

Relationship Between Work Loads And Working Conditions With Nursing Stress Levels In Intensive Care Unit

Edison Siringoringo^{1}, Andi Susilawani², Ilhamsyah³*

Departemen Surgical Medical Nursing, Stikes Panrita Husada Bulukumba, Indonesia¹

S1 Nursing Study Program, Stikes Panrita Husada Bulukumba, Indonesia²

Nursing Department, Universitas Islam Negeri Alauddin Makassar, Indonesia³

**Corresponding Autor : edisonsiringoringo@gmail.com*

ABSTRACT

Nurse workload is all activities carried out by nurses while on duty in a nursing service unit. Working conditions include physical environment variables such as the distribution of working hours, physical conditions in the form of noise, regulations, and demands. Job stress is a condition of tension that causes an imbalance of physical and psychological conditions in employees sourced from individuals and organizations that affect the physical, psychological, behavior of employees. This research method uses analytic research, with a cross-sectional design. The population in this study were nurses on duty in the ICU. The sample in this study amounted to 36 respondents with a sampling technique using the total sampling method. Data is collected by using a questionnaire sheet. Analysis of the data used by using the Chi-Square test. In this study, the results were obtained that the workload was in the bad category of 20 respondents (55.6%) and the working conditions included in the category did not support as many as 22 respondents (61.1%) and the stress level in the moderate category there were 23 respondents (63,9%). Based on the analysis that has been done using the Chi-Square test, there is a significant relationship between workload with stress levels with a value of $P = 0.000 < 0.05$ and work conditions with nurses' stress levels with a value of $P = 0.011 < 0.05$. There is a relationship between workload and working conditions with the stress level of nurses in the ICU. It is hoped that this research can be used as additional knowledge for the educational institutions of Stikes Panrita Husada Bulukumba.

Keywords: Workload, Working Conditions, Job Stress

INTRODUCTION

In Indonesia, research by the Indonesian National Nurses Association (PPNI) reported that as many as 50.9% of Indonesian nurses had experienced work stress, with symptoms of dizziness, feeling tired, less restful, and less friendly due to workload in 2006. According to data from the Indonesian Ministry of Health in 2014 the number of nurses in Indonesia reached 237,181 people, thus the incidence of work stress on nurses was quite large (Herqutanto, Harsono, Damayanti, 2017). Job stress is caused by not being able to overcome the threats faced by both mental, physical, and emotional that will affect his physical health. The impact of work stress on nurses can reduce nursing performance such as poor decision making, lack of concentration, apathy, fatigue, work accidents so that the provision of nursing care is not optimal which can result in low

organizational productivity. The most common effects of work stress are headaches (49%), followed by other symptoms such as anger, decreased brain function, ineffective coping, and relationship problems with coworkers. Based on studies have shown that the inability to cope with environmental situations in the form of threats both mental, physical, emotional, and spiritual can cause work stress (Mutmainna, 2012).

The results of the study said that the nurse profession has a very high risk of stress because nurses have very high duties and responsibilities towards the safety of human lives (Hendrarwati, 2015). Nurses are physically burdened with the implementation of tasks that are not their responsibility, mainly many Doctor work is delegated to nurses which ultimately makes nurses more physically burdened (Yudatama and Haksama, 2014). Excessive workload physically and mentally, that is, having to do too many things, is a possible source of work stress. The element that causes overload is time pressure. Nurse work stress can occur if the nurse in the task gets a workload that exceeds his ability so that the nurse is unable to fulfill or complete the task, the nurse is said to experience work stress.

This research is related to other studies which say that the influence of the work environment that does not support includes everything that exists in the environment of employees that can affect work stress, including workplace safety, temperature, humidity, ventilation, lighting, and cleanliness (Utami, 2010). Increased progress from intensive care units (ICU) causes strong stress in the work environment of ICU nurses. Nurses who work in ICU rooms have a heavy responsibility to deal with patients in critical conditions so nurses are required to further improve service and supervision of patient conditions that can result in fatigue and lead to work stress. where there is a struggle for life's struggle against death. Discovering that ethical issues relating to near-death patients constitute work stress for ICU nurses.

From the initial data collection conducted on December 21, 2018, in the ICU room of H. A. Sulthan Daeng Radja Hospital, Bulukumba Regency, against 36 nurses. Three nurses among them after interviewing using a questionnaire sheet found some data, namely nurses who served in the ICU said that the ICU is a nursing unit that has a high workload and this can cause stress. The working conditions of ICU nurses at H.Andi Sultan Daeng Radja Bulukumba Hospital indicate that night shifts are a problem for nurses because they have to leave home and family at night, in addition to the heavier burden or responsibility in connection with critical patient conditions that require observation

strict, nurses have a task or demand that must be done every time that is observing patients every hour but this is an obligation that must be done according to one of the nurses on duty at the ICU.

Based on the results of the study found that nurses who work in ICU H.Andi Sulthan Daeng Radja Bulukumba hospital are often complained, due to work demands that are too high or work environment that does not support the effects of air exchange in the room that is not optimal. Then the problem can be formulated The relationship between workload and working conditions with the stress level of nurses in the ICU H.Andi Sulthan Daeng Radja Bulukumba Hospital. The purpose of this study was to determine the relationship between workload and work conditions with stress levels of ICU nurses at H.Andi Sulthan Daeng Radja Bulukumba Hospital in 2019.

MATERIAL AND METHODS

The research design used by researchers is an analytic survey with a cross-sectional approach, which is a research data collection on several research variables carried out at one time. In this study, the researchers did not see the relationship between variables based on time travel (Hidayat, 2014). The population is a generalization area that consists of objects/subjects, which have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2017). The population in this study were all who served in the ICU room as many as 36 nurses at H.Andi Sulthan Daeng Radja Bulukumba Hospital.

The sample is part of the number and characteristics possessed by the population. If the population is large, and researchers may not study everything in the population, for example, due to limited funds, manpower, and time, then researchers can use samples drawn from that population. What is learned from the sample, the conclusion can be applied to the population. For this reason, samples taken from the population must be truly representative or representative (Sugiyono, 2017). The number of samples in this study was 36 respondents obtained in ICU H.Andi Sulthan Daeng Radja Bulukumba Hospital. The sampling technique in this study is a total sampling. The instrument in this study was a questionnaire (questionnaire). The questionnaire was used to collect data on age, sex, years of service, employment status, workload, working conditions, and stress levels of nurses.

Data were analyzed based on measuring scale and research objectives using computerized program software. Data were analyzed by (1) Univariate Analysis, Analysis

was conducted to see the proportions. (2) Bivariate Analysis, Bivariate test is conducted to find the relationship between the independent variable and the dependent variable with the test used is Chi-Square when it meets the requirements. Significance is accepted if $p < 0.05$.

RESULTS

Table 1. Frequency Distribution Based on Respondent Characteristics

Characteristic	Frekuensi (n)	Percentage (%)
Gender		
Female	31	86,1
Male	5	13,9
Employment status		
Honor	24	66,7
Civil Servants	12	33,3
Years of service		
1-5 Year	20	55,6
6-10 Year	4	11,1
11-15 Year	24	33,3
Age		
Late Teens 17-25 Year	13	36,1
Early adulthood 26-35 Year	20	55,6
Late adulthood >36 Year	3	8,3
Amount	36	100

Based on Table 1 the number of respondents in this study amounted to 36 respondents from nurses in the ICU. Characteristics of the study subjects included gender, employment status, years of service, and age. The sex of the respondent is female (86.1%), the employment status of the respondent is honorarium (66.7%), the length of service of the respondent is 1-5 years (55.6%) and the age of the respondent is an early adult of 26-35 years (55, 6%).

Table 2. Number of Respondents Based on Workload, Working Conditions, Stress Level

Workload	Frequency (f)	Percentage (%)
Bad	20	55,6
Good	16	44,4
Working Conditions		
Does not support	22	61,1
Support	14	38,9
Stress Level		
Middle	23	63,9
Light	13	36,1
Amount	36	100,0

Based on Table 2 shows the distribution of the number of respondents based on workload and working conditions with the stress level of nurses. The workload shows that the average respondent has a bad workload with a percentage of 55.6% and a good workload of 44.4%. For working conditions that the average respondent has unsupportive work conditions with a percentage of 61.1% and working conditions support 38.9%. While the stress level that the average respondent has a moderate stress level with a percentage of 63.9% and a mild stress level of 36.1%.

Table 3. Relationship Based on Stress Level with Nurse Workload

		Stress level			
		Middle	Light	Amount	<i>P Value</i>
Load Work	Bad	18	2	20	0,000
		78,3 %	15,4%	55,6%	
	Good	5	11	16	
		21,7%	84,6%	44,4%	
		23	13	36	
Amount		63,9 %	36,1%	100,0%	

Based on Table 3 shows the distribution of the number of respondents based on workload and working conditions with the stress level of nurses. The workload shows that the average respondent has a bad workload with a percentage of 55.6% and a good workload of 44.4%. For working conditions that the average respondent has unsupportive work conditions with a percentage of 61.1% and working conditions support 38.9%. While the stress level that the average respondent has a moderate stress level with a percentage of 63.9% and a mild stress level of 36.1%.

Table 4. Relationship Based on Stress Level with Working Conditions

		Stress level		Amount	<i>P Value</i>
		Middle	Light		
Working Conditions	Does not support	18	4	22	0,011
		78,3%	30,8%	61,1%	
	Support	5	9	14	
		21,7%	69,2%	38,9 %	
		23	13	36	
Amount		63,9%	36,1 %	100,0%	

Based on Table 4, it shows the relationship. Based on the results of the Chi-Square test with a result of $P < 0.011$, it shows that there is a significant relationship between working conditions and the stress level of nurses. This study is following the results of

research by Lumingkewas, Warouw, & Hamel (2015) which stated that working conditions have a relationship with work stress for nurses because they are required to work more quickly and precisely with a large number of patients every day with limited unsterile air. Unfavorable working conditions can affect nurses so that nurses find it difficult to face the patient's family with increased anxiety, are disturbed by the patient's condition that suddenly worsens, feels that there is no healthy air circulation in the nurse's room. Where sufficient air exchange will increase the physical freshness of the employees because if the ventilation is sufficient, the health of the employees will be guaranteed.

DISCUSSION

In this study, it can be seen that there is a significant relationship between workload and stress levels of nurses in the ICU room at RSUD H. Andi Sulthan Daeng Radja Bulukumba in 2019. From the results of statistical tests using the Chi-Square test, the $p\text{-value} = 0.000$ is smaller than the value of $\alpha = 0.05$. So it can be concluded that there is a relationship between workload and stress levels of nurses in the ICU room. The researcher's assumption is related to the research results that found respondents with a bad workload and not experiencing stress because respondents can cope with their stress by doing positive things and increasing the skills of nurses in carrying out nursing care to patients. Because high responsibility is accompanied by the ability to control properly, it will be able to reduce work stress experienced. Meanwhile, respondents with a good workload and experiencing stress because of the lack of workload and the understanding of each respondent is different. From the results of statistical tests using the Chi-Square test, it is obtained that the value of $p = 0.011$ is smaller than the value of $\alpha = 0.05$. So it can be concluded that there is a relationship between work conditions and stress levels of nurses in the ICU room.

As for the assumptions of the researchers, the finding of working conditions is not supportive by experiencing work stress because the working conditions in the room do not support workers in carrying out their activities properly, the body reacts in stressful situations, causes emotional changes and has an impact on nurse performance. Based on the theory that the work environment is one of the factors which is quite influential on the work performed by employees so that it can cause work stress due to complex problems arising from working conditions in the ICU room which includes physical and social work environments, namely relationships with coworkers, relationships with

superiors and subordinates and a sense of security for the nurse. alone. Meanwhile, respondents who experience supportive working conditions without experiencing work stress because they think that each job has a different level of difficulty depending on someone responding to the job. Everyone has calm in dealing with problems depending on the level of difficulty.

CONCLUSION

Based on the results of the research conducted with the aim of the research is to determine the relationship between workload and working conditions with the stress level of nurses in the ICU room at RSUD H. Andi Sulthan Daeng Radja Bulukumba in 2019. For the hospital, it can pay more attention to the relationship between workload and working conditions with nurses 'stress levels in the ICU H. Andi Sulthan Daeng Radja Bulukumba Hospital in the form of the need for activities aimed at reducing nurses' work stress by recreation to a place that can relax work stress from the work environment to reduce the burden of carrying out their duties again. To the next researchers to examine other factors that cause stress on nurses because the stress on nurses is caused by many factors, so that it is not only measured by the load factor, or working conditions.

DAFTAR PUSTAKA

- Ahmadun (2017). "Hubungan beban kerja perawat dengan stres kerja di Puskesmas Kuala Kampar Kabupaten Pelalawan Provinsi *Riau*"
- Alkhasanah (2016) "Gambaran Kinerja perawat berdasarkan beban kerja di Instalasi Rawat Inap penyakit dalam Rumah Sakit Umum (RSU) Kota Tangerang Selatan" *Jakarta*
- Budianto dan Kartini (2015) Pengaruh lingkungan kerja terhadap kinerja pegawai pada PT Perusahaan gas negara (PERSERO) Tbk SBU distribusi wilayah *Jakarta*
- Carayon, P dan Alvarado, JC, (2007) . Workload and patient Safety Among Critical Care Nurse: system engineering initiative for patient safety. *Crit Care Nurs Clin North Am*, 8 (5),121-129. (<http://d.scribd.com/docs/218a37tlzcf0u7vve.pdf>)
- Dewi (2015) Kajian Faktor Risiko Stres Kerja pada Perawat IGD dan ICU RSUD Cilacap
- Dharma (2011). "Metode Penelitian Keperawatan Panduan Melaksanakan dan Menerapkan Hasil Peneliti Jakarta Timur."
- Faritsy dan Nugroho (2017). "Pengukuran lingkungan kerja fisik dan operator untuk menentukan waktu istirahat kerja."
- Febriani, S (2017) "Gambaran Stres Kerja Pada Perawat Di Ruang Rawat Inap bagian perawatan jiwa Rumah Sakit Khusus Daerah Provinsi *Sulawesi Selatan*"

- Goal (2016) "Teori Stres: Stimulus, Respons, dan Transaksional", Buletin *Psikologi* ,24 (1), pp 1-11 doi : 10.22146/bpsi.11224
- Hariyono (2012). "Hubungan antara beban kerja, stres kerja dan tingkat konflik dengan kelelahan kerja perawat di rumah sakit islam Yogyakarta PDHI Kota Yogyakarta." *Jurnal Kesehatan Masyarakat (Journal of Public Health)* 3(3): 186-197."
- Harsono (2017) "Stres Kerja Pada Perawat Di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Primer" *Jurnal Kedokteran Indonesia* 5 (1):7-12
- Haryanti, Faridah & Purwaningsih (2013) " Hubungan antara beban kerja dengan stres kerja perawat Di Instalasi Gawat Darurat RSUD Kabupaten *Semarang*"
- Hendrarwati (2015). "Hubungan antara tingkat stres kerja perawat dengan kinerja perawat di Rumah Sakit Marga Husada Wonogiri:" *Surakarta*
- Herqutanto, Harsono, Damayanti & Setiawan (2017). "Stres Kerja pada perawat di rumah sakit dan fasilitas pelayanan kesehatan primer."
- Hidayat (2014). " Metode Penelitian Keperawatan Teknik Analisis Data Jakarta, Salemba Medika."
- Hudak, C.M (2010). Keperawatan kritis: Pendekatan holistik. Volume 1 Jakarta, EGC.
- Irfan (2010). "Rencana strategi pengelolaan ICU di RS pku Muhammadiyah Yogyakarta."
- Irmawati (2014). "Manajemen Logistik Farmasi Dirumah Sakit." Mars Pgdhsc.
- Juanda (2013) "Pengaruh stres kerja dan motivasi kerja terhadap kepuasan kerja karyawan PT. Bank Negara Indonesia (PERSERO) Tbk Cabang *Makassar*".
- Kristiningsih (2019) "Hubungan antara beban kerja dengan stres kerja perawat ICU, IMC, dan IGD Di RSUD PKU Muhammadiyah Bantul *Yogyakarta*"
- Kristanto (2009) "Faktor faktor penyebab stres kerja pada perawat ICU rumah sakit tipe C di Kota *Semarang*"
- Kurnia, Hayati, HK & Hotmaida (2015) "Hubungan Tingkat Stres Kerja Dengan Tingkat Kelelahan Kerja Perawat ICU Rumah Sakit Immanuel *Bandung*"
- Lazarus and Folkam (1984) *Stres, Appraisal and Coping* . New York, USA: Springer Publishing Company.
- Lewa, Eka idham lip K. dan Subowo.(2005). Pengaruh Kepemimpinan, Lingkungan Kerja Fisik, dan Kompensasi terhadap kinerja Karyawan di PT Pertamina (PERSERO) Daerah Operasi Hulu Jawa Bagian Barat, Cirebon.*Jurnal Manajemen*
- Lyon, B. (2012) *Stres, Coping, and Helath. Handbook of Stress, coping and Health : Implications for nursing research, theory, and practice*. USA:Sage Publications, Inc.
- Mallyya, A. (2016). "Perbedaan Stres Kerja Antara Perawat Instalasi Gawat Darurat (Igd) Dan Perawat Intensive Care Unit (Icu) Rsud Sultan Syarif Mohamad Alkadrie Kota Pontianak." *ProNers* 3(1).

- Marqus & Huston (2010). *Kepemimpinan dan manajemen keperawatan: Teori dan Aplikasi* (Edisi ke-4 ed). Jakarta: EGC.
- Martini (2007). "Hubungan beban kerja yang dilaksanakan perawat dengan kelengkapan dokumentasi."
- Muamalatku, (2018) Kategori Umur menurut Who & Depkes <https://muamala.net/kategori-umur-menurut-who/>
- Mutmainna (2012). "Faktor faktor penyebab stres kerja di ruangan ICU pelayanan jantung terpadu ".Dr.Cipto Mangunkusumo *Jakarta*
- Novia (2014). "Tips-tips Dahsyat Kelola Stres dan emosi untuk hidup lebih bahagia. Yogyakarta, Araska."
- Notoatmodjo (2012) *Metode Penelitian Kesehatan*. Jakarta : Rineka Cipta
- Nursalam (2014). "Konsep dan Penerapan metodologi penelitian ilmu keperawatan jakatra, Salemba Medika."
- Nursalam (2016). *Manajemen Keperawatan Aplikasi dalam Praktik Keperawatan Profesional*. Jakarta, Salemba Medika.
- Nurrohman, (2015) Pengaruh kondisi kerja, gaya kepemimpinan dan stres kerja terhadap kinerja karyawan CV, Nova Furniture di *Boyolali*
- Pitaloka Diah (2010) "Pengaruh Beban Kerja dan Kondisi Kerja terhadap Stres Kerja pada Perawat Ruangan di Rumah Sakit Umum Kabanjahe Kabupaten Karo Tahun 2009".
- Prawitasari (2009) Hubungan beban kerja perawat pelaksana dengan keselamatan pasien di RS Husada *Jakarta*
- Priyoto (2014) *Konsep Manajemen Stress*. Yogyakarta: Nuha Medika
- Rahmadyrza (2015). "Faktor-faktor yang mempengaruhi munculnya stres kerja perawat di ruang rawat inap cendrawasih rsud arifin ahmad provinsi riau pekanbaru."
- Rikomah (2017). *Farmasi Rumah Sakit* : Deepublish
- Setiawan (2016) "Pengaruh kerja dan lingkungan kerja terhadap kinerja karyawan PT. Macanan Jaya Cemerlang Klaten-*Jawa Tengah-Indonesia*"
- Silalahi (2010). "Gambaran tingkat stres berdasarkan karakteristik mahasiswa tahun pertama fakultas keperawatan"
- Sopiyuddin (2012). "Membuat proposal penelitian bidang kedokteran dan kesehatan."
- Sugiyono (2017). "Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung, Alfabeta."
- Sujarweni (2014). "Metodologi Penelitian Keperawatan Yogyakarta, GAVA MEDIA."
- Supriatna, Yuniar, Desrianty (2014) "Usulan strategi peningkatan performansi kerja perawat berdasarkan faktor pemicu stres dengan menggunakan dimensi *Greenberg*" *Bandung*

- Syamsuddin (2015). "Pedoman Praktis Metodologi Penelitian Internal WADE GROUP."
- Tunggareni, H.S. (2013) Job Satisfaction dan Performance berdasarkan Beban Kerja Tenaga Keperawatan di Rumah Sakit Bhayangkara Lumajang. *Jurnal Administrasi Kesehatan Indonesia* volume 1 Nomor 3 pages 225-233 *Surabaya*
- Utami (2010) “ Pengaruh Kepemimpinan, kondisi kerja, dan rekan terhadap semangat kerja pegawai dinas pendidikan Kabupaten *Semarang*”
- Widyasari (2002), Stres kerja dan dampaknya, Team e-psikologi.com, informasi psikologi online, jakarta
- Yudatama & Haksama (2014) “Beban kerja subjektif Intensive Care Unit” *Subjective Workload Of Nursing Staff In Intensive Care Unit. Surabaya*
- Yulianingsih (2015). "Peran perawat dalam meningkatkan mutu pelayanan Ners instalasi rawat intensif RS UGM."
- Zulmiasari (2017). "Gambaran tingkat stres kerja perawat di pusat kesehatan masyarakat (Puskesmas) Kota Semarang."