Work Stress Among Nurses of Hospitalized Patient Room at RSI Siti Rahmah

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Abstract. : Work stress is one of several dimensions that indicate every job worldwide and has become a global epidemiology. Work stress experienced by nurses at RSI. Siti Rahmah Padang can cause stress symptoms such as neck muscles, shoulders, or stiff back when or after work and feel headaches when facely many works that to be accomplished. The purpose of this study is to determine the factors associated with work stress on the inpatient nurses at RSI. Siti Rahmah in 2018. This research was an observational analytic research with cross sectional design. The sample was selected using total sampling technique of 68 nurses in the inpatient room RSI. Siti Rahmah Padang. This research was conducted in January - March 2018. Data were analyzed univariate using frequency distribution and bivariate using Chi-Square statistical test with significance level 95% α = 0.005. The results showed that there were 34 nurses (50%) experiencing severe stress. There was a relation between work load and work stress (p = 0.001), and work safety with work stress (p = 0.790). It is expected that hospital manager or employer always make sure every worker does his job according to his basic job, regulates regular work rotation to minimize burnout in work and nurses make monthly meetings between employers and fellow workers to have good interpersonal relationships.

Keywords: Work stress, Work load, Relation interpersonal.

1 Introduction

World Health Organization (WHO) in 1996 stated that stress is world epidemic in 21st century [1]. National Institute of Occupational Safety and Health (NIOSH) reported that about 40% of worker stated that their job is full of pressure in an extreme level. Another report from Attitude in American Workplace VII stated that 80% of workers experienced stress in their job and a half of them need help to solve it [2]. The data taken from Statistic Bureau of worker shows that the numbers of day used by workers to absent from working related to stress was up to twenty days [3].

Work stress is a condition arises in interaction among human and its job [4]. Working stress also can lead to organizational strain in a form of absence, decreasing of working performance, and increasing of injury frequence and employer turn-over [5]. Survey data of Self-reported Work Related Illness (SWI) in European Agency For Sale an Healthy at Work (2009) in 2004 showed that nurse has high stress prevalence related to their job [6]. Asian countries such as Singapore the main reason of stress is the lack of personnel, high pressure of job and conflict in job environment [7].

The result of observation in Rumah Sakit Islam (RSI) Siti Rahmah it was found that the prefalence of stress on nurse for 80% once in a whole feeling stiff or after working. For 90 % of nurse once feel dizzy if they do many task. By considering the high potency of stress on nurse it was conducted the study about stress in Rumah Sakit Islam (RSI) Siti Rahmah.

The purpose of this study was to analyze the factor related to work stress related to workload and work safety.

2 Method

The type of this study is analytic observational research with cross sectional design. The dependent variable is work stress and the independent variable is workload, and work safety. The study was conducted at the RSI. Siti Rahmah Padang in 2018. The study population was all nurses in the inpatient room of RSI. Siti Rahmah Padang. Population total was 68 nurses, and the sample used in this study was a total sampling of 68 nurses.

Data collection was done through questionnaires and direct interviews with respondents. Univariate analysis was done by looking at the frequency distribution of each category of independent variables. The data were categorized based on the median. Bivariate analysis was conducted by using Chi-Square test with a degree of confidence of 95% $\alpha = 0.05$, if $p < 0.05$, it was said that there was a significant relationship of the two variables.

The inclusion criterion of this study were working as an inpatient nurse at RSI. Siti Rahmah Padang and willing to be a research respondent. Exclusion criteria from this study were nurses on leave and could not be visited until three times.

3. Result

Table 1. shows an overview of the frequency distribution of respondent characteristics like age, gender, work stress, work load and work safety. Based on Table 1 it was known that more than a half (54.4%) of nurse has age of 21-30 years, more than a half (91.2%) of nurses was female. Based on Table 1, it is known that work stress experienced by nurses in the category of slightly stress by 50% and Highly stress by 50%, the workload experienced by nurses experiences were mostly heavy/high workloads 58.8%, and the work safety experienced by nurse is mostly unsafe 70.6%.

Tabel 1. Frequency Distribution of Respondent Characteristic

	Respondent characteristic	f	%
Age	21- 30 Years	37	54.4
	31- 40 Years	28	41.2
	>40 Years	3	4.4
	Total	68	100
Gender	Female	62	91.2
	Male	6	8.8
	Total	68	100
Work Stress	Highly stress	34	50

	Slightly stress	34	50
	Total	68	100
Workload	High	40	58.8
	Light	28	41.2
	Total	68	100
Work Safety	Not safe	48	70.6
	Safe	20	29.4
	Total	68	100

The frequency distribution of nurses' stress symptoms can be seen based on the answers in Table 2. Based on Table 2 it can be seen that as many as 77.9% of nurses feel that sometimes the muscles of the neck, shoulders, or back are stiff during or after work. As many as 69.1% of nurses feel sometimes headaches or dizziness in facing a lot of work.

Table 2. Frequency Distribution Based on The Answer of Stress Symptom on Inpatient Nurse at RSI. Siti Rahmah Padang in 2018

No	Statement of Stress Symptom	N		S		O		A	
		f	%	f	%	f	%	f	%
1	Feelings of nervous and worry when receiving or treating patients with severe illnesses (for example: heart disease, cancer, diabetes, etc.) or chronic diseasesr	27	39.7	37	54.4	1	1.5	3	4.4
2	Feeling neck, shoulder / back muscles, stiff when or after work	10	14.7	53	77.9	4	5.9	1	1.5
3	Feeling heartburn, tense and bloating when treating patients in the inpatient room	42	61.8	22	32.4	4	5.9	0	0
4	Facing a lot of work to be done makes headaches or dizziness	21	30.9	47	69.1	0	0	0	0
5	Hands like to sweat when or after treating patients with severe illnesses (eg heart, cancer, DM, etc.) or infectious diseases	42	61.8	22	32.4	4	5.9	0	0
6	Experiencing feelings of fatigue and helplessness carrying out tasks with patients suffering from severe illnesses (for example: heart, cancer, DM, etc.) or infectious diseases	37	54.4	26	38.2	5	7.4	0	0
7	Feeling tense when dealing with patients with severe illnesses (for example: heart, cancer, DM, etc.) or infectious diseases	35	51.5	32	47.1	1	1.5	0	0

8	Feeling lost concentration when hearing the many differences in doctor's instructions in carrying out work	35	51.5	31	45.6	2	2.9	0	0
9	Feeling pressured in carrying out daily work	37	54.4	29	42.6	1	1.5	1	1.5
10	Easily angry and easily offended in work matters	43	63.2	25	36.8	0	0	0	0
11	Experiencing eating disorders (increasing portions or losing appetite) when there are many problems at work	30	44.1	37	54.4	1	1.5	0	0
12	Having a sleep disorder	35	51.5	30	44.1	3	4.4	0	0
13	Often absent or absent from work because of illness	57	83.8	11	16.2	0	0	0	0
14	Feeling out of enthusiasm (lazy to work) when many patients with difficult conditions in the room	48	70.6	19	27.9	1	1.5	0	0
15	Feeling difficult to provide innovative and creative ideas about work problems	39	57.4	29	42.6	0	0	0	0

Note : N =Never, S =Sometimes, O = Often, A = Always

Table 3. The correlation of Workload and Work Safety with Work Stress of Inpatient Nurses at the RSI. Siti Rahmah Padang in 2018

	Work stress				Total		P value
	High		**Low**				
	f	**%**	**f**	**%**	**N**	**%**	
Workload							
High	27	67.5	13	32.5	40	100	0,001
Low	7	25	21	75	28	100	
Total	34	50	34	50	68	100	
Work Safety							
Unsafe	25	52.1	23	47.9	48	100	0,790
Safe	9	45	11	55	20	100	
Total	34	50	34	50	68	100	

Based on Table 3 it can be seen that experiencing more severe stress in heavy workloads (67.5%) than in light workloads (25%). Based on the results of statistical tests using the chi-square test obtained p value = 0.001 (p <0.05) means that there is a significant relationship between workload with work stress nurses inpatient rooms at RSI. Siti Rahmah Padang in 2018. Then, it can be seen that the nurse who experience more severe stress on unsafe work safety

(52.1%) than on safe work safety (45%). Based on the results of statistical tests using the chi-square test obtained p value = 0.790 (p> 0.05) means that there is no significantly association between job security and the work stress of inpatient nurses at RSI. Siti Rahmah Padang in 2018.

4. Discussion

4.1 Age

Age is closely related to the level of maturity or maturity of nurses associated with maturity in carrying out tasks and psychological maturity. With psychological maturity, the older nurses who work in the inpatient room are expected to be more able to show the maturity of their souls. Increasing age can lead to one's ability to make decisions, be able to think rationally, be able to control emotions, and be more tolerant of other people's views. [8]. Nurses over 40 years old are more able to control stress. Nurses with an older age are more mature psychiatric, wise, think rationally, control emotions, are tolerant of views and behaviors that are different from them, and are more mature intellectual and psychological levels [9].

4.2 Gender

According to Rodrigues (2010) that the stress level of ICU nurses in Portugal shows that the stress level of female nurses is higher than that of male nurses. Female nurses are more patient and conscientious in caring for and dealing with patients and families that vary in character [10]. Anoraga (2006) states that although the rights and obligations between men and women are the same, women workers have greater burdens and obstacles than men because of their role in the family in taking care of the household so as to enable women to experience greater stress [11].

4.3 Work stress

The results showed that half of the nurses 50% experienced severe stress. This can be seen from the results of research answers as many as 77.9% of nurses felt sometimes neck muscles, shoulders or back stiff when and after work and 69.1% of nurses felt sometimes headaches or dizziness in facing a lot of work. The results of this study are in accordance with previous research conducted by Yana (2014) about work stress on nurses in the Emergency Room at Pasar Rebo Regional Hospital found that of 24 nurses, almost half of the nurses 45.8% experienced high stress [12].

In hospitals, nurses have a very important role because the nursing department provides services for 24 hours.Nurses are also required to always be ready and alert during the service, also must check periodically and continuously the development of patient health during care. On the other hand, conflicts at work can affect household life and conversely, household conflicts can interfere with work performance. Thus conflicting dual roles are prone to occur in family life and the work of a nurse. Demands the ability to adjust and balance the two roles in order to provide the best service for patients.

Low to moderate stress levels stimulate the body and increase its ability to react, such individuals often perform tasks well, assiduously or quickly. However, if a person experiences severe stress due to too much burden carried by someone and cannot be met it will cause lower performance. Someone experiencing medium stress in the long term can cause a negative

influence on performance because the intensity of stress that continues to weaken the individual and undermine his energy resources [13].

4.4 Workload

The results showed that more than half 58.8% of nurses had heavy workloads. It can be seen that as much as 79.4% of the work is repetitive and 76.5% when working do not have free time.

The results of this study are in accordance with previous studies conducted by Wagiu, et. al. (2017) about the relationship of workload with the work stress of nurses inpatient hospitals [14]. The results of this study are in accordance with Yana's (2014) research on the work stress of nurses in the Emergency Department at Pasar Rebo, found that of 24 nurses, almost half of nurses 46.7% had high workloads [12]. A heavy nursing workload seems to be related to suboptimal patient care and may lead to reduced patient satisfaction [15].

Nursing workload definitely affects the time that a nurse can allot to various tasks. Under a heavy workload, nurses may not have sufficient time to perform tasks that can have a direct effect on patient safety. A heavy nursing workload can influence the care provider's decision to perform various procedures. Several studies have shown the relationship between nurses' working conditions, such as high workload, and job dissatisfaction. Job dissatisfaction of nurses can lead to low morale, absenteeism, turnover, and poor job performance, and potentially threaten patient care quality and organizational effectiveness [15]. Workload can be defined as a difference between the capacity or ability of workers with work demands that must be faced [16].

Based on the statistical test results obtained p = 0.001 means that there is a significant relationship between heavy workloads with work stress nurses inpatient at RSI. Siti Rahmah in 2018. According to Robbins (2008) in Wagiu et al (2017) factors that greatly affect work stress are work demands or workload factors that are too heavy so that it requires high responsibility so it is likely to result in high stress [14].

The main role of nurses consisting of seven of them providing patient care services, as a place to ask patients, collaborate with other medical experts, assist patients in increasing the level of health knowledge. Repetition of main activities repeatedly coupled with additional tasks will cause a high workload resulting in work stress. Based on the results of observations and interviews conducted with nurses who have a lot of workload found in class II BPJS (Safa) and Class III BPJS (Marwa) seen from the capacity of patients more than other classes other than that nurses do not only perform the main role nurses but have additional workloads outside the main role such as delivering food to patients who are supposed to be the task of nutritional installation, calling the doctor should be part of the information system and some nurses doing checks on oxygen cylinders that should be carried out by the UPS (Uninterruptible Power Supply) unit.

A heavy nursing workload can lead to distress (e.g., cynicism, anger, and emotional exhaustion) [17] and fatigue. Nurses experiencing stress and fatigue may not be able to perform efficiently and effectively because their physical and cognitive resources may be reduced; this suboptimal performance may affect patient care and its safety[15].

The increase in workload causes the nurse's workload to increase. If the nurse's workload increases and the work cycle repeats every day, the possibility of nurses' free time to rest is used to work so that it can cause boredom at work, work fatigue and work stress. Irregular work rotation with a good cause of boredom at work because in the long term work with the same workload, the same environment so that there is no change in atmosphere that can minimize boredom at work. It is hoped that nurses can take the time between their busy time to rest for a

while so that the negative impact of the workload can be minimized and the hospital should arrange work rotation on a regular basis so as to minimize work boredom which impacts on work stress.

There is a relationship between workload and nurses' work stress due to the heavy workload carried by the nurses, so the nurses are more susceptible to stress so that it has a negative impact on the productivity of nurses at work. The decrease in nurse productivity will cause care services to decrease. Nurse's workload becomes heavy because nurses are given additional tasks such as delivering food to the patient's inpatient room which should be the workload of a nutrition installation. It is expected that the hospital always ensures that each officer does his or her own job in accordance with its main tasks..

4.5 Work Safety

The results showed that more than half 70.6% of nurses felt insecurity at work. It can be seen that as many as 89.7% feel that work has a high potential for accidents and 70.6% of work requires excessive caution. Nurses 'feelings of fear of being pricked, fear of transmitting illnesses from patients makes nurses assume that their work has a high potential for accidents that affects nurses' attitudes of caution excessively. Based on the statistical test results obtained $p = 0.790$ means that there is no significant relationship between job security with the stress of inpatient nurses working at RSI. Siti Rahmah Padang in 2018.

The results of this study are in accordance with Ismail's (2013) research on the analysis of factors related to work stress on nurses at the Bahteramas General Hospital of Southeast Sulawesi Province found out of 200 nurses more than half 69% felt insecurity at work [18].

Feelings of nurses who think that work has a high work potential to influence nurses' attitudes at work so this causes nurses pressure which negatively causes work stress. To avoid this kind of thing nurses should be included in training or seminars related to operational standards for safe work procedures such as universal awareness seminars aimed at increasing nurses 'knowledge in working in accordance with SOPs in order to maintain the health and safety of nurses' work. It is expected that nurses will always be included by the Hospital to attend seminars or training related to nurses health and safety.

The results of this study differ from research conducted by Ismail (2013) work stress on nurses at Bahteramas General Hospital in Southeast Sulawesi Province found that there is a relationship between job security and job stress (p value = 0.000). Job security means that it is associated with workplaces that have a high risk of occupational safety and health, especially those related to the risk of being infected as one of the factors causing occupational stress [18].

Based on the answers to the questions regarding the safety of nurses, of the six questions, only two questions had a percentage above 50%, namely feeling that work has a high potential for accidents and work that requires excessive caution. Nurses feel the job has a high potential for accidents. Threatening nurses 'feelings can change nurses' attitudes to work like excessive caution. Excessive caution by nurses can cause pressure on nurses.

To minimize pressure nurses must be equipped with knowledge and expertise in work. Every nurse's job must have a standard operating procedure (SOP) to avoid work accidents. It is expected that nurses will be included by hospitals to attend training or seminars to improve nurses' knowledge and skills in working so as to prevent undesired events such as work accidents.

5. Conclusion

Stress experienced by nurses can affect physiological changes in the body so that it also has an impact on decreased productivity in the workplace such as a decrease in the quality of patient care services. Nurses can stretch and relax at rest. The workload of nurses increases when a nurse is burdened with additional duties. If the nurse's workload increases and the work cycle repeats every day, the possibility of nurses' free time to rest is used to work so that it can cause boredom at work, work fatigue and work stress. The hospital should regulate work rotation on a regular basis so as to minimize work burnout which impacts work stress. Nurse work has a high enough potential for work accidents to cause work stress. Nurses must be included in training or seminars related to operational standards for safe work procedures such as universal vigilance seminars aimed at increasing nurses 'knowledge in working in accordance with standard operating procedure in order to maintain the health and safety of nurses' work.

References

[1] Maxon R. Stress in the workplace: a costly epidemic. Fairleigh Dickinson University Magazine. http://www.fdu.edu/newspubs/magazine/99su/stress. html. (1999)

[2] Hurrell JJ. Occupational stress. Dalam: Levy BS, Wegman DH, Baron SL, Sokas RK. Occupational health recognizing and preventing work-related disease injury. 6th edition. New York: Oxford University Press; (2011)

[3] Losyk, B. Kendalikan Stres Anda : Cara Mengatasi Stres dan Sukses di Tempat Kerja. (Marselita Harapan, Penerjemah). Jakarta : Gramedia Pustaka. (2007)

[4] Wijono, Sutarto. : Psikologi Industri dan Organisasi. Jakarta : Prenadamedia Group. (2010)

[5] Smedley J, Dick F, Sadhra S. : Oxford handbook of occupational health. 2nd ed. Oxford: Oxford University Press (2013)

[6] Ikrimadhani, T dkk.: Perbedaan Tingkat Stres antara Shift Pagi, Sore, Malam paa Perawat Rawat Inap di Rumah Sakit Umum Daerah Banyudono Boyolali. Artikel Penelitian. Surakarta: Universitas Muhammadiyah Surakarta. (2015)

[7] Lim, J et al. : Stress and Coping in Singaporean Nurses: A literature Review. Nursing and Health science; 12, 251-258. (2010)

[8] Robbins, Stephen. P dan Judge, Timothy. A. : Perilaku Organisasi. Jakarta: Salemba Empat. (2008).

[9] Herqutanto, et. al.: Stres Kerja pada Perawat di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Primer. Journal UI. Vol 5 No 1 (2017).

[10] Rodrigues. : Association between serum ferritin and measures of inflammation. Am J Crit Care 2005 ;14: 513-521 (2010)

[11] Anoraga, Pandji.: Psikologi Kerja. Jakarta: PT. Rineka Cipta (2006)

[12] Yana, Dewi. : Stres Kerja Pada Perawat Instalansi Gawat Darurat Pasar Rebo Tahun 2014. Jurnal Administrasi Kebijakan Kesehatan. Volume 1 Nomor 2. DKI Jakarta: Dinas Kesehatan Provinsi DKI Jakarta. (2014)

[13] Robbins, S.P. and Judge, T.A. : Organisational Behavior. 15th edition, Pearson, Boston. (2013)

[14] Wagiu, F. C. dkk. : Hubungan Antara Beban Kerja dengan Stres Kerja Pada Perawat Rawat Inap Rumah Sakit Hermana Lambean. Manado: Universitas Sam Ratulangi (2013)

[15] Carayon P, Gurses AP. : Nursing Workload and Patient Safety—A Human Factors Engineering Perspective. In: Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US);. Chapter 30 (2008)

[16] Tarwaka.: Ergonomi Industri. Surakarta: Harapan Press. 2014

[17] Greenglass ER, Burke RJ, Moore KA. : Reactions to increased workload: effects on professional efficacy of nurses. Appl Psychol: An International Review.Vol 52(4): pp 580–97. (2003)

[18] Ismail. : Analisis Faktor yang Berhubungan Dengan Stres Kerja Pada Perawat di Rumah Sakit Umum Bahteramas Provinsi Sulawesi Tenggara. Jurnal Kesehatan Masyarakat. Yogyakarta: Universitas Hasanuddin (2013).