

**Relationship of Workload and Working Conditions to Stress Level of Nurse in Intensive Care Unit (ICU) (Pandan Hospital, Tapanuli Tengah, 2017)**

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**Abstract:** Stress is a stimulus or a stressful situation. If the situation is a stressful job situation, then stress on work can be caused by several factors, including workload and working conditions. The ICU nurse must monitor the patient's critical condition carefully and continuously. Hospitals are one form of health facilities, both organized by the government and society that serves to make efforts of basic health or referral health and supporting health efforts. Hospitals in carrying out their functions are expected to pay attention to social functions in providing health services to the community. ICU is one of the work environment that has high-stress tendency. It is possible since ICU nurses are exposed to patients with unsafe mental conditions, requiring particular attention for 24 hours/day. This condition requires greater physical energy with special nursing care as well. Also, critical patients demand the speed and accuracy of performing actions that are not always required in other nursing situations. Another opinion says that inadequate knowledge and skills are seen as a stress source of ICU nurses. A nurse in charge of ICU performs three main tasks, life support, monitoring the patient's condition and preventing possible complications. The type of research is observational with the quantitative approach, while the research design used is cross-sectional that is by examining the dependent variable, free and variable between simultaneously. With a sample of nurses 11 people. Data analysis method by univariate analysis and bivariate analysis. The workload of nurses who work in the ICU area of the majority "Medium" are five people (45.5%). The working conditions of nurses working in ICU areas of the majority "Medium and Hard" are four people (36.4%). The stress levels the work of nurses working in the ICU area of the majority "Medium" are five people (45.5%). There is Workload Relation with Stress Level of Respondent in ICU is  $p < 0,05$  ( $p = 0.032$ ), no Relation of Working Condition with Stress Level Respondent in ICU Year 2017 is  $p > 0.05$  ( $p = 0.775$ ). The hospital has to give counseling, education and training of emergency and the use of supporting tools available in ICU room so that they can anticipate the obstacles faced during the working period.

**Keywords:** Workload, Working Conditions, Stress.

**INTRODUCTION**

Stress is a stimulus or a stressful situation. If the situation is a stressful job situation, then the stress on the job can be caused by several factors, two of them are workload and working conditions [1]. The ICU nurse must monitor the patient's critical condition carefully and continuously. Hospitals are one form of health facilities, both organized by the government and society that serves to make efforts of basic health or referral health and supporting health efforts. Hospitals in carrying out their functions are expected to always pay attention to social functions in providing health services to the community [2, 3]

Intensive Care Unit (ICU) is one of the central services in the hospital. It requires highly specialized medical resources of doctors and trained nurses and the current number in Indonesia is insufficient. ICU is one

of the most stressful work environments [2]. It is possible because ICU nurses are exposed to patients with unsafe mental conditions, so emergency department (IGD) needs to be known to determine the quantity and quality requirements of nurses needed in IGD space so that no unsuitable workload eventually causes work stress. Working conditions in the form of work situations that include facilities, regulations applied social relations cooperation among officers that can cause discomfort for workers [5-7].

This condition requires greater physical energy with special nursing care as well. Also, critical patients demand the speed and accuracy of performing actions that are not always required in other nursing situations. A nurse in charge of ICU performs 3 three main tasks: life support, monitoring the patient's condition and preventing possible complications [8, 9]. Equipped with

sophisticated facilities located in ICU chambers such as heart monitors, respirators, fibrillation, dialysis equipment, requires specialized skills with people trained in ICU work.

As already noted above that critical patients have dysfunctional problems that require individual management. It can cause stress for the family [10, 11]. Families often complain and criticize the nurses. This condition can also cause stress for the nurse, so it impedes the implementation of nursing care given to critical patients. The quality of nursing service is inseparable from the role of patient classification in the inpatient room because with the classification, the patient feels more appreciated according to his right and can be known how the condition and workload of nurses in each room of care [3]. Work conditions and workload to be completed. This condition can trigger the emergence of work stress because all patients who visit indirectly demand to get effective and efficient service so that the problems faced by the patient immediately resolved [4].

If the number of tasks is not proportional to the ability of both physical and expertise and the time available, then it will be a source of stress [13-15]. Workload both quantity and quality must be done with skill. The factors affecting the nurse's workload are the patient's condition, the average number of hours of care needed to provide immediate service to the patient exceeds one's ability, the desire for job performance, high job demands and nursing care documentation [5]. The negative consequence of increased workload is the possibility of emotional nurses that are not appropriate that the patient expected. Excessive workload is very influential on the productivity of health workers and of course affect the productivity of nurses. The nurse senses that the number of nurses is not worth the amount.

The nurses at Emergency Department Ambarawa hospital handle 45 patients per day. The number of nurses assigned to the morning shift of 4 nurses who handled the patient an average of 20 patients. Three nurses on the day and night shifts average an average of 12-15 patients on the afternoon and evening shifts. The number of visits is not proportional to the number of nurses on duty, where nurses at the ERS Ambarawa hospital number of 19 health workers are 14 nurses and five midwives [17-19]. The same thing is also found in the ERG General Hospital Ungaran average visit per day 40 patients, where 15 nurses have the same task with nurses at the ERI Ambarawa hospital (Data Record Medical Ambarawa and Ungaran hospital, August, 2012) [20].

Based on preliminary surveys that the number of nurses in the ICU General Hospital Pandan amounted to 11 people with patients who came treated every day

as many as seven people. Based on the above data, the researcher is interested in researching about "Working Relationship Relationship and Working Conditions to Stress Nurses Intensive Care Unit Unit (ICU) at Pandan Hospital, Tapanuli Tengah year 2017".

The results of this study indicate that the workload of nurses in Ambarawa hospital is high. The results of data collection conducted in the medical records section of Ambarawa hospital during August 2012 obtained the results of the number of patients entering 950 patients. Ungaran hospital has 865 patients during August.

## **METHODOLOGY**

The type of research is observational with the quantitative approach, while the research design used is cross-sectional that is by examining the dependent variable, free and variable between simultaneously. The study was conducted from April to September 2017, while the selected research location was Pandan hospital. The population of this study is all nurses in ICU rung as many as 11 people.

### **Univariate Results**

#### **Workload of Respondents in ICU Pandan Hospital in 2017**

Based on the results of the study it is known that the workload of nurses working in the ICU area are 5 moderate (45.5%), and minority and heavy 3 people (27,3%).

#### **Working Conditions of Respondents in ICU Pandan Hospital in 2017**

Based on the result of the research, the working conditions of nurses working in ICU areas are moderate and heavy four people (36,4%), and minority and heavy three people (27,3%).

#### **Stress Level of Respondents in ICU Pandan Hospital in 2017**

Based on the results of the study note that the level of work stress nurses who work in the ICU majority room Medium 5 people (45.5%), and minority minor and weight two people (18.2%).

### **Bivariate Results**

#### **Workload Relationship with Respondent Stress Level in ICU Pandan Hospital Room 2017**

Based on the research note that the Relationship Workload with Respondent Stress Level in ICU Pandan Hospital Room 2017 is  $p < 0.05$  ( $p = 0.032$ ) which means  $H_0$  is rejected and  $H_a$  accepted, means there is Workload Relation with Respondent Stress Level in ICU Room Pandan hospital year 2017.

#### **Relationship of Working Conditions with Stress Level of Respondents in ICU Pandan Hospital Room 2017**

Based on the above table it is known that the Relationship of Working Conditions with Stress Level of Respondents in ICU Room Pandan Hospital Year 2017 is  $p > 0,05$  ( $p = 0.775$ ) which means  $H_0$  accepted and  $H_a$  rejected, meaning no Relation 3.1.2. Working Conditions of Respondents in ICU Pandan Hospital in 2017.

## **RESULTS AND DISCUSSION**

### **Respondent Workload in ICU Pandan Hospital Room 2017**

Based on the result of research, the workload of nurses working in ICU area is "5" (45,5%), "minor" and "heavy" minority are three people (27,3%). Workload measurements are defined as a technique for obtaining information about the efficiency and effectiveness of an organization's work unit, or holders of positions conducted systematically using position analysis techniques, workload analysis techniques or other management techniques. Furthermore, also stated that the measurement of workload is one of the management techniques to obtain information position, through the process of research and assessment conducted by analysis. The position information is intended to be used as a base to improve the apparatus both in the field of institutional, management, and human resources (Utomo, 2008). Ranging from simple to complex research concluded that excessive workload is the primary source of stress in nursing, followed by working conditions is a significant stressor.

### **Working Conditions of Respondents in ICU Pandan Hospital in 2017**

Based on the research, the working conditions of nurses working in ICU areas are moderate and heavy four people (36.4%), and minority and heavy three people (27,3%). Working conditions are responses to the work environment (Vecchio, 2005). Working conditions related to physical and mental health. Individuals working on the human service profession, The physical condition of the work environment around employees is very important to be noticed by the business entity, because it is one way that can be taken to ensure that employees can perform tasks without experiencing disturbances and psychological conditions of the work environment can affect performance that includes personal or group feelings, status associated with a number of workspace locations and a number of controls or work environments.

Some of the effects caused by work stress are physiological symptoms, including headache, cold sweats, heart palpitations, psychological symptoms include not satisfied with work, interpersonal relationship conflicts, irritability, irritability, behavioral symptoms include withdrawal, decreased productivity and loyalty is lacking [21, 22]. Nurses as one of the healthcare providers to individuals, families, and communities are required to provide services with good

quality. For that required dexterity and the nurse's skill and alertness in dealing with patients, this condition will make a nurse easier to experience stress [23].

### **Stress Level of Respondents in ICU Pandan Hospital in 2017**

Based on the results of the study note that the level of work stress nurses who work in the ICU majority room Medium 5 people (45.5%), and minority minor and weight two people (18.2%). Stress is a stimulus or a stressful situation. If the situation is a stressful job situation, then the stress on the job can be caused by several factors, 2 (two) of which are workload and working conditions [21]. ICU nurses must monitor the condition of patients who are critically strict and continuous.

Ranging from simple to complex studies concluded that excessive workload is the primary source of stress in nursing, followed by working conditions is the next significant stressor. The hospital to improve the quality of care of each nursing room, especially in the ICU room or in the hospital environment itself. Working conditions can run well and officers will get good results and can work according to their respective performance - so as not to arise thoughts that can cause stress. Nurses in running the profession are very vulnerable to stress; this condition is triggered by the demands of the organization and its interaction with work that often bring conflict over what is done. The workload often performed by nurses is physical such as lifting patients, pushing health equipment, tidying up the patient's bed, pushing the gurney, and the mental nature of work complexity such as skill, responsibility for healing, taking care of the family and establish communication with the patient.

According to the Indonesian National Nurses Association, as many as 50.9% of Indonesian nurses who work experienced work stress often feel dizzy, tired, less friendly, less rest due to excessive workload and inadequate income. Meanwhile, Frasser [24] explains that 74% of nurses experience stressful events, of which the primary source is a work environment that demands physical strength and skill. Installation The emergency department is an essential unit in the operation of a hospital, which is the entrance for any 24-hour service that operates in addition to general polyclinics and specialists who only serve patients during working hours. As the spearhead of the hospital's nursing service, IGD should serve all cases admitted to the hospital. With the complexity of work in such a way, the nurses who served in this room are required to have more ability in comparison with nurses who serve patients in other space. Each nurse in charge of the emergency room should be equipped with knowledge, skills, and even considered necessary to follow the training that supports the nurse's ability to handle the

patient quickly and accurately by the case that goes to the ER.

#### **Workload Relation with Stress Level of Respondent in ICU Pandan Hospital Room 2017**

Based on the results of the research note that the Relationship Workload with Respondent Stress Level in ICU Pandan hospital room 2017 is  $p < 0.05$  ( $p = 0.032$ ) which means  $H_0$  is rejected and  $H_a$  accepted, means there is Workload Relation with Respondent Stress Level in ICU Pandan hospital year 2017. There is a significant relationship between workload and nurse work stress in each room of Sidikalang Hospital, Medan as evidenced by  $p$ -value  $0,004 < 0,05$ . Due to excessive workload will cause fatigue both physical and mental and emotional reactions such as headaches, indigestion, irritability, high blood pressure and can lead to work accidents, but it can affect the performance of nurses in providing nursing services to patients [25].

This workload is inseparable from each nurse because every individual has a work area where the workload is not appropriate can cause work stress, if tired will cause fatigue and if the workload is too light can lead to boredom, no interest and fatigue work. The workload can affect work performance or performance; then nursing units need to assess the level of workload, associated with the time difference. The nurses in the ICU chamber also perform nursing care for 24 hours and work in turns or shift duty. In shift guard, the ratio of the number of nurses in one shift guard is often unbalanced by the number of patients, especially during night shifts that are considered less workload compared to afternoon shift or afternoon shift. As a result, nurses often work beyond their capacity.

#### **Relationship of Working Conditions with Stress Level of Respondents in ICU Pandan Hospital Room 2017**

Based on the results of the research note that the Relationship of Working Conditions with Stress Level of Respondents in ICU Pandan Hospital in 2017 is  $p > 0,05$  ( $p = 0.775$ ) which means  $H_0$  accepted and  $H_a$  rejected, meaning no Relation of Work Condition with Stress Level Respondent in Room ICU Pandan hospital year 2017. Working conditions are responses to the work environment [26]. Working conditions related to physical and mental health. The physical condition of the working environment around employees is critical to be noticed by the business entity. It is one way that can be taken to ensure that employees can perform tasks without disturbing. The psychological condition of the work environment can affect performance that includes personal or group feelings. Status is associated with some workspace locations and some supervisory or work environments.

Some of the effects caused by work stress are physiological symptoms that include headaches, cold sweats, heart palpitations. Psychological symptoms

include not satisfied with work, interpersonal relationship conflict, irritability, irritability, behavioral symptoms include withdrawal, decreased productivity and less loyalty [21, 22]. Working conditions in the form of work situations that include facilities, regulations applied social relations cooperation between officers. It can result in discomfort for the patient's ever-changing patient condition. The average number of hours of care needed to provide direct service to the patient exceeds one's ability, the desire for achievement of work, the high job demands and the documentation of nursing care [27].

#### **CONCLUSION**

The working conditions of the nurses working in the ICU who are mostly "moderate" and "heavy" are 4 (36.4%). Level of work stress nurses who work ICU room the majority "Medium" there are five people (45.5%). Workload Relation with Respondent Stress Level in ICU Pandan hospital room in 2017 is  $p < 0,05$  ( $p = 0.032$ ). It means that  $H_0$  is rejected and  $H_a$  accepted, meaning there is a Relationship Workload with stress levels Respondents in ICU Pandan hospital room in 2017. Relationship Working Conditions with stress levels of respondents in ICU Pandan hospital room in 2017 is  $p > 0.05$  ( $p = 0.775$ ) which means  $H_0$  accepted and  $H_a$  rejected. It means there is no working condition relation with the stress level of the respondent.

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