

# Occupational Stress in the Intensive Care Unit and Intensive Cardiology Care Unit of the Rumah Sakit Umum Daerah Dr. Zainoel Abidin Banda Aceh

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**Abstract:** Occupational stress is the second largest health problem associated with work after musculoskeletal disease. Occupational stress can be caused by an imbalance between the personality characteristics of workers and aspects of their work, many work-related diseases are experienced by nurses who work in intensive care hospitals. The purpose of this study was to determine the description of occupational stress on nurses of the Intensive Care Unit (ICU) and Intensive Cardiology Care Unit (ICCU) of Rumah Sakit Umum Daerah Dr. Zainoel Abidin (RSUDZA) Banda Aceh. This research is an observational study, the sampling technique used was total sampling (54 respondents). The result showed that the ICU and ICCU nurses at RSUDZA Banda Aceh experienced mild occupational stress (62.96%), and 1.85% experienced severe occupational stress. 61.11% of nurses stated that a lot of work had to be done, only 38.52% of nurses were skilled at work, and 47.78% of nurses received an award for good work performance. The conclusion of this study is that ICU and ICCU nurses at RSUDZA Banda Aceh experienced mild occupational stress. Nurses workload is quite high, there are still nurses who are less skilled at work and the majority of nurses have a working period of <5 years.

## 1 INTRODUCTION

Every worker has experienced stress without recognizing social status, economic, and job position (Martin, 2011). Among all of the health workers, the most stressful occupational health workers experienced by nurses (Lua, 2011) Nurses who work in emergency situations are more susceptible to stress (Duffy, 2014). Stress experienced by nurses can affect physical and emotional conditions, it greatly affects the performance of work and health services provided to patients (Moustaka, 2010; Arbabisarjou, 2013). According to the theory of General Adaptation Syndrome Selye in Safaria (2009) the stages of stress are as follows: a) Reaction alarm; this stage explains the sympathetic system and glands of the body begin to secrete adrenaline, epinephrine, norepinephrine which give rise to symptoms such as tachycardia, tachypneu, cold sweat, sensitivity to reduced pain, increased muscle contraction, and digestive disorders. b) Resistance; this stage is where the body begins to release adrenaline, noradrenaline and cortisol which are used to energize the body when fighting tension. At this stage physiological disorders have begun. c)

Exhaustion: in this stage the body has run out of energy to constantly fight tension, if this condition continues then the system in the body will be damaged so that a person can suffer from heart disease, gastritis, hypertension, migraine, diabetes mellitus and so on. According to Rasmun (2004) stress is divided into three levels, namely: a) Mild stress, not damaging to the physiological aspects of the individual. Mild stress it is occurs in a few minutes or several hours; b) Moderate stress, occurring from several hours to several days. Moderate stressful situations can be caused by some situations such as an unfinished agreement, excessive workload, and expecting new work; c) Severe stress, occur from several weeks to several years. Prolonged stress can cause tensions and worries that continue to destroy the physical, psychological and entire life of the patient slowly. According to Dewe (2010) the source of occupational stress on nurses is divided into five, namely: a) Excessive workload; b) Difficulties in establishing relationships with other nurses; c) Difficulties in treating patient's with critical conditions; d) Have responsibility for treatment or patient care; e) Caring for patients who are difficult

to improve. According to Robins (2002) the impact of stress is as follows: a) Physiological symptoms such as: Changes in body metabolism, increase heart rate and respiration rate, increase blood pressure, cause headaches, and heart attacks; b) Psychological symptoms: dissatisfaction. c) Behavioral symptoms such as: decreased productivity, absenteeism, the level of employee turnover, changes in eating habits, increased smoking and consumption of alcohol, quick talk, anxiety, and sleep disorders. According to Durai (2010) Management of occupational stress can be done through:

1. Psychological management such as increasing self-awareness, reducing tension, counseling and psychotherapy
2. Physiological management such as exercising physical health, regulating diet, and quitting smoking
3. Affective communication between managers and workers, so that there will be clear lines between tasks and responsibilities
4. Work performance evaluation system
5. Increasing participation to reduce role ambiguity and conflict
6. Develop skills, personality and work that are in accordance to the needs of employees and organizations that can support work development efforts both in quantity and quality to reduce stress.

## 2 METODOLOGI

This study is an observational study place at the ICU and ICCU RSUDZA Banda Aceh. The sample in this study was all nurses of the ICU and ICCU RSUDZA Banda Aceh, totaling 54 nurses. To measure occupational stress, the data were collected by interview with Workplace Stress Scale questionnaire, the results were divided into five categories: 8-15 (normal), 16-20 (mild stress), 21-25 (moderate stress), 26-30 (severe stress) and a score of 31-40 (very heavy stress).

## 3 RESULTS AND DISCUSSION

### 3.1 Characteristics of Nurses

Table 1: Characteristics of Nurses of ICU and ICCU RSUDZA Banda Aceh

Characteristics	N	%
<b>Age</b>		

21-30	31	57,41
31-40	17	31,48
41-50	6	11,11
<b>Gender</b>		
Male	13	24,07
female	41	75,93
<b>Education</b>		
D III/Academy	24	44,44
S 1	30	55,56
<b>Room</b>		
ICU	34	62,96
ICCU	20	37,04
<b>Length of work (year)</b>		
< 5	26	48,15
6-10	17	31,48
> 11	11	20,37

Based on Table 1, it shows that the ICU and ICCU nurses at RSUDZA Banda Aceh were at most 21-30 years old at 57.41%. This age group is considered capable of getting a job, able to face high physical burdens and agile to move in work (Eriawan, 2013). The result of this study indicates that the majority of nurses are female, that is equal to 75.93%. This is similar with Burgess's (2010) study which states that 78.3% of female nurses work in intensive services, as well as in Inoue (2013) who stated that the high percentage of female nurses compared to male nurses. This is estimated that during the education process and looking for work period, the majority of women choose occupations related to health because women tend to have sense of caring and caring feelings such as maintaining the health of their children. Nurses and midwives are considered as women's jobs because providing care is an appropriate task for women (Sudarma, 2008). The results of this study indicate that 55.56% of nurses with S 1 education, most of them work in the ICU, are 62.96%. This is in line with the research conducted by Inoue (2013) in Brazil, the majority of nurses work in the ICU is 61.7%. ICU is an intensive room that serves adult patients with various types of diseases. This is different from other intensive spaces that deal with diseases more specifically, such as ICCU, which deals with patients with special heart disease, so that there are more nurses in the ICU than other rooms. The results of this study also showed that the majority of ICU and ICCU RSUDZA nurses in Banda Aceh had a working period of <5 years which was 48.15%. This is similar with Monte (2013) research in Brazil and Pawar (2014) in Mumbai which states that the majority of nurses have a <5 year working period in the ICU.

### 3.2 Occupational Stress

Table 2: Frequency Distreibusi of Occupational Stress of Nurses in ICU and ICCU RSUDZA Banda Aceh

Occupational Stress	N	%
Normal	13	24,08
Mild	34	62,96
Moderate	6	11,11
Severe	1	1,85
Total	54	100,00

Based on table 2, it shows that the ICU and ICCU nurses at RSUDZA Banda Aceh experienced mild occupational stress, which is equal to 62.96%, and 1.85% who experienced severe stress are nurses who worked in the ICU. The profession as a nurse in an intensive room is a job that is prone to stress, this is because the work is full of tension in dealing with patients with various medical complaints. According to Bahadori (2014) and Saleh (2013) nurses who work in intensive spaces tend to experience stress because they have to deal with critical patients with a heavy workload, so that a lot of pressure arises. This happens because nurses are not only faced with patients with critical conditions but also the necessity to work with high responsibility. According to Gulavani (2013), nurses who experience occupational stress have a negative influence on emotional health and physical health, such as easy to have headaches, fatigue, mood changes and other illnesses.

Table 3: Occupational Stress Items of Nurses in ICU and ICCU RSUDZA Banda Aceh

Occupational Sres Item	%
The workplace is unsafe and unpleasant	36,67
Work is bad for health and emotions	45,56
A lot of work needs to be done	61,11
Difficult to convey the conditions of work faced to superiors	46,30
Work interferes with family and personal life	38,52
Have adequate control of the task	53,33
Get an award	47,78
Skilled and talented	38,52

Based on table 3 above, 61.11% nurses of ICU and ICCU RSUDZA Banda Aceh stated that a lot of work had to be completed. According to Gurung

(2014) mind and physical burden due to work causes a person to feel tired and bored so that it is easy to feel and give negative emotions to oneself and to the people closest to them that cause saturation and discomfort interaction with others. Bahadori (2014) states that intensive care space nurses who experience occupational stress are associated with high workloads, the high workload can be in the form of an imbalance in the number of nurses and patients that must be addressed. Nurses who handle too many patients will experience difficulties when they work. Workloads that involve mental and large responsibilities can cause high stress compared to physical workload. The results of this study also showed that only 38.52% of Banda Aceh ICU and ICCU nurses were skilled and gifted in their work, this was related to their working period which was still <5 years old. The duration of the nurse's work is related to the learning process of the skills practiced, the longer a person works in an institution the better the learning process is to improve the quality of skills. Difficulties in caring for patients with critical conditions, whether to carry out treatment for patients with unknown equipment, manage procedures of new actions in working with doctors who demand quick answers and actions. If This is left unchecked, it can reduce work performance, increase medical errors, and reduce service quality and patient satisfaction. The result of this study also shows that only 47.78% received an award for good work performance. This shows that the coverage of awards received by ICU and ICCU RSUDZA nurses in Banda Aceh is still relatively low.

### 4. CONCLUSION

The conclusion of this study is that ICU and ICCU nurses at RSUDZA Banda Aceh experienced mild occupational stress. This happens because the workload is high, there are still nurses who are less skilled in working and the majority of nurses have a working period of <5 years.

### 5. SUGESTION

Suggestions in this study are:

1. Management of RSUDZA Banda Aceh should:
  - a) Manage workload both physically and mentally in accordance with the ability or work capacity of nurses working in the ICU and ICCU

by avoiding excessive workloads or too light loads; b) Improving the quality of the ICU and ICCU swimmers by providing training in accordance with their fields in a sustainable manner and giving them the opportunity to take a higher level of education; c) Give appropriate rewards, and carry out refreshing programs regularly.

2. Management of RSUDZA Banda Aceh should carry out stress screening periodically for ICU and ICCU nurses at least once a year.

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