that simultaneously assess the effect of these factors on job stress in nurses (Budiyo et al., 2019; Mulyati & Aiyub, 2018; Rangkuti et al., 2022).

RSUD dr. Hadrianus Sinaga Samosir Regency is a non-educational type C hospital based on the Decree of the Minister of Health of the Republic of Indonesia Number: 496 / Menkes / SK / V / 2008 dated May 28, 2008 concerning the Determination of Regional General Hospital dr. Hadrianus Sinaga. RSUD dr. Hadrianus Sinaga is part of the Samosir Regency Government which carries out public services in the health sector. RSUD dr. Hadrianus Sinaga as the only hospital owned by the Samosir Regency government that carries out health services for all levels of society, both the general public and health insurance participants, strives to make self-improvement in accordance with the needs of the people of Samosir Regency for quality health services. Outpatient services available at RSUD dr. Hadrianus Sinaga is an Intern, Surgery, Obstetrics and Gynecology, Children, Pulmonary, Heart, ENT, Neurology, Psychiatry, Dental and Medical Care Unit.

Patient visits at this hospital have increased every year, both outpatient and inpatient have increased by 12% since 2021 and 2022. The largest number of inpatient visits was in class III inpatient rooms, which was 986 in 2021 and 1535 in 2022. The increase in patient visits can be an encouragement for the hospital to realize the vision of becoming a leading hospital with international quality and a good referral for Samosir Regency.

The increase in the number of inpatients at RSUD dr. Hadrianus Sinaga is not matched by an increase in the number of nursing staff and the uneven distribution of nursing personnel in each inpatient room. According to Permenkes Number 56 of 2014, the number of nursing staff needs is calculated by a ratio of 2 (two) nurses to 3 (three) beds.

Based on the results of interviews with 10 nurses at RSUD dr. Hadrianus Sinaga, Samosir Regency through direct and online interviews 3 nurses complained of frequent dizziness, fatigue, uncontrolled emotions, lack of personnel in the team and 7 nurses complained of difficulty concentrating at work, feeling boredom and a heavy workload due to the demands of patients and families of patients with various diagnoses. This shows that there is a problem of work stress felt by nurses.

2. METHOD

The design of this study was a *cross sectional study*. The study was conducted at RSUD dr. Hadrianus Sinaga, Samosir Regency from January 2023 to July 2023. All (144) implementing nurses who work at RSUD dr. Hadrianus Sinaga, Samosir Regency. Some of the implementing nurses who work at RSUD dr. Hadrianus Sinaga, Samosir Regency.

From respondents interviewed using questionnaires and personnel data obtained from the Administration Department of RSUD dr. Hadrianus Sinaga, Samosir Regency. Primary data: Obtained from interviews using questionnaires. Secondary data: From personnel data from the Administration Department of RSUD dr. Hadrianus Sinaga, Samosir Regency.

Table 1. Operational definition of research variables

Variable	Operational definition	Measuring instruments	Measurement results	Measuring scale
DEPENDEN				
Nurse work stress	The body's reaction is a series of responses aimed at reducing the impact (Depkes, 2009)	Questionnaire	0. Stress, when the score > 34 1. No stress, when the score ≤ 34	Ordinal
INDEPENDEN				
Age	The length of life of nurses is calculated in full time from birth to last birthday.	Questionnaire	> 36 years old ≤ 36 years old	Ordinal
Gender	Gender status is differentiated physically and biologically based on external genital organs.	Questionnaire	woman man	Nominal
Education level	The last level of formal education taken by nurses	Questionnaire	0. D3 nursing 1. S1 nursing	Ordinal
Marital status	The identity of the nurse is judged by the sacred bond.	Questionnaire	marry unmarried	Ordinal
Length of work	The period of work of nurses is calculated from being accepted to work at the hospital until now.	Questionnaire	>/5 Years < 5 Years	Ordinal
Workload	A number of tasks or jobs charged to nurses that must be completed within a certain period of time.	Questionnaire	0. weight when score > 42.5 1. Moderate or mild when the score ≤ 42.5	Ordinal
Interpersonal Conflict	Different desires or desires between nurses or superiors	Questionnaire	0. Exists when the score > 45 1. None when the score ≤ 45	ordinal
Hospital support	The nurse's view of the support provided by the hospital in the form of award certificates or medical incentives/services.	Questionnaire	0. less when the score ≥ 24 1. Enough if the score < 24	Ordinal

The research questionnaire used was the occupational stress questionnaire developed by the National of Occupational Safety and Health, namely the NIOSH Generic Job Stress Questionnaire (Safety, n.d.) and perceived organization support questionnaire developed by Rhoades and Eisenberger, 2002; Worley, Fuqua and Hellman, 2009)

1. Respondents' identities include the initials of the respondent's name, age, gender, education level, marital status and length of employment.
2. Workload

It consists of 17 questions contained in the questionnaire. Score 1 if there is none, score 2 if not too much, score 3 if it is a bit much, score 4 if it is many, score 5 if it is very much. The result of measuring the number of workloads is the average answer score obtained by dividing the total score by the number of questions.

3. Interpersonal conflict

It consists of 15 questions contained in a questionnaire. The scoring is a score of 1 if strongly disagree, score 2 if disagree, score 3 if neutral, score 4 if agree and score 5 if strongly agree. The measurement of interpersonal conflict variability is the average answer score obtained by dividing the total score by the number of questions related to interpersonal conflict. Perceived organization support was assessed using 8 statements assessed through a score of 0-6 (0= Strongly Disagree; 1= Somewhat Disagree; 2= Slightly Disagree; 3= Both Agree and Disagree; 4= Slightly Agree; 5= Somewhat Agree; 6= Strongly Agree). In this section, there are 8 question items with 4 statements having scores with reverse assessment, namely statements no. 2, 3, 5, and 7. (Rhoades and Eisenberger, 2002; Worley, Fuqua and Hellman, 2009).

4. Work stress

Consists of questions related to physiological and psychological changes experienced by respondents. Questions related to physiological changes consist of 17 questions contained in the questionnaire. The scoring on this question consists of a score of 1 if never, a score of 2 if rare, a score of 3 if sometimes, a score of 4 if often, a score of 5 if very often. Furthermore, psychological-related questions consist of 20 questions contained in the questionnaire. The scoring in this section consists of a score of 0 if almost never (less than 1 day), a score of 1 if it happens infrequently (1-2 days), a score of 2 if it happens occasionally (3-4 days) and a score of 3 if it happens almost every time (about 5-7 days).

The measurement of the work stress variable is the average score of answers to questions related to physiological and psychological changes. The calculation of the average is carried out by dividing the total score by the number of questions of physiological, psychological and behavioral changes.

Measurement Aspect

1. The NIOSH research questionnaire was measured by a *scoring system*. An example of scoring that will be done is if the interpersonal conflict variable consists of 5 questions. After obtaining the total score, then division by the number of questions available to get the average score of interpersonal conflict variables for each individual, then summation of the average value of the variable scores of all respondents and divided by the number of respondents so that the average value of the population for interpersonal conflict variables is obtained. Next, the value is compared with the median value of the total score of the interpersonal conflict variable.
2. *Perceived Organization Support* is calculated by adding up the scores of each answer to the statements in statements nos. 1, 4, 6, and 8, where the value of each answer is 0 = Strongly Disagree; 1= Somewhat disagree; 2= Slightly Disagree; 3= Both Agree and Disagree; 4= Slightly Agree; 5= Somewhat Agree; 6= Strongly Agree. Then added with the sum of the values of the answers to statements no. 2, 3, 5, and 7, where the value of each statement is 6 = Strongly Disagree; 5 = Somewhat disagree; 4= slightly disagree; 3= Both Agree and Disagree; 2= Slightly agree; 1= Somewhat agree; 0= Strongly agree. The sum of the values in statements 1 to 8 is then grouped into (Rhoades and Eisenberger, 2002; Worley, Fuqua and Hellman, 2009): Well, if the sum of the values in statements no. 1 through 8 ranges from 0-24. Bad, if the sum of the values in statements no. 1 to 8 ranges from 25-48.

Data management in this study consists of several steps, namely as follows:

1. *Editing*, checking the data that has been collected, if there are errors and errors in data collection, the data will be corrected and re-recorded.
2. *Coding*, the data that has been studied is then converted into numbers (codes)
3. *Data entry*, Entering all data from the questionnaire based on the variables studied.
4. *Cleaning*, checking all data that has been entered into the SPSS program to avoid errors in data entry.

5. Saving, storage of data ready for analysis
6. Data analysis

After the data was successfully collected, data analysis was carried out with the SPSS Version 25 program.

1. Univariate Analysis
To determine the proportion of categories of dependent variables and the frequency distribution of each independent variable's categories.
2. Bivariate Analysis
To find out the relationship of each independent variable with the dependent variable using the *Chi-square test*.
3. Multivariate Analysis
From the results of bivariate analysis of all variables, variables that have a value of $p < 0.05$ were selected into a multivariate model. Because the dependent and independent variables in this study are categorical data types and consist of two categories (bicotomus), the appropriate multivariate analysis is Rheric Logistics.

3. RESULTS AND DISCUSSION

Outpatient services available at RSUD dr. Hadrianus Sinaga namely Intern Polyclinic, Surgery, Obstetrics and Gynecology, Children, Pulmonary, Heart, ENT, Neurology, Psychiatry, Dental, Medical Care Unit and services in the Emergency Department are provided 24/7 (24 hours per day, 7 days per week). The number of beds available for inpatient is 128 beds with 144 implementing nurses.

Univariate Analysis

To determine the proportion of nurse work stress and the distribution of nurse frequency according to the category of independent variables, a univariate analysis was carried out, as follows:

- a. Dependent variables

Table 2. The proportion of nurses' work stress at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023

Work stress in nurses	n	%
Stress		18,2
No stress		81,8
Total		100,0

Tabel 2 di atas menunjukkan bahwa proporsi stres kerja pada perawat di RSUD dr. Hadrianus Sinaga Kabupaten Samosir tahun 2023 adalah sebesar 18,2%.

- b. Independent variables

Table 3. Distribution of nurse frequency according to individual characteristics at RSUD dr.

Hadrianus Sinaga, Samosir Regency in 2023		
Characteristic	n	%
Age		
> 36	53	36,8
≤ 36	91	63,2
Gender		
Woman	131	91,0
Man	13	9,0
Education level		
D3 Nursing and Midwifery	129	89,6
S1 Nursing	15	10,4
Marital status		
Marry	129	89,6
Unmarried	15	10,4
Length of work		
≥ 5 years	114	79,2
< 5 years	30	20,8

Table 3 shows the demographic profile of nurses at RSUD dr. Hadrianus Sinaga, Samosir Regency. A total of 91 people (63.2%) were less than or equal to 36 years old, while 53 people (36.8%) were above that age. Of the total nurses, 131 (91%) were women and 13 (9%) were men. In terms of education, 129 people (89.6%) have an educational background of D3 Nursing and Midwifery, while 15 people (10.4%) have an S1 Nursing degree. The majority, 129 (89.6%), are married, and the remaining 15 (10.4%) are single. Regarding length of service, 114 people (79.2%) had five years or more of work experience, and 30 people (20.8%) had less than five years of experience.

c. Employment Factor

Table 4. Distribution of nurse frequency according to work at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023

Variable	n	%
Workload		
Heavy	1	0,7
Light-medium	143	93,3
Interpersonal conflict		
There are	1	0,7
No	143	93,3

Based on Table 4, in RSUD dr. Hadrianus Sinaga Samosir Regency, only a small percentage of nurses, namely 0.7%, have a heavy workload, while the overwhelming majority (99.3%) have a light-medium workload. In addition, almost all nurses there, as much as 99.3%, did not experience interpersonal conflicts.

d. Hospital Support

Table 5. Distribution of nurse frequency according to hospital support at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023

Hospital support	n	%
Less	3	2,1
Good	141	97,9

The table above shows that only a small percentage of nurses (2.1%) lack support from hospitals, while 97.9% of nurses receive good support.

Bivariate Analysis

To determine the effect of independent variables on work stress, cross-tabulation (bivariate analysis) was carried out. Because each variable is categorical data (2 categories), the statistical test used is *chi-square*.

a. The relationship of individual characteristics of nurse work stress

Table 6 The relationship between individual characteristics and work stress of nurses at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023

Variable	Work stress		P value	OR (IK95%)
	Stress n (%)	No stress n (%)		
Age (years)				
> 36	14 (26,4)	39 (73,6)	0.072	2.154 (0.923-5.025)
≤ 36	13 (14,3)	78 (85,7)		
Gender				
Woman	27 (20,6)	104 (79,4)	0.128	~*
Man	0 (0,0)	13 (100,0)		
Education level				
D3 Nursing and midwifery	23 (17,8)	106 (82,2)	0.407	1.676 (0.490-5.733)
S1 Nursing and midwifery	4 (26,7)	11 (73,3)		
Marital status				
Marry	4 (26,7)	11 (73,3)	0.483	0.597 (0.174-2.041)
Unmarried	23 (17,8)	106 (82,2)		

Length of work (years)				
≥ 5	23 (20,2)	91 (79,8)	0.393	1.643
< 5	23 (46,9)	26 (53,1)		(0.521-5.177)

Based on Table 6, it was found that the proportion of work stress at RSUD dr. Hadrianus Sinaga Samosir Regency was higher in several categories of nurses: 26.4% in nurses over 36 years old, 20.6% in female nurses, 17.8% in those with S1 Nursing and Midwifery education, 26.7% in married nurses, and 46.9% in nurses who have worked less than 5 years. However, all these proportions showed no statistically significant effect with a p-value greater than 0.05.

b. The relationship of occupational factors with nurse work stress

Table 7. The relationship between work and work stress of nurses at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023

Variable	Work stress		Nilai p	OR (IK95%)
	Stress n (%)	No stress n (%)		
Workload				
Heavy	17 (26,4)	55 (73,6)	0.135	0.522
Light-medium	10 (14,3)	62 (85,7)		(0.221-1.235)
Interpersonal conflict				
There are	27 (20,6)	116 (79,4)	1.000	~*
No	0 (0,0)	1 (100,0)		

* The OR and IK95% values cannot be determined, because one of the columns contains a value of 0 (zero).

Based on Table 7, at RSUD dr. Hadrianus Sinaga Samosir Regency, the proportion of work stress reached 26.4% in nurses with heavy workloads, higher than nurses with light to moderate workloads. Meanwhile, 20.4% of nurses who experienced interpersonal conflict experienced work stress, a higher figure than those who did not have interpersonal conflict. However, both showed no statistically significant effect with a p-value greater than 0.05.

c. The effect of hospital support factors on nurses' work stress

Table 8. The relationship between hospital support and nurse work stress at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023

Variable	Work stress		Nilai p	OR (IK95%)
	Stress n (%)	No stress n (%)		
Hospital support				
Less	25 (17,4)	116 (80,6)	0.090	9,280
Good	2 (1,4)	1 (0,7)		(0.810-106.369)

Table 8. It showed that work stress was higher (17.4%) in nurses who received less support from hospitals compared to nurses who received good support, but statistically showed no significant effect ($p > 0.05$).

Multivariate Analysis

Multivariate analysis was not carried out, because based on the results of bivariate analysis, the p value of all variables did not show a value of < 0.05 so it was not eligible to be included in the multivariate model.

Discussion

The results of this study showed that there was no effect of age on the work stress of nurses at RSUD dr. Hadrianus Sinaga. The nurses who work at this hospital have high morale even though they are more than 35 years old. Age factors are difficult to analyze alone because there are still many factors in other individuals that affect work stress. In addition, with age, knowledge and experience will improve and a greater sense of responsibility where everything can make up for the shortcomings to adapt. The results of this study are different from the research of Akbar and Akhter (2011), where younger workers are more at risk of experiencing work stress compared to older ones. This is because older workers are usually more emotionally mature, so they have a better ability to manage stress better. (Hansson et al., 2001).

In this study there was no influence of gender on nurses' work stress, because the performance of nurses at the study site was the same commitment choice for both men and women. This is in line with Fitri (2013) research where the results of the relationship between respondents' sex and work stress using the Biserial correlation test, obtained a p value of 0.805 ($P > 0.05$) which means there is no significant relationship between sex and work stress. Based on the results of this study, there is no influence of education level on work stress, this is likely to occur because nurses who have higher education are willing to share knowledge and experience with nurses who have a D3 education level, so that there are no mistakes when taking actions in work that can manage work stress. According to Nurjanah (2017), the level of education affects job selection. The higher one's level of education, the stronger the desire to do a job with a high level of challenge. Expectations and creative ideas will be expressed in the effort to complete the perfect task. Creative ideas are symbols of self-actualization that distinguish themselves from others in the completion of tasks and the qualities produced. Another case with respondents with S1 education who are more analytical / managerial, where in carrying out their daily duties feel challenged to balance between quantity and quality.

There was no effect of marital status on the work stress of nurses at RSUD dr. Hadrianus Sinaga. This is likely because both unmarried and married nurses at the study site were able to align individual life and work. But theoretically, married nurses certainly have a place to share and talk about their work and can provide emotional support to each other to reduce stress. This result is in line with the results of Safitri's research (2020) where there was no relationship between marital status and work stress ($p = 0.417$). The occurrence of stress in married individuals at work, among others, depends on the individual's ability to solve problems in the family, so as not to interfere with work. Marital status has a strong relationship with work stress. Married individuals can get emotional support from their partners that are not obtained by unmarried workers, so that work stress experienced tends to be lower (Olatunji, 2014).

There was no effect of the length of the nurse's work period on work stress at the study site. The work system in the hospital has indeed been arranged in such a way by the management, so that all nurses work not only focused on one particular installation or room, but there are times when *rolling* or rotation to work units evenly every 6 months whether nurses who have worked for a long time (senior) or vice versa. However, according to Robbins, et al. (2002) and Suska (2011), workers who have a longer working period tend to have better abilities and understanding of their work compared to workers who have a shorter working period. Someone who has served for a long time will have a high level of satisfaction, so that the stress experienced is decreasing. Nurses who have a low working period have not been able to adjust to their workplace environment, while nurses who have a longer working period have been able to adapt to their work environment, and are more experienced in completing their work, so they can better control their stress at work. Stress can be temporary or long-term, depending on how long it lasts, the strength and ability of the individual to cope with it.

There is no effect of workload with nurse work stress at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023. Nurses who work in this hospital do not feel a heavy workload because they are supported by an adequate amount of energy in each room, so they do not work excessively. With an adequate number of personnel, every nurse on duty does not continuously have to contact with patients. In addition, they state that the knowledge and abilities they have can compensate for the level of difficulty of the existing work. The results of this study are different from research conducted by Azteria et al. (2020) where almost all inpatient nurses in hospitals experience emotional distress in doing their jobs, and statistically show a significant relationship ($P < 0.001$).

According to Permendagri Number 12 of 2008, Workload is the amount of work that must be shouldered by a position/organizational unit and is the product between work volume and time norms. According to Gibson (2009), stating workload is the necessity of doing too many tasks or providing insufficient time to complete tasks. In this study, there was no reinforcement of interpersonal conflicts with nurses' work stress at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023. This is likely due to the evaluation of the hospital management and good communication between nurses in the same installation or different installations, and working together if the number of patients exceeds capacity than usual. This result does not match the results of research by Dewi et al. (2021) that there is a significant relationship ($p = 0.039$) between interpersonal conflict and work stress.

Likewise, the results of research by Manaf, et al (2019), that there is a significant influence between interpersonal conflicts on the performance of nurses at Faisal Islamic Hospital Makassar in 2018. The results of Muhammad & Purbo's research, 2022, found that there is a significant effect of work conflict on work stress. Nurses who have high conflict, will also experience high work stress and vice versa (Yana, 2015). There is no effect of hospital support with nurse work stress at RSUD dr. Hadrianus Sinaga, Samosir Regency in 2023. Hospital management usually always provides evaluation and feedback on the attitude, behavior and work results of nurses. In addition, the hospital also provides input and direction if there is an inappropriate nurse's attitude while working, provides opportunities to increase knowledge with the type of training that matches their expertise, gives an award certificate to nurses on National Health Day every year to nurses who have good performance, even though the payment for medical services and additional income (incentives) until now has not been given regularly every month. This result is not in line with research conducted by Ilyas et al. (2020), namely there is a significant relationship between hospital support and work stress ($p < 0.001$). According to Gottlieb (in Smet, 1994) social support (hospital) is verbal or non-verbal information or advice, real help, or actions obtained because of others. Social support sources can be obtained from the environment around the hospital, such as, colleagues, and doctors. (Sarafino & Smith, 2012).

Nurses as individuals basically need social support, so they feel cared for and valued (Taylor, 2009). According to Gottlieb (in Smet, 1994) social support (hospital) can give a pleasant impression and is indirectly useful in problem solving. Furthermore, nurses as individuals, if they receive high social support, will tend to experience low levels of stress and become better able to succeed in dealing with stress compared to individuals who lack social support (Taylor, 2009). The method used by individuals who receive high social support is by changing the response to stressors. Thus the individual will feel that there are people nearby and around who can help for example, when the nurse gets a problem will go to a friend to talk about the problem (Smet, 1994).

4. CONCLUSION

Based on individual characteristic factors, the proportion of work stress at RSUD dr. Hadrianus Sinaga Samosir Regency appears higher in several categories of nurses: 26.4% in nurses over 36 years old, 20.6% in female nurses, 17.8% for those with S1 Nursing and Midwifery education background, 26.7% for married people, and 46.9% for those who have worked less than 5 years. Meanwhile, based on occupational factors, 26.4% of nurses with heavy workloads and 20.4% who had interpersonal conflicts showed higher levels of stress. Finally, based on supporting factors, as many as 17.4% of nurses who felt less supported by the hospital experienced higher stress compared to those who felt supported. However, all these proportions showed no statistically significant association with a p-value greater than 0.05. Although the data showed no significant association, the proportion of work stress was higher among nurses who received less support from hospitals. Therefore, it is recommended that hospitals continue to provide support, such as award charters or incentives according to ability. Meanwhile, for nurses, maintaining togetherness and kinship through various activities is important to reduce work stress. Furthermore, for researchers, it is advisable to conduct further research with such designs as case-control and other statistical techniques, as well as explore other factors that might influence nurses' work stress.

REFERENCE

- Amran, Y. (2012). *Pengolahan dan Analisis Data Statistik di Bidang Kesehatan*. Universitas Islam Negeri.
- Andrianti, S., Ikhsan, I., Nurlaili, N., & Sardaniah, S. (2020). Hubungan Beban Kerja Dengan Stres Kerja Pada Perawat Di Rumah Sakit Rafflesia Kota Bengkulu. *Jurnal Vokasi Keperawatan (JVK)*, 2(2), 87–101. <https://doi.org/10.33369/jvk.v2i2.10687>
- Budiyanto, Rattu, A. J. M., & Umboh, J. M. L. (2019). Faktor-Faktor Penyebab Stress Kerja Perawat Dalam Merawat Pasien Covid-19. *Jurnal KESMAS*, 8(3), 1–18. <https://doi.org/10.37036/ahnj.v7i2.201>

- Chiang, C.-F., & Hsieh, T.-S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior. *International Journal of Hospitality Management*, 31(1), 180–190.
- Davey, M. M., Cummings, G., Newburn-Cook, C. V., & Lo, E. A. (2009). Predictors of nurse absenteeism in hospitals: A systematic review. *Journal of Nursing Management*, 17(3), 312–330. <https://doi.org/10.1111/j.1365-2834.2008.00958.x>
- Gusti Yuli Asih, S.Psi, M. S. et al. (2018). *Stress Kerja : Buku Ajar* (1st ed.). Perpustakaan Nasional: Katalog dalam Terbitan (KDT), Semarang University Press.
- Hart, S. G., & Staveland, L. E. (1988). Development of NASA-TLX (Task Load Index): Results of Empirical and Theoretical Research. In P. A. Hancock & N. Meshkati (Eds.), *Human Mental Workload* (Vol. 52, pp. 139–183). North-Holland. [https://doi.org/https://doi.org/10.1016/S0166-4115\(08\)62386-9](https://doi.org/https://doi.org/10.1016/S0166-4115(08)62386-9)
- Havaei, F., Park, M., & Astivia, O. L. O. (2021). The National Standard of Psychological Health and Safety in the Workplace: A Psychometric and Descriptive Study of the Nursing Workforce in British Columbia Hospitals. *The Canadian Journal of Nursing Research = Revue Canadienne de Recherche En Sciences Infirmieres*, 53(4), 405–416. <https://doi.org/10.1177/0844562120986032>
- Havaei, F., Tang, X., Smith, P., Boamah, S. A., & Frankfurter, C. (2022). The Association between Mental Health Symptoms and Quality and Safety of Patient Care before and during COVID-19 among Canadian Nurses. *Healthcare (Switzerland)*, 10(314), 1–13. <https://doi.org/10.3390/healthcare10020314>
- Honorata Ratnawati Dwi Putranti, Suparmi, S. S. (2021). Analisis Perceived Organizational Support, Quality Culture, dan Kepuasan Kerja sebagai Second-Order Factor terhadap Turnover Intention Karyawan Generasi Y di ATC (Air Traffic Control). *Jurnal Maksipreneur*, 10(2), 258–277.
- Hurrell JJ Jr, M. M. (1988). *Exposure to job stress--a new psychometric instrument*. *Scand J Work Environ Health*. 1(14 Suppl), 27–28.
- ILO. (2016). *Psychosocial risks and work-related stress*. http://www.ilo.org/safework/areasofwork/workplace-health-promotion-and-well-being/WCMS_108557/lang--en/index.htm
- Koesomowidjojo, S. R. . (2017). *Panduan Praktis Menyusun Analisis Beban Kerja*.
- Li, Y., Fan, R., Lu, Y., Li, H., Liu, X., Kong, G., Wang, J., Yang, F., Zhou, J., & Wang, J. (2022). Prevalence of psychological symptoms and associated risk factors among nurses in 30 provinces during the COVID-19 pandemic in China. *The Lancet Regional Health - Western Pacific*, 30(11), 100618. <https://doi.org/10.1016/j.lanwpc.2022.100618>
- Macphee, M., Dahinten, V. S., & Havaei, F. (2017). The impact of heavy perceived nurse workloads on patient and nurse outcomes. *Administrative Sciences*, 7(1), 1–17. <https://doi.org/10.3390/admsci7010007>
- Mulyati, & Aiyub. (2018). Faktor-faktor yang mempengaruhi stres kerja perawat pelaksana. *JIM FKep*, 3(4), 45–50.
- Munandar, A. S. (2001). *Psikologi industri dan organisasi*. Universitas Indonesia (UI-Press).
- Nasib Tua Lumban Gaol. (2016). Teori Stres: Stimulus, Respons, dan Transaksional. *Buletin Psikologi*, 24(1), 1–11.
- Nursalam. (2020). *Metodologi penelitian ilmu keperawatan : pendekatan praktis*. Salemba Empat.
- Padila, & Andri, J. (2022). Beban Kerja dan Stres Kerja Perawat di Masa Pandemi Covid-19. *Jurnal Keperawatan Silampari*, 5(2), 919–926. <https://doi.org/10.31539/jks.v5i2.3582>
- Putri, F. R., & Anggraini, D. (2020). Perceived Organizational Support dan Keterlibatan Kerja pada Perawat Kontrak. *Psychology Journal of Mental Health*, 2(2), 13–23.
- Rangkuti, H. Z., Harahap, J., Simajorang, A., Masyarakat, F. K., & Kesehatan Helvetia, I. (2022). Faktor-Faktor Yang Memengaruhi Stres Kerja Pada Perawat Di Ruang Rawat Inap. *Jurnal Keperawatan Priority*, 5(2), 46–54.
- Rasasi, A. A., Faisal, A. W., & Sawaf, E. E. (2015). Work-Related Stress Among Nurses Working in Dubai, a Burden for Healthcare Institutions. *American Journal of Psychology and Cognitive*

- Science*, 1(2), 61–65.
<http://www.aiscience.org/journal/ajpcs><http://creativecommons.org/licenses/by-nc/4.0/>
- Rhoades, L., & Eisenberger, R. (2002). Perceived Organizational Support : a Review of the Literature. *Journal of Applied Psychology*, 87(4), 698–714.
- Romadhoni, L. C., Asmony, T., & Suryatni, M. (2015). Pengaruh Beban Kerja, Lingkungan Kerja, dan Dukungan Sosial Terhadap Burnout Pustakawan Di Kota Mataram. *Khazanah Al-Hikmah : Jurnal Ilmu Perpustakaan, Informasi, Dan Kearsipan*, 3(2), 124–145.
<https://doi.org/10.24252/kah.v3i2a3>
- Safety, O. (n.d.). *NIOSH Generic Job Stress Questionnaire*. 45226(513).
- Santoso, S. (2018). *Menguasai Statistik dengan SPSS 25*. PT Elex Media Komputindo.
- Sharma, J., & Dhar, R. L. (2016). Factors Influencing Job Performance of Nursing Staff: Mediating Role of Affective Commitment. *Personnel Review*, 45(1), 161–182.
- Soleman, A. (2011). Analisis Beban Kerja Ditinjau dari Faktor Usia Dengan Pendekatan Recommended Weight Limit (Studi Kasus Mahasiswa Unpatti Poka). *Arika, Volume 5*(2), 84–98.
- Stelnicki, A. M., & Carleton, R. N. (2021). Mental Disorder Symptoms Among Nurses in Canada. *The Canadian Journal of Nursing Research = Revue Canadienne de Recherche En Sciences Infirmieres*, 53(3), 264–276. <https://doi.org/10.1177/0844562120961894>
- Suarez, L. Y. T. (2015). *Kajian Faktor Risiko Stress Kerja Pada Perawat IGD Dan ICU RSUD Cilacap Tahun 2015*. 1, 1–27.
- Sugeng, S. U., Hadi, H. T., & Nataprawira, R. K. (2015). Gambaran Tingkat Stres dan Daya Tahan terhadap Stres Perawat Instalasi Perawatan Intensif Di Rumah Sakit Immanuel Bandung. *Jurnal Fakultas Kedokteran Universitas Kristen Maranatha*, 1–10.
- Sulistiawanti, A., & Fitriyana, R. (2022). Persepsi Dukungan Organisasi dan Kesejahteraan Psikologis pada Perawat yang Menangani Pasien COVID-19 di Kota Bekasi. *Jurnal Social Philantropic*, 1(1), 23–28.
- Umansky, J. dan Rantanen, E. (2016). *Workload in Nursing. Proceedings of The Human and Ergonomics Society 2016 Annual Meeting*. 60(1), 551–555.
- World Health Organization. (2019). *World Patient Safety Day 2019*. World Health Organization.