Relationship between Workload and Non-physical Work **Environment with Nurse Job Stress in Inpatient Room of** Menteng Mitra Afia Hospital in 2019

Friskania Devi Rosanti¹ and Mayumi Nitami²

¹Health Policy Administration, Faculty of Public Health and Sciences, Universitas Esa Unggul, Indonesia ²Enviromental Health, Faculty of Public Health and Sciences, Universitas Indonesia, Jl. Arjuna Utara No.9, Blk.1 No.2, Duri Kepa. Kebon Jeruk 11510, Indonesia

Keywords: Job Stress, Workload, Nurse, Esa Unggul, October.

Abstract:

Based on Riskesdas (2018) shows the prevalence of severe mental disorders in Indonesia of 7 per mile population and mental emotional disorders 9.8% of the population. While the DKI Jakarta Province Data shows the prevalence of mental emotional disorders is 9.7%. The purpose of this study was to determine the relationship between workload and non-physical work environment with nurses' work stress in the inpatient room of Menteng Mitra Afia Hospital in 2019. This study used a cross-sectional study design with 30 respondents. The sampling technique uses a total sampling method. Data obtained through a questionnaire with the variable workload, non-physical work environment, and work stress. Data analysis using the Chi-Square test. The results showed that there was a significant relationship between workload (p = 0.003, PR = 0.264 or 3.78) and non-physical work environment (p = 0.026, PR = 2.222) with nurses work stress. The researcher suggests that providing health services especially in the field of counseling and counseling as well as routine sports activities, rotating workers and increasing the number of human resources in the inpatient room, providing support to workers to develop careers, give appreciation and pay more attention to the physical work environment in the inpatient room.

INTRODUCTION

In America, work stress is a common problem and is detrimental to workers. Job stress can cause health problems such as fatigue/tiredness, dizziness, and indigestion (Munandar, 2006) The EU-OSHA report (2013) explains that 51% of workers report work- related stress commonplace for work and 4 out of 10 workers stated that the problem of work stress was not well managed in their organizational environment. The high rate of work stress in Europe has caused European member governments to take part in solving problems that occur (The OSHA, 2013). Work stress is an important concern for one of them in the health service sector workers, all professionals in the hospital have a risk of stress, but nurses have a higher stress level (ILO, 2016). The results of the study (Health and Safety 2014) Executive, showed that health professionals, teachers, and nurses had the highest

stress levels with a prevalence rate of 2500, 2190 and 3000 cases per 100,000 workers in the period 2011/12, 2013/14 and 2014/15.

Based on data from the World Health Organization (WHO, 2018), around 300 million people in the world experience stress. Based on Basic Health Research (2018), the prevalence of severe mental disorders in Indonesia is 7 per mile population and mental emotional disorders 9.8% of the population. While DKI Jakarta Province Data shows the emotional mental disorder prevalence is 9.7%, the data shows Jakarta is wrong one city has 9.7% mental-emotional management challenges (Balitbangkes, 2018). Based on data (American Nurses Association, 2017) stress data on nurses obtained as much as 82% of workers in hospitals in America. Nurses and nursing students face unique dangers in the workplace, the results of the HRA show there must be a way to cope with stress levels in nurses, especially with physical activity, nutrition, rest, safety, and quality of life. Nurses need to get

stress management programs so nurses are more comfortable working and better able to serve patients, as data shows that 68% of nurses report they tend to prioritize patient safety and health more than themselves, this causes stress levels in nurses are quite tall.

The results of a survey conducted by PPNI (Indonesian National Nurses Association) about 50.9% of nurses working in four provinces in Indonesia experience work stress that is often dizzy, tired, unable to rest due to high workload and time- consuming (Bakri, 2014). The research results of the Ministry of Health and the University of Indonesia show that 78.8% of nurses carry out cleaning duties, 63.3% perform administrative tasks and more than 90% perform non-nursing tasks and only 50% perform nursing care actions according to their functions (Bakri, 2014).

A cross-sectional study conducted at 3 hospitals in the Yangon region, Myanmar, showed that 50.2% were nurses have a high level of work stress (Lwin, 2015).

Menteng Mitra Afia Hospital is a private hospital located in Central Jakarta located at Jalan Kali Pasir No. 9 Cikini, Jakarta Pusat. At its inception in 1997, Menteng Mitra Afia Hospital was known as a specialized Neurology and Psychiatric Hospital. And as for the duties of nurses in Menteng Mitra Afia Hospital is data analysis to formulate a nursing diagnosis, plan and carry out a simple nursing evaluation on individuals, carry out documentation of nursing care.

Maintain nursing and medical equipment so that it is always in a state ready for use, handover patients during service changes, follow periodic meetings held by the head of the room, bring patients for surgery, radiological examinations. The burden of nurses' physical workers includes lifting patients, bathing patients, helping patients to the bathroom, pushing health equipment, making the patient's bed, pushing the patient's bench. While the mental workload experienced by nurses including, working shifts or taking turns, preparing the mentality of the patient and the patient's family, especially for those who will carry out surgery or in critical condition. Profile of Menteng Mitra Afia Hospital in 2019 explained that the capacity of beds in the inpatient room was 75 beds, the number of nurses 30 people from that number the ratio between the number of nurses and the number of beds was (1:1) where should the type C hospital is one nurse caring for one patient or one nurse with one patient's bed. This

figure indicates an increase in bed occupancy rates or increases patient visits per day. Increased patient visits can be an encouragement for the hospital to realize the vision of becoming a hospital that provides quality, trusted services and prioritizes satisfaction and is affordable to the community.

The increase in the number of hospitalized patients at Menteng Mitra Afia Hospital in the past year has continued to increase from 50 patients per day in the past few months to nearly 85 patients every day but the increase has not been offset by an increase in the number of nursing staff. According to Permenkes Number 56 of 2014, the number of nursing staff needs is the same as the number of beds in an inpatient installation (ratio 1: 1).

Based on interviews conducted using the DASS 42 questionnaire on 13 inpatient nurses found 5 people experienced moderate stress (38.5%) then 6 people experienced high stress (46%) and 2 people experienced low stress (15%). Based on the symptoms arising from the three stresses, it can affect a number of illnesses that are allegedly due to the person experiencing stress that is quite high and prolonged, including work dissatisfaction, fatigue, moodiness and lack of enthusiasm at work, rising work accident rates due to lack of focus at work, wrong in making decisions, high absenteeism and high emotional level at work.

Based on the above background, researchers are interested in conducting further research on "The Relationship between Workload and the Non- Physical Work Environment of Nurses and Work Stress in the Inpatient Room of Menteng Mitra Afia Hospital in 2019.

2 RESEARCH RESULT

2.1 Univariate Analysis

Table 1: Frequency Distribution of Work Stress Nurse inpatient rooms in Menteng Mitra Afia Hospital in 2019.

Category	Frequency	Percentage	
Stress	16	53.3	
No Stress	14	46,7	
Total	30	100	

Based on the results of the study above shows that the highest proportion of respondents in work stress was 16 people (53.3%).

Table 2: Frequency Distribution of Workload Frequency in Inpatient Nurse at Menteng Mitra Afia Hospital.

Category	Frequency	Percentage	
Hard	14	46,7	
Light	16	43,3	
Total	30	100	

Based on the results of the study above shows that the highest number of proportions were respondents with light workloads of 16 people (53.3%).

Table 3: Frequency Distribution of Non- Physical Work Environment Nurse inpatient room at Menteng Mitra Afia Hospital.

Category	Frequency	Percentage
Not good	11	36,7
Good	19	63,3
Total	30	100

Based on the results of the study above shows that the highest proportion of respondents is a good work environment with 19 people (63.3%), and the lowest proportion is respondents with a bad work environment of 11 people (36.7%).

Table 4: The Relationship between Workload and Nurse Stress in the Inpatient Room at Menteng Mitra Afia Hospital in 2019.

	Work Stress				
Workload	Str	Stress No Stress		ess	Total
	N	%	N	%	
Hard	3	21,4	11	78,6	100
Light	13	81,2	3	18,8	100

Based on the results of the study in table 4.4 shows that in light workloads, the highest proportion of people experiencing work stress were 13 people (81.2%) while the heavy workload had the highest proportion is those who did not experience work stress as many as 11 people (78.6%). In this study using the chi-square test using the Fisher's Exact Test value because the results of the 2x2 table found the expected value of less than 5 (E <5), the statistical test results showed that there was a relationship between workload and work stress obtained p-value = $0.003 (\leq 0.05)$. From the value of the Prevalence Ratio (PR) workload with nurse work stress of 0.264 (PR <1) or 3.78 with 95% CI (0.094 -0.739) which means that respondents who experienced light workloads were 3.78 times

protected or prevented/minimized the occurrence of work stress compared to nurses who experience heavy workloads.

Table 5: Work Environment relations Non-Physical with the Work Stress of Nurses in the Inpatient Room Menteng Mitra Afia Hospital in 2019.

Work	Work Stress				
Environment	Stress		No Stress		Total
Non-	N	%	N	%	
Physical					
Not Good	9	81,8	2	18,2	100
Good	7	36,8	12	63,2	100

Based on table 4.5 shows that in a bad work environment, the highest proportion is 9 people who experience heavy work stress (81.8%) while the good work environment has the highest proportion of 12 people who experience mild work stress (63.2%).

3 DISCUSSION

3.1 Relationship between Workload and Nurse Stress

The results of the study of the relationship of workload with nurses' work stress in the inpatient room of Menteng Mitra Afia Hospital in 2019 were obtained from 30 respondents, with light workload, the highest proportion was 13 people (81.2%) while work stress while heavy workload had the highest proportion of 11 people (78.6%) who did not experience work stress. Statistical test results show there is a relationship between workload with nurses work stress obtained by the value of Prevalence Ratio (PR) of 0.264 (PR <1) or 3.78 with 95% CI (0.094 - 0.739), which means that respondents who experience heavy workloads 3, 78 times are protective or prevent the occurrence of work stress compared to nurses who experience light workloads. This study is in line with Graduates, et. al (2015) states that there is a very significant relationship between workload and work stress of implementing nurses.

In this study using the chi square test using the Fisher's Exact Test value because the results of the 2x2 table there is no expected value of less than 5 (E <5), the statistical test results indicate there is a relationship between non-physical work environment with work stress obtained p-value = 0.026 (≤ 0.05). From the Prevalence

Ratio (PR) value of non-physical work environment with nurses work stress of 2,221 with 95% CI (1,158 - 4,260), which means that respondents who experience a non-physical work environment are not at 2.222 times at risk for experiencing work stress compared to nurses who experience nonphysical work environment is good.

According to Manuaba (2000), due to workload that is too heavy can result in a worker suffering from work disorders or diseases. Excessive workload will cause physical or mental fatigue and emotional reactions such as headaches, indigestion, and irritability. While the workload is too little where the work that occurs due to repetition of motion will cause boredom, a sense of monotony. Boredom in routine daily work due to too little work or work results in a lack of attention to work that can potentially endanger workers. Excessive or low workloads can cause work stress. In general, work stress is influenced by many factors besides workload, as mentioned in Restiaty, et. Al. (2006) research about workload and feeling of exhaustion the relationship of the workload at work with work fatigue is a physical symptom of work stress, meaning that the heavier the workload at work, the higher the level of work stress. This is in line with the theory of Gibson's (1997) excess workload and too little workload is a stress generator. The workload can be further divided into excessive / too little quantitative workload, which arises as a result of tasks that are too much / too little given to the workforce to be completed within a certain time. Munandar (2008) states that physical and mental overload work is doing too many activities both physically and mentally, and this can be a source of job stress. This excessive workload is very influential on the productivity of nurses. Nurses feel that the number of nurses is not appropriate or proportional to the amount of work to be done. Such conditions will certainly trigger the emergence of work stress. The workload is the amount of energy expended from a working system carried out by humans in a particular work. The workload can vary according to the number and combination of tasks performed, the level of difficulty of the task, the characteristics of the work and others.

The cause of the relationship of workload and work stress of nurses in the inpatient room at Menteng Mitra Afia Hospital because where there is a lot of repetition of motion will arise boredom but a monotonous position such as when completing a report with the attitude of sitting too

long also causes stiff muscles (stiff neck) and tired, the workload of nurses at Menteng Mitra Afia Hospital is to provide direct care services based on the treatment process, carry out treatment actions and evaluate according to the patient's problem, accompany the doctor visit and record programs to be carried out, make daily reports, make handover responsibility verbally and in writing and it is done repeatedly, in addition to a large number of patient waiters can also trigger stress many demands by patients and patients' families to nurses and nurses are not proportional to a large number of patients who come because the nurse's movements are not so free facing a patient's family that has a lot of complaints. And the stress of nurses who appear is the decrease in performance or productivity of nurses and the number of turnover of workers in Menteng Mitra Afia Hospital, often the number of nurses with high absenteeism and aggression in the workplace and irritability. Efforts that have been made by the hospital are in the delegation of authority to use workload calculations based on daily reports and also the hospital has tried to do family gatherings every once a year.

Suggestions from researchers for the hospital is in the rotation every 6 months so that workers do not feel bored with monotonous work, crackdown firmly on the number of patients' families who want to accompany patients unless the patient's family is very necessary to assist. This is so the inpatient room is not full and inhibits the space for nurses in handling patients. The way is that every person who enters must carry a patient waiting card where each patient is only entitled to 2 families who accompany or by way of security control after each visiting hour and at night and evaluate HR by increasing the number of patients who come with existing nurses remembering Turnover of workers is still high.

3.2 Relationship of Non-physical Work Environment with Nurse Stress

The results of the study of the relationship of nonphysical work environment with nurses work stress in the inpatient rooms of Menteng Mitra Afia Hospital in 2019 were obtained from 30 respondents, the working environment was not good, the highest proportion was 9 people who experienced severe work stress (81.8%) while good work environment has the highest proportion of those who experience mild work stress as many as 12 people (63.2%). Statistical test results show there is a relationship between non-physical work environment with nurses work stress obtained by the value of Prevalence Ratio (PR) of 2,221 with 95% CI (1,158 - 4,260) which means that respondents who experience non-physical work environment are not at risk 2.222 times to experience heavy work stress compared to nurses who experience a good non-physical work environment.

The condition of the work environment provides an important role in the good and bad performance produced. If the work environment is quite comfortable and the communication inside runs smoothly, the resulting performance is also maximal (Sedarmayanti, 2009). One of the requirements to support the implementation of professional nursing practice is to pay attention to the nurse's work environment (Brook & Anderson, 2004). So that a positive work environment supports the practice of nursing and nurse patients (Cherry & Jacob,2005).

According to Sedarmayanti (2011) states that the non-physical work environment is all the circumstances that occur related to relations between colleagues, or relations with subordinates. This is in line with the theory of Nitisemito (2001) the positive influence on individual performance (nurses) is demonstrated through the work environment. The work environment is anything that is around the employees/workers that can affect themselves in carrying out the tasks assigned.

The cause of non-physical work environment relationship with nurses work stress is not only on the relationship of nurses with nurses or nurses with superiors but there are other factors that include non- physical work environment which includes temporal work environment such as the standard number of hours at least 35 hours a week and rest time working hours need to be given to employees so that they can recover their fatigue and the environment psychological work that is a sense of insecurity because most nurses are still contracted workers who at any time can break contract, there is no opportunity to develop a career in accordance with the ability of nurses and several factors of the physical work environment that is more to the work center, chairs, desks the condition is not good, the size of the room is quite narrow and set the workspace to be comfortable for nurses. The hospital's effort is to begin renovation and procurement of inventory items such as shelves and will be done in stages.

Suggestions from researchers for the hospital are to include nurses in training or seminar

workshops to add/upgrade existing knowledge such as nursing training, emergency or managerial so that each nurse is ready with managerial knowledge, prioritizing workers with good performance to be appointed to be permanent employees and besides having to pay attention to the non-physical work environment, the physical work environment must also be given more attention such as a room that is not cramped, adequate lighting, a place to rest for nurses must also be comfortable, the desk chair must also be in good condition and not lacking because when the work environment being physically unwell can also trigger stress.

4 CONCLUSIONS AND SUGGESTIONS

4.1 Conclusions

- 1. The description of the proportion of workload in the inpatient room at Menteng Mitra Afia Hospital shows that the highest proportion is nurses experiencing light workloads of 16 people (53.3%).
- The description of the proportion of nurses' non-physical work environment in the inpatient room of Menteng Mitra Afia
 Hospital shows that the highest proportion is nurses experiencing good work environment, as many as 19 people (63.3%).
- 3. The description of the proportion of nurses who experience severe work stress in the inpatient room of Menteng Mitra Afia Hospital shows that the highest proportion is nurses experiencing severe work stress that is as many as 16 people (53.3%).
- 4. There is a significant relationship between workload with nurses works stress in the inpatient room at Menteng Mitra Afia Hospital with respondents who experience light workloads at 3,792 times the risk of experiencing heavy work stress compared to nurses who experience heavy workloads.
- 5. There is a significant relationship between non-physical work environment with nurses work stress in the inpatient room of Menteng Mitra Afia Hospital with respondents who experience non-physical work environment is not at risk 2.221 times to experience severe work stress compared to nurses who experience non-physical work environment both.

4.2 Suggestion

Based on the results of the study and the limitations of the research held in this study it can be recommended as follows:

- 1. The hospital must provide health services especially in the field of counseling and counseling or stress assessment for each employee so that they can be evaluated and carry out routine sports activities.
- Menteng Mitra Afia Hospital rotates workers and increases the number of human resources in the inpatient room.
- Provide support to workers to develop careers, give appreciation and pay more attention to the physical work environment in the inpatient room.

REFERENCES

- Ahsan & Pradayanti, Adine Yenie Cahyaning. (2013). Stres Kerja dan Kepuasan Kerja Perawat di Rumah Sakit Daerah (RSD) Mardi Waluyo Kota Blitar Vol. 10 No. 2: 318-323
- American Nurses Association. (2017). American Nurses Association Health Risk Appraisal: Executiver Summary, (October 2013), 1-8 Retrieved from http://www.nursingworld.org/HRS-Executive-Summary
- Anggraeni, D. M & Saryono. (2013). Metodelogi Penelitian Kualitatif dan Kuantitatif dalam Bidang Kesehatan. Yogyakarta: Nuha Medika.
- Anoraga, P. (2014). *Psikologi Kerja. Jakarta*: Rineka Cipta
- Azizpour, Y., Shohani, M., Sayehmiri, K & Kikhavani, S. (2013). A Survey on the Associated Factors of Stress among Operating Room Personnel. Thrita Journal of Medical Sciences, 2(3), 19-23. https://doi.org/ 10.5812/thrita.9505
- Bakri, D. (2014). Hubungan Kondisi dan Beban Kerja dengan Stres Kerja Perawat di Ruang Rawat Inap RSUD Dr. Adnan WD Payahkumbuh Tahun 2014. Fakultas keperawatan Universitas Andalas, 58, 2013-
- 2014. Balitbangkes. 2018. Riset Kesehatan Dasar (Riskesdas 2018). Jakarta: Kementrian Kesehatan.
- Budiono, & Sumirah. (2015). Konsep Dasar Keperawatan. Jakarta: Bumi Medika.
- Brooks, B. A. 2004. Development of an Instrument to Measure Quality of NursingWork Life. Chicago: University of Illinois at Chicago.
- Cherry, B. & Jacob, S. R. (2014). *Contemporary nursing: issues and management*. 6 editions. Philadelphia: Elsevier Mobsy.
- Damanik. M. S. (2013). Pengujian Realibilitas, Validitas, Analisi item, pembuatan Norma Depression Anxienty and stress scale (DASS- 42).

- Desima, Riza. 2013. Tingkat Stres Kerja Perawat dengan Perilaku Caring Perawat Tahun 2013 Vol. 2 No. 1. Retrieved from http://e.journal.umm.ac.id/index.php/keperawatan/artic le/view/2380
- Firmana, Andri Satriadi. (2011). Hubungan Shift Kerja dengan Stres Kerja pada Karyawan Bagian Operation PT.Newmont Nusa Tenggara di Kabupaten Sumbawa Barat. Jurnal KESMAS, 5: 1-67
- Hayes, B., Bonner A (2010). Job satisfaction, Stress, and Burnout Associated with Haemodialysis Nursing: a review of literature. Jurnal of Renal Care 36 (4), 174-179
- Hamel, Rivelino., Virginia V. Runtu., Linni Pondaag. (2018). Hubungan Beban Kerja Fisik dengan Stres Kerja Perawat di Ruang Instalasi Rawat Inap Rumah Sakit Umum GMIM Pancaran Kasih Manado Vol. 6 No. 1. Universitas Sam Ratulangi.
- Health and Safety Statistic. (2014). Annual Report for Great Britain. Retrieved from www.hse.gov.uk/statistics/causdis/in dex.htm
- Hendrawati, Mulat. (2015). Hubungan Antara Tingkat Stres Kerja Perawat dengan Kinerja Perawat di Rumah Sakit Marga Husada Wonigiri Surakarta: Stikes Kusuma Husada
- Herqutanto, Harsono, H., Damayanti, M., & Setiawati, E. P. (2017). Stres Kerja pada Perawat di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Primer. E. Journal Kedokteran Indonesia, 5 (1), 12-17.
- https://doi.org/10.23886/ejki.5.7444. 12-7
- Ikrimadhani, T. (2015). Perbedaan Tingkat Stres Kejra Antara Shift Pagi, Sore Dan Malam Pada Perawat Rawat Inap di Rumah Sakit Umum Daerah Banyudono Boyolali. Program Studi Kesehatan Masyarakat Fakultas Ilmu Kesehatan Universitas Muhammadiyah Surakarta 2015, 2015,1-11
- Ilyas, Yaslis. (2004) *Perencanaan SDM Rumah Sakit Teori Metoda dan Formula*. Jakarta: Kajian Ekonomi Kesehatan FKM UI.
- International Labour Organization. (2012). Stress prevention at work checkpoints. Partical improvements for stress prevention in the workplace. (pp, 1-137). Retrieved from www.ilo.org/publns.
- International Labour Organization. (2016). Workplace Stress: A collective challenge. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_protect/--protrav/---safework/documents/publication/wcms_466 547.pdf
- Kementrian Ketenegakerjaan. (2004). Nomor Kep.102/MEN/VI/2004. Retrieved from http://turc.or. id/news/wp- content/uploads/2016/01/9.- Kepmen-No-Kep.102-MEN-VI- 2004.pdf
- Kuntoro, A. (2010). *Buku Manajemen Keperawatan*. Yogyakarta: NUHA MEDIKA.
- Kuswana, Sunaryo Wawa. (2014). *Ergonomi dan keselamatan dan kesehatan kerja*.Bandung:PT.Remaja Rosdakarya.
- Lotulong, Hendra A., Ricky C. Sondakh., Ralph B.H Kairupan. (2015). *Hubungan Antara Iklim Organisasi* dan Kepuasan Kerja Dengan Stres Kerja pada

- Perawat di Poliklinik RSUP DR. R. D. Kandou Kota Manado Tahun 2014
- Lumingkewas, Mega. (2015). Hubungan Kondisi Kerja dengan Stres Kerja Perawat Di ruangan Instalasi Gawat Darurat Medik RSUP Prof. DR. R. D. Kandou Manado. EJournal Keperawatan (e- Kp) Vol. 3 No.3.
- Lwin, Pyone Mjinzu. 2015. Job Stress and Burnout Among Hospital Nurses in A City of Myanmar.
- Mangkunegara, A.A., dan Prabu, A. (2011). Manajemen Sumber Daya Manusia Perusahaan. Bandung: PT. Remaja Rosdakarya.
- Munandar, A. S. 2006. *Psikologi Industri dan Organisasi*. Jakarta : UI Press
- Munandar, A. S. 2008. *Psikologi Industri dan Organisasi*. Jakarta : UI Press
- Noordiansah, Pasih. (2016). Pengaruh Lingkungan Kerja Terhadap Stres Kerja Perawat Studi Pada Rumah Sakit Muhammadiyah Jombang Vol. 1, No. 2
- Nurazizah. (2017). Faktor-faktor yang Berhubungan dengan Stres Kerja pada Perawat di Ruang Rawat Inap Kelas II RS X Jakarta Tahun 2017. Fakultas Kesehatan Masyarakat.
- Perwitasari, D. T., Nurbeti, N., & Armyanti, I. (2015). Faktor-faktor yang Mempengaruhi Tingkatan Stres pada Tenaga Kesehatan Di RS Universitas Tanjungpura Pontianak Tahun 2015, 2, 553-561.
- Saam, Z., & Wahyuni, S. (2014). *Psikologi Keperawatan*. Jakarta: Raja Grafindo Persada.
- Sedarmayanti. (2011). Membangun dan Mengembangkan Kepemimpinan serta Meningktakan Kinerja untuk Meraih Keberhasilan, edisi Pertama. Bandung: PT.Refika Aditama
- Setyawati, L. M., (2010). Selintas Tentang Kelelahan Kerja, Amara Books. Yogyakarta. Hal 28-33 Sherwood L. Human Physiology: from Cells to Systems, 2nd. Ed.
- Sharma, Parul. (2014). Occupational stress among staff nurses: Controlling the risk to health. Indian J Occup EnvironMed, 18 (2): 52-56
- Siagian, S. (2014). *Manajemen Sumber Daya Manusia*. Jakarta: Bumi Aksara
- Sopiah. (2011). Perilaku Organisasi. Yogyakarta: Andi. Subiyantoro, Yosep. (2014). Hubungan Beban Kerja dan Stres Kerja Perawat di ED Siloam Hospital Kebun Jeruk dan Siloam MRCCC Tahun 2014.
- Sugiyono. (2011). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta.
- Suma'mur. (2009). Higiene Perusahaan dan Kesehatan Kerja (HIPERKES). Jakarta: Sagung Seto.
- Suma'mur. (2009). Hiegene Perusahaan dan Keselamatan Kerja. Jakarta:CV.Sagung Seto
- Suryaningrum, T. (2015). Pengaruh Beban Kerja Dan Dukungan Sosial Terhadap Stres Kerja Pada Perawat RS PKU Muhammadiyah Yogyakarta. Fakultas Ekonomi Universitas Negeri Yogyakarta.
- Tawarka. (2014). Keselamatan dan Kesehatan Kerja: Manajemen dan implementasi K3 di Tempat Kerja. Surakarta: Harapan Press.
- The European Agency for Safety and Health at Work (EU-OSHA). 2013. Perspective on work-related diseases:

- from research to practice. Retrieved from http://osha.europa.eu/en/publications/reports/mental-health-promotion-workplace TEWE11004ENN/view
- Waluyo, Minto. (2013). *Psikologi Industri*. Jakarta: Akademi Permata. WHO. (2018). *Work Organisatiion & Stress*. Retrieved from https://www.who.int/news-room/fact-sheets- detail/depression
- Wijono, S. 2010. Psikologi Industri dan Organisasi: Dalam Suatu Bidang Gerak Psikologi Sumber Daya Manusia. Jakarta: Kencana.
- Wisudawan, Arie Satria & Suratmi. (2015). Hubungan dengan Beban Kerja Dengan Stres Kerja Perawat Pelaksana di Ruang IGD RSUD Dr. Soegiri Lamongan Vol 6 No.2. Stikes Muhammadiyah Lamongan.

