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Relationship Between Nurse Workload and Work Stress in Internal Medicine Inpatient Rooms IX and XI Dustira Hospital Cimahi

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Abstract

Introduction: Nurses on duty in the Internal Medicine Inpatient Room of Dustira Hospital Cimahi are very high exposed to work stress, this is due to the nurse's workload exceeding the standard time working, because the nurse works in 1 day 8 hours while the time off is only 1 day a week, besides that total patients who provide a lot of work stress which results from working hours exceeding the established limit. Objective: The study aims to find out the relationship between nurse workload and work stress in the Inpatient Installation of Dustira Hospital. Method: This research is a quantitative survey with a cross sectional approach. The sampling technique in this study was a total sampling with a total sample of 44 respondents. Result and Discussion: Of the 44 respondents more than half of the 27 (61.4%) nurses have a light workload and less than half 17 (38.6%) nurses experience moderate work stress. There is a relationship between nurse workload and nurse work stress (p-value=0.001<0.05). **Conclusion:** The conclusion is that the workload is related to the stress level of nurses in the Internal Medicine Inpatient Rooms IX and XI of Dustira Hospital Cimahi.

Keywords: Workload; Work Stress; Nurses;

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Introduction

Law NO. 36 of 2009 on mental health (Health Law) Mental health efforts are aimed at ensuring that everyone can enjoy healthy mental health, free from fear, pressure, and other disorders that can interfere with mental health (Ministry of Health RI, 2009) in (Amalita, Alawiya, and Utami, 2020)

Currently, there are many hospitals in Indonesia that have received good accreditation status, and it cannot be separated from good hospital services as well (Aryandini and Rahmat, 2015). The biggest challenge in hospital services is the fulfillment of people's expectations for hospital quality (Kiyai et al., 2015). One of the health professions that provide services in hospitals is nurses. In Indonesia, professional nurses only make up 2% of the total existing nurses. This figure is much lower than the Philippines which has reached 40% with undergraduate and second education (Handayani, Fannya, and Nazofah, 2018)

According to Nursalam in Widyasari (2010) in (Mardyyah, 2020), Nursing in Indonesia is currently still in a process of professionalization, namely the occurrence of a change and development of characteristics according to demands locally and globally. To make this happen, nurses must be able to provide professional nursing care to clients. One of the evidences of professional nursing care is reflected in documenting the nursing process where nurse professionalism is synonymous with nurse workload (Marbun, 2020)

Nursing care standards as a guideline for nurses in meeting patient needs with the hope that the quality of service that satisfies patients in terms of aspects: assessment, diagnosis, planning, implementation and evaluation can be reflected dynamically, continuity, effectively and humanely that can be accounted for. In its implementation, the standard of nursing care is strongly influenced by the level of knowledge, attitudes, and motivation of nurses in addition to support, awards from nursing management and hospitals (Indriani, 2018)

Nursing care standards that include continuous and continuous assessment, diagnosis, planning, implementation, and evaluation have implications for increasing nurse workload. Nursing is a science that deals with the physical, psychological, sociological, cultural and spiritual problems of the individual (Doenges, 2002 in Widyasari (2010)). The nursing process is a framework that allows nursing to identify its uniqueness to society. The nursing process facilitates the identification of human responses to health problems (Koerniawan, Daeli, and Srimiyati, 2020). Human responses show changes in health, well-being, and lifestyle. The nursing process is also defined as a method for nurses to provide nursing care to clients (Chusna, 2010)

Widyasari (2010) in (Febby, 2018) revealed that the increasing workload experienced by nurses due to the demands of professionalism has implications for the emergence of psychological pressures in the form of work stress caused by workload and working conditions. Workload as a source of stress is caused due to overload of both quantitative workloads and qualitative workloads.

Working conditions are individual responses to the work environment which includes both the physical environment and the team's working relationships. The work

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stress experienced by nurses will greatly affect the quality of nursing services provided to patients. A nurse needs excellent health to regulate mood and control stress, surviving so as to allow working productively (socially, physically, and psychologically) (Mundung, Kolibu, and Joseph, 2017)

It is said that the reason why the nursing profession has a very high risk of exposure to stress is because nurses have very high duties and responsibilities for the safety of human lives (Amin, Ekwinaldo, and Novrianti, 2020). In addition, she also revealed that nursing work has several characteristics that can create high and stressful work demands. Such characteristics are double-tiered authority, personnel heterogeneity, dependence in work and specialization, competitive culture in hospitals, strict work schedules and must be ready to work at all times (Makarim and Kurniawati, 2014)

Shows that the stress experienced by a person will change the way the immune system works. As a result, the person tends to be prone to diseases that tend to heal for a long time because the body does not produce many immune cells or many antibody cells are defeated. The health and effectiveness of employee work because it has an effect on physical and psychological aspects (Hendrawan et al., 2018)

The enormous role and responsibility that nurses must carry allows nurses to be in working conditions that can trigger work stress. Stress experienced by individuals over a long period of time with a fairly high intensity will result in the individual suffering from physical, emotional and mental fatigue. The stress caused by poor working conditions in a nursing work environment has been identified as the main cause of errors in handling patients among nurses (Akbar, 2013)

Data from the *medical record* of Dustira Hospital in the internal medicine room in January 2017 BOR (Bed Occupancy Rate) reached 30% and increased BOR (*Bed Occupancy Rate*) reached 50% in March 2017 and the number of patient visits was recorded at 500 people with various cases such as hypertension, CKD (*chronic kidney disease*), *febris*, diarrhea, *abdominal pain*, nausea, ARI, diabetes miletus, dengue fever, and other cases.

Dustira Hospital is a hospital that provides services to patients as much as possible. With the number of nurses 44 people consisting of 6 civil servants and 46 contract nurses and divided into 2 (two) treatment rooms. A large number of visits will require treatment and require treatment by doctors as well as nurses in the hospital.

Based on a preliminary study through a survey of respondents on nurses, through the results of interviews that the author had conducted on 46 nurses in the inpatient section of the internal medicine room, there were 30 respondents who said that the workload of nurses in the inpatient medicine room at Dustira hospital exceeded the standard of worker time, because nurses worked in 1 day and 8 hours while the time off was only 1 day a week. A large number of patients provide work stress caused by working hours that exceed the established limit.

The Law on Working Hours, Working Hours is the time to do work, it can be carried out during the day and or at night. Working hours for workers in the private sector are regulated in Law No.13 of 2003 concerning Manpower, especially articles 77 to 85.

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Article 77 paragraph 1, Law No.13/2003 requires every employer to implement the provisions of working hours. The provisions of these working hours have been regulated in 2 systems as mentioned above, namely:

- 1. 7 hours of work in 1 day or 40 hours of work in 1 week to 6 working days in 1 week or
- 2. 8 hours of work in 1 day or 40 hours of work in 1 week to 5 working days in 1 week.

In both working hours systems, a limit on working hours is also given, namely 40 (forty) hours in 1 (one) week. Based on preliminary studies through nurse interviews, it is said that for 3 months Dustira Hospital has experienced a lot of patient visits so that work activities for nurses will increase. With the number of inpatient visits in the internal medicine room, there were 500 people with various cases such as hypertension, CKD (*chronic kidney disease*), *febris*, diarrhea, *abdominal pain*, nausea, ARI, diabetes miletus, dengue fever, and other cases.

This phenomenon causes nurses to have to do quite dense work in the sense of their increasing workload. Along with the increase in workload and the limited number of nurses in providing services, it causes stress that causes the nurse's condition to become unstable.

Method

This research is a type of quantitative *survey* research with *a cross sectional* approach. The population and samples in this study were all nurses in the Inpatient Room of Dustira Cimahi Kindergarten II Hospital, namely 2 rooms with a total of 44 nurses, with a sampling technique, namely *Total Sampling*. The type of data collected in this study was primary data obtained directly from respondents by distributing workload and work stress questionnaires. Data analysis was carried out univariately and bivariately using *the Chi-Square* test

Result and Discussion Result

1. Nurse Workload Overview

Table 1
Frequency Distribution of Nurse Workload in Internal Medicine Inpatient Rooms IX

and XI Dustira Hospital Cimahi

 Workload
 Frequency
 Percentation (%)

 Light
 27
 61,4

 Heavy
 17
 38,6

 Total
 44
 100,0

Source: Primary Data 2017

Based on table 1, it was found that more than half of 27 (61.4%) respondents had light workloads and less than half 17 (38.6%) of respondents had heavy workloads.

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2. Nurse Work Stress Overview

Table 2

Distribution of Frequency of Work Stress of Nurses in Internal Medicine Inpatient Rooms IX and XI of Dustira Hospital Cimahi

Work Stress	Frequency	Percentage (%)		
Light	16			
Keep	17	38,6		
Heavy	11	25		
Total	44	100,0		

Source: Primary Data 2017

Based on table 2, it was found that less than half of 17 (38.6%) respondents experienced moderate stress, less than half 16 (36.4%) respondents experienced mild stress and less than 11 (25%) respondents experienced severe work stress

3. The Relationship of Workload to Nurse Work Stress

Table 3

The Relationship of Workload with Nurses' Work Stress in the Internal Medicine Inpatient Room IX and XI of Dustira Hospital Cimahi

	Work Stress						C		
Workload	Light		Keep		Heavy		Sum		P-value
	n	%	n	%	n	%	n	%	
Light	14	51,9	11	40,7	2	7,4	27	100	0,001
Heavy	2	11,8	6	35,3	9	52,9	17	100	
Total	16	36,4	17	38,6	11	25,0	44	100	

Source: Primary Data 2017

Based on table 3 obtained results from 27 nurses with light workloads, more than half of them 1 4 people (51.9%) experienced mild stress, while of 17 respondents who had a heavy workload more than half of them 9 people (52.9%) experienced severe stress.

The results of the statistical test obtained the result of p value=0.001, so it can be concluded that there is a relationship between workload and work stress of nurses in the Internal Medicine Inpatient Room IX and XI Dustira Hospital Cimahi

Discussion

Nurse Workload Overview

The results of this study on the workload picture can be seen that more than half of 27 (61.4%) respondents have light workloads and less than half 17 (38.6%) respondents have heavy workloads.

The results of this study illustrate that the workload received by respondents is considered to be in accordance with the duties and responsibilities carried out by respondents as nurses. This can be inferred from the large number of respondents who have a light workload compared to heavy ones. Based on this condition, it is said that the

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placement that has been carried out by Dustira Hospital Cimahi is in accordance with the conditions in the Inpatient room.

The results of researchers' observations in the field of respondents who have a light workload are caused by several factors, including internal factors of the respondents themselves, such as comfortable and adequate workplace facilities, appropriate working hours and also the good health of the respondents themselves.

This situation is supported by the opinion of Munandar (2007) who clarifies workload in intrinsic factors of work including physical factors, namely certain working conditions can produce optimal work performance in addition to the impact on employee performance, physical conditions also have an impact on the mental health of a workforce. The physical condition of the worker has an influence on the physical condition and psychology of a person. In this case, the employee's health condition must remain in good health while doing work, in addition to adequate rest also with the support of comfortable and adequate workplace facilities.

The results of the study also found that there were respondents who felt that they had a heavy workload, namely 38.6%. This condition occurs because his usually occurs because many patients enter the room at about the same time so that it causes the documentation of nursing care cannot be done properly and completely because the nurse will first take action on the client / patient.

Researchers argue that patientvisits will have an impact on the number of productive activities that nurses must do, both direct nursing activities based on patient classification and indirect nursing activities. Nurses' productive activities that nurse's often do when conducting research include new patient admissions, wound care, administering medications, infusions, *nebulizers*, patient administration, and documentation. Non-productive activities carried out by nurses include chatting, staying at the *nurse station*, reading newspapers, eating, praying, and sleeping. The use of time for the implementation of nurse productive activities during the morning shift and afternoon shift is more than during the night shift.

The results of this study are also in line with the results of a study conducted by Hendianti (2012) which showed the results that the workload of nurses is included in the light category with the average percentage of nurse productive time use is 57.44%

Based on the description above, researchers assume that nurse workload can affect work productivity and nurse work stress.

Nurse Work Stress Overview

The results of the study on respondents' work stress showed that less than half of 17 (38.6%) respondents experienced moderate stress, less than half of 16 (36.4%) respondents experienced mild stress and less than half 11 (25%) respondents experienced severe work stress. Work stress is an adjustment response mediated by individual differences and or psychological processes that are a consequence of any outside action (environment), situation, or event that establishes excessive psychological and or physical

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requests to a person (Gibson, 2010) in (Nurdiawati and Atiatunnisa, 2018)(Nurdiawati and Atiatunnisa, 2018)

The results of this study showed that there was a difference in the level of work stress experienced by nurses at Dustira Hospital. This can happen because each individual nurse has a way of dealing with the pressures in her job. This difference can be influenced by several factors, one of which is the existence of some nurses who are unable to establish a good relationship with their co-workers or superiors, so that they feel that their workload is too heavy, this is in accordance with the opinion of Charles A and Shanley F (1997) in Sunaryo (2014) who revealed that of the five sources of stress in nursing, one of them is the difficulty of establishing relationships with other staff.

The results of this study are in line with the results of a study conducted by Kusbiantor (2008), which showed that 0 respondents (71.43%) experienced mild stress. The results of the study conducted by researchers showed that 11 (25%) respondents experienced heavy work stress, conditions like this can be due to several factors including the presence of intrinsic factors in work, such as the shift work system, where when the nurse is on duty on the night shift will certainly affect her physical condition because the rest time or night sleep is reduced. This is in accordance with the opinion expressed by Tarwaka (2011) the factors causing the onset of work stress, one of which is intrinsic factors in work, namely physical and tasks, for physical such as noise, heat while tasks include workload, night work and resiki passion and danger.

In nurses who experience stress in mild levels this can be because nurses not only have good skills and knowledge about nursing care and the performance of their duties, but nurses also have the ability to control their emotions or in the opinion of Goleman (2009) have emotional intelligence, where One of the factors that can affect work stress is emotional intelligence, because by having high emotional intelligence, a person will have the resilience to bear stress, namely the ability to withstand unpleasant events or stressful situations. This stress resistance has to do with the ability to remain calm and patient.

Based on the description above, researchers can conclude that nurse work stress is very difficult to avoid, so what can be done is how the management and the nurse themselves manage, overcome, and prevent work stress so that the nurse's work is not disturbed.

The Relationship between Workload and Nurse Work Stress

The results showed that of the 27 nurses with light workloads, more than half of them were 1 4 people (51.9%) experiencing mild stress, while of 17 respondents who had a heavy workload more than half of them were 9 people (52.9%) experiencing severe stress.

Based on *the chi square* statistical test, the result of p value = 0.001 was obtained, it can be concluded that there is a relationship between workload and nurse work stress in the hospital inpatient room Dustira Cimahi.

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The results of this study show that there is a relationship between workload and nurse work stress. This can be due to increased workload allowing work stress to arise. Work stress is a situation of factors related to work, interacting with factors from within the individual and changing the state of physiology and psychology so that his state deviates from normal (Haryani, 2008). The five sources of nurse work stress in general are excessive workload, difficulty connecting with other staff, difficulty caring for critical patients, dealing with treatment and patient care and failure to care (Abraham & Shanley, 1997 in (Fajrianti, 2016)

Based on the observations of researchers in the field, it is known that there are some nurses who have difficulties in their work and cannot directly communicate the problems faced with the superior (head of the room) or with their colleagues. This will certainly cause nurses to have difficulty at work and can cause work stress. For this reason, the head of the rangan is expected to help nurses who are experiencing difficulties so as to reduce the pressure that comes from the inability of their staff to overcome their problems in order to prevent the emergence of work stress in nurses in the room they lead.

The above conditions show that work stress is influenced by workload, however, work stress can also be influenced by other factors, namely the work environment, the results of this study are in accordance with the opinion expressed by Munandar (2008) who revealed that The source of stress that causes a person not to function optimally or that causes a person to fall ill, comes not only from one kind of generator but from several stress generators. Part of human time is to work, therefore the work environment has a very large influence on the health of a worker. Stress generation at work is a great stress generator against the malfunctioning or falling ill of a working workforce

The opinion is in line with the opinion that explains that work conditions are responses to the work environment (Vecchio, 2011). Working conditions are concerned with physical and mental health. Individuals who work in the human service profession, the physical condition of the work environment around employees really needs to be considered by the business entity, because this is one way that can be taken to ensure that employees can carry out their duties without experiencing disturbances and psychological conditions from the work environment cant influencing performance which includes personal or group feelings, status associated with a number of workspace locations and a number of supervisions or work environments. Some of the effects caused by work stress are physiological symptoms, including headaches, cold sweats, palpitations, psychological symptoms include dissatisfied with work, conflicts in interpersonal relationships, irritability, irritability, behavioral symptoms include withdrawal, decreased productivity and lack of loyalty (Robbins and Judge, 2015)

The results of this study are in accordance with the results of a study conducted by Prihatini (2012) in (Sari, Yusran, and Ardiansyah, 2017) which showed that there was a relationship between workload and nurse work stress with a correlation of 0.885. From the results of the description above, researchers can conclude that there is a relationship between workload and work stress in nurses in the Internal Medicine Inpatient Room IX and XI hospitals. Dustira Cimahi.

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Conclusion

Research on the relationship of nurse workload with nurse stress levels in Internal Medicine Inpatient Rooms IX and XI of Dustira Hospital Cimahi, lebih of half 27 (61.4%) nurses have a light workload. Less than half of the 17 (38.6%) nurses experienced moderate work stress, a da relationship between workload and nurse stress levels in Internal Medicine Inpatient Rooms IX and XI of Dustira Hospital Cimahi, with *a p value*=0.001.

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