



Work Stress Factors in Innures at the Putri Hijau Kesdam I Bukit Barisan Medan

Agung Prawira¹, Ismail Effendi¹ Miskah Afriani²

¹Department of Public Health, Helvetia Institute of Health, Indonesia

²Department of Psychology, Helvetia Institute of Health, Indonesia



*Corresponding Author: Agung Prawira

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Abstract

One of the jobs that is prone to stress is a nurse. According to PPNI, 50.9% of Indonesian nurses experience work stress. This study was to determine the factors that influence the stress of nurses at the Putri Hijau Level II Hospital, Medan. The research design used was cross sectional with a population of 152 nurses in this study and the sample used a stratified random sampling technique to 60 nurses. Data analysis using binary logistic regression test. Research shows that there is an effect of workload ($p = 0.03$) and interpersonal relationship ($p = 0.03$) on nurses' work stress, while the variables of gender, tenure, career development and role conflict have no effect on nurses' work stress. Workload and interpersonal relationships in the workplace have the potential to cause work stress for nurses. So it is advisable for the management to adjust the physical and mental workload with the capacity and ability of nurses, and strive for a conducive social environment.

Introduction

One of the professions that has an important role in the hospital is nursing. Nursing is one of the hospitals that plays an important role in the implementation of efforts to maintain the quality of health services in the hospital. In the standards of evaluation and quality control, it is explained that nursing services ensure the existence of high quality nursing care by continuously engaging in quality control programs in hospitals (Aditama, 2004).

One of the work barriers of nurses in providing health services is job stress. According to research from the National Institute for Occupational Safety and Health (NIOSH) which is the National Institute for Occupational Safety and Health, it is determined that nurses are one of the professions that have a high risk of stress. Based on the survey results of the Indonesian National Nurses Association (PPNI) in 2006 that 50.9% of Indonesian nurses experience work stress with symptoms of frequent feeling dizzy, tired, unfriendly, lack of rest due to high workloads. Meanwhile, according to the American National Association for Occupational Health (ANAHO) the incidence of job stress in nurses is at the top of the forty first cases of stress in workers. Selye's research (in Basuki) shows that the reason the nursing profession has a high risk of being exposed to stress is because nurses have very high duties and responsibilities for the safety of human life (Basuki, 2014).

The duties and responsibilities of nurses are not light things to bear, on the one hand the nurse is responsible for physical, administrative, and administrative tasks from the institution where she works, dealing with anxiety, complaints and patient self-defense mechanisms that arise in patients due to illness, tension, boredom in dealing with patients In a condition that is

critically ill or in a terminal condition, on the other hand, he is required to always appear as a good nurse profile by his patients (Danang, 2009). Various situations and work demands experienced can be a potential source of stress (Johnson et al., 2005; Winwood & Lushington, 2006; Moustaka & Constantinidis, 2010).

Stress can be described as feeling excessive, tense, worried. Most people have experienced stress, sometimes to motivate them to get work done and do it well. dangerous stress when it occurs excessively and to interfere with daily activities in the long term (Society, 2012).

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. Other effects of work stress are headaches, anger, decreased brain function, ineffective coping, and relationship disorders with colleagues (Basuki, 2014).

There are several factors that influence work stress on various health workers, especially nurses. Work stress factors consist of 1) workload 2) cases of death and dying 3) emotional inadequacy 4) unpreparedness to handle treatment 5) conflicts with doctors 6) conflicts with colleagues 7) problems with supervisors 8) problems with patients and their families (Basuki, 2014)

Research conducted by Knezevic et al., (2011) with the topic of nurse work stress showed that the dominant factor in influencing work stress from several of the above factors was 58% by workload, followed by 34.7% by conflict with supervisors, 25 , 5% conflict with patient and family, 23.5% by uncertainty of action, 15.3% by conflict with other health professionals and 13.3% by conflict with colleagues. (14) The same thing has been proven by Posangi et al., (2016) in their research which shows that the workload of feeling like a new nurse also affects the work stress level of a nurse (Basuki, 2014)

One of the hospitals in Medan City is the Putri Hijau Medan Hospital. Based on previous research by Mardiana (2018) which aims to determine and examine the Description of Work Stress in Nurses at the Putri Hijau Level II Hospital, Medan in 2018. This study uses a descriptive approach. The population in this study were all nurses who worked at the Putri Hijau Level II Hospital Medan totaling 101 people and the sample of this study was 101 people. The results of this study indicate that as many as 84 people (83.2%) of respondents experienced mild stress, as many as 16 people (15.8%) experienced moderate stress, and as many as 1 person experienced severe stress from a physiological aspect, as many as 88 people (87.1 %) experienced mild stress, while as many as 13 people (12.9%) experienced moderate stress from a psychological aspect, and as many as 88 people (87.1%) experienced mild stress, while as many as 13 people (12.9%) experienced moderate stress from the aspect of behavior (Basuki, 2014)

Thus, based on previous research it has been known that there are problems with stress for nurses in the hospital, there are nurses who feel that they experience mild and moderate stress. Therefore, in this study, we wanted to find out more about the factors that influence the stress of nurses at the Putri Hijau Level II Hospital in Medan.

Methods

This type of research is an explanatory research with a cross sectional approach. The population in this study were 152 nurses at the Putri Hijau Level II Hospital and a total sample of 60 nurses. Collecting data through questionnaires which are distributed directly to respondents. The stress questionnaire used the Perceived stress scale (PSS 10) and the questionnaire from other variables was modified by the researcher based on theory. Data analysis using logistic regression test, which aims to determine the influence of independent variables on the dependent variable.

Results and Discussion

Univariate Analysis Results

Based on the characteristics of the respondents, it was found that the average number of nurses at the Green Princess Hospital Level II aged 26-35 years was 40 people (66.6%) and respondents who were in the late adult stage were 20 people or 33.4%. Based on the work status of the nurses studied, there were 33 volunteers (55%) and 27 nurses (45%) who were civil servants.

Judging from the working period variable, most of the respondent's working period was around 5-10 years, namely 27 respondents (45%), followed by respondents with a service period of more than 10 years, namely 20 respondents (33.3%) and respondents with a working period of 0-5 years as many as 13 people (21.7%). Based on the workload variable, it was found that some nurses felt a heavy workload (56.7%) and respondents stated that 36 respondents (60%) felt a role conflict at work. In terms of career development, nurses stated that there were no opportunities for career development as many as 37 people (61.7%).

The description of job stress as many as 20 nurses (33.3%) felt enough stress and most of the others felt light work stress as many as 40 people (66.7%).

Table 1. Respondents Characteristic Frequency Distribution

No	Characteristic	f	%
1	Age		
1	Early Adults (26-35 Years)	40	66.6
2	Late adult (36-45 years)	20	33.4
	Total	60	100
	Job status		
1	Voluntary Force	33	55
2	Civil Servant	27	45
	Total	60	100

Table 2. Frequency Distribution of Univariate Variables

Variable	f	%
Years of Service		
0-5 years	13	21.7
5-10 years	27	45
>10 tah years un	20	33.3
Sex		
Male	9	15
Female	51	85
Work Load		
Light	26	43.3
Heavy	34	56.7
Interpersonal Relationship		
Good	27	45
Less Good	33	55
Career Development		
Chance Available	23	38.3
No Chance	37	61.7
Role Conflict		
No	24	40
Yes	36	60

Work Stress		
Light	40	66.7
Moderate	20	33.3
Total	60	100

Bivariate Results

Table 3 shows that the workload value shows the p-value = 0.001 or α -value = 0.05. This proves that there is a relationship between workload and work stress at the Putri Hijau Level II hospital. In line with this, the interpersonal relationship variable shows that the significant value of gender probability is p-value = 0.001 or α -value = 0.05, meaning that there is a relationship between interpersonal relationship factors and work stress at the Putri Hijau Level II hospital.

Variables not related to work stress were role conflict (sig p 0.080), career development (sig p 0.466), tenure (sig p 0.739) and gender variables (p 0.126).

Multivariate Results

Multivariate data analysis was performed using logistic regression test, which aims to determine the influence of independent variables on the dependent variable. The magnitude of the influence of the independent variable on the dependent variable is seen from the Exp (β) value.

The step taken in logistic regression analysis is selecting the variables to be included in the multivariate analysis. The variables included in the multivariate analysis were those which in the bivariate analysis had a p value <0.25 . The method used in logistic regression analysis is the Backward method. Backward method will automatically enter all selected variables to be included in the multivariate. Gradually, variables that had no effect were excluded from the analysis. The process will stop until there are no more variables that can be excluded from the analysis. After going through the 3-step analysis process, the logistic regression test results were obtained.

The results of the OR value on the workload variable are indicated by the OR value of 29,765. This means that respondents who have a heavy workload are more at risk of experiencing work stress 29 times greater than respondents who have a light workload.

Value of B = Natural Logarithm of 29,765 = 3,393. Because the value of B is positive, workload has a positive effect on work stress.

The results of the OR value on the interpersonal relationship variable are indicated by the OR value of 14.011. This means that interpersonal relationships that are not good are more at risk of experiencing work stress 14 greater than respondents who have good interpersonal relationships.

Value of B = Natural Logarithm of 14,011 = 2,640. Because the value of B is positive, interpersonal relationships have a positive influence on work stress.

Table 3. The Relationship between Working Period and Job Stress in Nurses

Years of Service	Works Stress				Total		Sig-p
	Light		Moderate		f	%	
	F	%	F	%			
0-5 years	9	69.2	4	30.8	13	100	0.739
5-10 years	19	70.4	8	29.6	27	100	
>10 years	12	60	8	40	20	100	

Table 4. The Relationship between Sex and Nurse Job Stress

Sex	Work Stress				Total		Sig-p
	Light		Moderate				
	f	%	F	%	f	%	
Male	4	44.4	5	55.6	9	100	0.126
Female	36	70.6	15	29.4	51	100	
Total	40	66.7	20	33.3	60	100	

Table 5. Relationship between Workload and Work Stress of Nurses

Work Load	Work Stress				Total		Sig-p
	Light		Moderate				
	f	%	F	%	f	%	
Light	25	96.2	1	3.8	26	100	0.001
Hard	15	44.1	19	55.9	34	100	
Total	40	66.7	20	33.3	60	100	

Table 6. Interpersonal Relationship with Nurse Job Stress

Interpersonal	Work Stress				Total		Sig-p
	Light		Moderate				
	f	%	F	%	f	%	
Good	25	92.6	2	7.4	27	100	0.001
Less Good	15	45.5	18	54.5	33	100	
Total	40	66.7	20	33.3	60	100	

Table 7. Relationship between Career Development and Job Stress in Nurses

Career Development	Work Stress				Total		Sig-p
	Light		Moderate				
	f	%	F	%	f	%	
Opportunity Available	16	69.6	7	30.4	23	100	0.466
No Opportunity	24	64.9	13	35.1	37	100	
Total	40	66.7	20	33.3	60	100	

Table 7. Relationship between Career Development and Job Stress in Nurses

Role Conflict	Work Stress				Total		Sig-p
	Light		Moderate				
	f	%	F	%	f	%	
No	19	79.2	5	20.8	24	100	0.080
Yes	21	58.3	15	41.7	36	100	
Total	40	66.7	20	33.3	60	100	

Table 9. Logistic Regression Test

Variable	B	df	Sig.	Exp(B)
Work Load	3.393	1	0.03	29.765
Interpersonal Relationship	2.640	1	0.03	14.011
Constant		1		

The Effect of Gender on Job Stress of Nurses at the Level II Green Princess Hospital

Based on the results of research on gender with work stress, it is known that as many as 51 respondents (100%) were female, 36 respondents (70.6%) experienced mild stress and as many as 15 respondents (29.4%) experienced moderate stress. This study is in line with the research conducted by Prabowo. The results showed that there was no significant relationship between gender and the incidence of work stress ($p = 0.526$). The results showed that there were 8 out of 29 respondents (27.6%) with male gender who had a higher stress level than women.

This is supported by research by Gyllensten (2010) which states that gender is a demographic characteristic that plays a role in stress. There are differences in the severity of stress related to gender. Even though they are exposed to the same stressors, women can have different responses from men. (Basuki, 2014)

Gender plays a role in stress. There are differences in responses between men and women when facing conflict. The female brain has a negative awareness of the existence of conflict and stress, in women conflict triggers negative hormones that cause stress, anxiety, and fear. Meanwhile, men generally enjoy the existence of conflict and competition, and even think that conflict can provide a positive boost. In other words, when women are under pressure, it is generally easier for them to experience stress (Basuki, 2014)

In this study, gender does not affect work stress because basically every individual has the potential to experience stress, it's just that usually women are more visible when they are under stress, while men can cover up the situation even though they are feeling stressed. Men and women have different levels of stress. Their efforts to manage stress can also be different in that women are more visible when they are stressed because women are more expressive and open in expressing their stress than men so that men are not visible when they are stressed.

In addition, female and male nurses in this study were prone to experiencing stress because when the study was conducted to coincide with the outbreak of the corona outbreak in Medan, the nurses were worried and afraid if a patient came with complaints resembling the disease. This situation adds stress to both male and female nurses.

The Effect of Working Period on the Work Stress of Nurses at the Level II Green Princess Hospital

Based on the results of the research work period with work stress, it is known that as many as 13 respondents (100%) with a work period of 0-5 years, as many as 9 respondents (69.2%) experienced mild stress and as many as 4 respondents (30.8%) experienced moderate stress. Furthermore, with a work period of 5-10 years as many as 27 respondents (100%) there were 19 respondents (70.4%) who experienced mild stress and as many as 8 respondents (29.6%) experienced moderate stress.

Based on the results of the chi-square test, it shows that the significant probability of gender is $p\text{-value} = 0.739$ or $> \alpha\text{-value} = 0.05$. This proves that there is no relationship between work tenure and work stress at the Putri Hijau Level II hospital.

This is in line with the results of Mayang's research, explaining in his 2018 research on Factors Associated with Work Stress in Employees of the Participation Section of the Ungaran Health Social Security Administration (BPJS), that based on the results of hypothesis testing using the chi square test, a p-value was obtained 0.151 (> 0.05), which means that there is no relationship between work tenure and work stress for the BPJS Kesehatan Ungaran employees (11).

Other researchers found that there is a relationship between work tenure and work stress in factory 2 workers at PT. Maruki International Indonesia Makassar. Respondents who are in the category of a long work period experience more work stress than respondents who are in the category of a new work period (Ibrahim, 2016)

According to Munandar (2001), new and long work periods can trigger work stress and are exacerbated by a heavy workload. However, the working tenure affects workers because it creates a routine at work, so that in the end, long periods of work tend to get stress easily based on work routines. (Basuki, 2014)

In this study, both the old work period and the new work period have work challenges and can cause stress. This is because the longer the work period, the greater the burden and responsibility they bear. As well as easy stress with routines and work conditions that tend to be monotonous and feel less challenging. Meanwhile, new work periods experience work stress because workers still need to adjust to the work environment and what work risks can occur. Adjustment to the expectations and reality received in the workplace. New and old work periods can trigger work stress and are exacerbated by a heavy workload. However, working tenure affects workers because it creates a routine at work, which in turn creates stress. Work routines that are always monotonous create boredom accompanied by a limited work environment that makes workers become bored.

Effect of Workload on Work Stress of Nurses at the Level II Green Princess Hospital

Workload is a series of tasks given to someone that must be completed at a certain time. From an ergonomic point of view, every workload received by a person must be appropriate and balanced both with regard to physical abilities, cognitive abilities and human limitations who accept the load (Basuki, 2014)

Of the nurses studied, 34 respondents (100%) felt a heavy workload, 15 respondents (44.1%) experienced mild stress and 19 respondents (55.9%) experienced moderate stress. Based on the results of the study, it was found that the workload had a sig-p value of $0.03 < 0.05$, meaning that the workload had a significant effect on the work stress of nurses at the Putri Hijau Level II Hospital. The results of the OR value on the workload variable are indicated by the OR value of 29,765. This means that respondents who have a heavy workload are more at risk of experiencing work stress 29 times greater than respondents who have a light workload.

The results of this study are in line with the research conducted by Murni regarding the effect of physical and mental workload on the work stress of nurses in the ER at Cianjur Hospital in 2012, it was found that the results of statistical analysis showed that there was no relationship with physical workload ($p = 0.322$) and there was an effect of workload. mental ($p = 0.048$) on the work stress of nurses in the IGD Cianjur Hospital (Kasmarani, 2012)

Another study was also conducted by Arifin (2016) regarding the effect of workload on work stress of nurses at Prof. dr. Soekandar Mojokerto obtained the results were analyzed using logistic regression. The analysis results show the value of $p < \alpha$ $p = 0.011$ and $\alpha = 0.05$, from these results, there is an influence between workload and work stress. (Arifin, 2016)

Workers are only able to carry loads up to a certain weight according to their working capacity. The workload can include tasks that are physically spatial in nature, work place, while mental tasks such as job complexity, difficulty level of work, job responsibilities. Workload can also be influenced by work organization such as length of work time, fast rest periods, shift work, night work, wage systems, organizational structure models, assignment of tasks and authority (Wahyu, Wahyu and Anita, 2015).

Jobs that are considered excessive or feel that there are no work challenges can cause stress. Stress due to work or work stress is a dangerous physical and emotional response that arises

when job demands are not in accordance with the abilities or needs of the workers (K, 2011). If the individual continues to deal with such pressure every day, it will experience an increase in stress hormones that continue to rise and this large amount of hormones makes it difficult for the body to continue to fight it. Moreover, conditions outside of work can cause stress. And with the lack of opportunities for physical and mental rest, the immune system will decrease, causing physical condition and behavior to decrease.

According to researchers, work stress can arise because of too much and piling up work. The cause of stress is that the nurse doesn't have a strategy to get the job done. As a result, when the old work was not finished, the new assignments came and made matters worse. When there are too many things that the nurse has to think about and do, then the nurse feels stressed and there is an opportunity for stress.

The Influence of Interpersonal Relationships on the Work Stress of Nurses at the Level II Green Princess Hospital

Interpersonal relationships have a sig-p value of 0.03 <0.05, which means that interpersonal relationships have a significant influence on the work stress of nurses at Putri Hijau Level II Hospital. The results of the OR value on the interpersonal relationship variable are indicated by the OR value of 14.011. This means that interpersonal relationships that are not good are more at risk of experiencing work stress 14 greater than respondents who have good interpersonal relationships. As many as 27 respondents (100%) had good interpersonal relationships, 25 respondents (96.2%) experienced mild stress and as many as 2 respondents (7.4%) experienced moderate stress. Furthermore, from 33 respondents (100%) having poor interpersonal relationships, there were 15 respondents (45.5%) who experienced mild stress and 18 respondents (54.5%) experienced moderate stress.

In line with this research, another study by Suparwati (2015) on Interpersonal Relationships with Nurse Stress Levels in the Adult Inpatient Room of Rsu PKU Muhammadiyah Bantul, there is an interpersonal relationship with the stress level of nurses in the PKU Muhammadiyah Bantul 2015 Adult patient ward (Suparwati, 2015).

Starting to build good communication between employees, because communication is a bridge for employees in building a strong collaboration. If communication between employees runs smoothly, team harmony will be maintained and friendships will be even tighter, so that employees will share and work hand in hand to solve all existing work problems.

According to researchers, there is a relationship between interpersonal relationships and the level of stress experienced by nurses. It can be concluded that the better the interpersonal relationship in the adult inpatient room, the better the stress level experienced by nurses. Conversely, the worse the interpersonal relationship, the worse the stress level experienced by nurses will be. The nursing profession, who meets various problems with colleagues every day, has the potential to cause stress levels if not properly anticipated. Therefore it is necessary to establish a good interpersonal relationship between nurses and nurses, nurses and patients, nurses and the patient's family in order to create comfortable relationships so that health services can also be carried out properly.

The Influence of Career Development on Job Stress of Nurses at the Level II Green Princess Hospital

The results of research on career development with work stress, it is known that as many as 23 respondents (100%) stated that there was an opportunity to develop a career, 16 respondents (69.6%) experienced mild stress and as many as 7 respondents (30.4%) experienced moderate stress. . Furthermore, from 37 respondents (100%) stated that there

was no career development, there were 24 respondents (64.9%) who experienced mild stress and as many as 13 respondents (35.1%) experienced moderate stress.

Based on the results of the chi-square test, it shows that the significant probability value of gender is $p\text{-value} = 0.466$ or $\alpha\text{-value} = 0.05$. This proves that there is no relationship between career development and work stress at the Putri Hijau Level II hospital.

According to researchers, role conflict is a form of role confusion that must be performed by employees. The existence of multiple instructions that differ from each other and must be carried out at the same time is a reflection of the role conflict. Role conflict in particular is also seen as a form of mismatch between the role that must be performed and the demands of the job that should be done based on certain professional standards that are believed and embraced by employees.

Conclusion

There is an influence of workload and interpersonal relationships on work stress of inpatient nurses at Putri Hijau Level II hospital. There is an influence of interpersonal relationships on stress. It can be said that the higher the workload and interpersonal relationship problems will cause work stress for nurses. Meanwhile, there was no effect of tenure, gender, role conflict and career development on the work stress of inpatient nurses at Putri Hijau Level II hospital. Nurses can make work plans so as to reduce the risk of being burdened from work and HR can adjust the physical and mental workload to their respective capacities and abilities. It is also recommended to strive for a comfortable social environment in the workplace, hold job rotations for three-step development and career advancement, create a friendly work environment to avoid gaps.

References

- Aditama, T. (2004). *Manajemen Administrasi Rumah Sakit*. Jakarta: UI Press.
- Arifin. (2016). *Dampak beban kerja terhadap stress kerja pada perawat RSUD Prof. dr. Soekandar Mojokerto*.
- Basuki. (2014). *Stui Komparatif Faktor-Faktor Yang Berhubungan Dengan Stres Kerja Pada Perawat PNS dan Non PNS di Ruang Rawat Inap RS Jiwa Provinsi Sulawesi Tenggara Tahun 2014*. Kendari: Fakultas Kesehatan Masyarakat UHO.
- Danang, P. (2009). *Hubungan Stress Kerja dengan Adaptasi Pada Perawat Di Instalasi Gawat Darurat RSUD Pandan Arang*. Jakarta: Universitas Indonesia.
- Ibrahim. (2016). *Faktor-faktor yang berhubungan dengan stres kerja pada pekerja factory 2 PT. Maruki Internasional Indonesia Makassar*.
- K, K. (2011). *Penerapan Kesehatan Kerja Praktis bagi Dokter dan Manajemen Perusahaan*. Balai Penerbit FKUI, 71–78.
- Kasmarani, M. K. (2012). *Pengaruh Beban Kerja Fisik dan Mental terhadap Stres Kerja pada Perawat di Instalasi Gawat Darurat (Igd) RSUD Cianjur*. *Jurnal Kesehatan Masyarakat Universitas Diponegoro*, 1.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). *The experience of work-related stress across occupations*. *Journal of managerial psychology*.
- Mayang, F. A., Lestanyo, D., & Kurniawan, B. (2018). *Faktor-Faktor yang Berhubungan dengan Stres Kerja pada Karyawan Bagian Kepesertaan di Badan Penyelenggara Jaminan Sosial (BPJS) Kesehatan Ungaran*. 6(4), 2356–3346.

- Moustaka, E., & Constantinidis, T. C. (2010). Sources and effects of work-related stress in nursing. *Health science journal*, 4(4), 210.
- Society, A. P. (2012). UnderStanding and Managing Stress. *APS*.
- Suparwati, R. (2015). Hubungan Interpersonal dengan Tingkat Stres Perawat di Ruang Rawat Inap Dewasa Rsu PKU Muhammadiyah Bantul. *Naskah Publikasi*, 1–15.
- Wahyu, Wahyu and Anita, D. C. (2015). Hubungan Tingkat Stres Kerja Perawat terhadap Mutu Pelayanan Keperawatan di Ruang Rawat Inap RS PKU Muhammadiyah Yogyakarta. In *Skripsi thesis, STIKES 'Aisyiyah*.
- Winwood, P. C., & Lushington, K. (2006). Disentangling the effects of psychological and physical work demands on sleep, recovery and maladaptive chronic stress outcomes within a large sample of Australian nurses. *Journal of advanced nursing*, 56(6), 679-689.