Analysis of Factors that Influence Nurse's Work Stress at the Inpatient Room of General Hospital Regional Doctor Zubir Mahmud Regency of East Aceh

Muhammad Amin¹, Ismail Efendy¹, Tri Niswati Utami¹

¹Masters Program in Public Health Sciences, Faculty of Public Health, Helvetia Institute of Health, Indonesia

*Corresponding Author: Muhammad Amin
Email: annurwoundcare@gmail.com

Abstract
Work stress is a widespread issue that often affects or is complained about by employees in several nations. Consequently, the purpose of this research was to analyze the elements that impact the job stress of nurses in the inpatient room at the Regional General Hospital of Doctor Zubir Mahmud, East Aceh Regency. The research design used is a cross-sectional, analytical survey. The population for this research consisted of 129 respondents, and the sample size for the purposive sampling approach was 56 respondents. Using a simple occupational stress questionnaire, data were obtained. Analysis of data using the chi-square test. Workload had a p-value of 0.004, career uncertainty had a p-value of 0.031, and dual roles had a p-value of 0.045, indicating that it affects the job stress of nurses in the inpatient room of the Regional General Hospital Doctor Zubir Mahmud Regency. Eastern Aceh The workload variable has the biggest impact on the job stress of nurses in the hospital, as measured by the value of Exp (B) or the Odds Ratio of 19.222. This research concludes that workload, career ambiguity, and numerous jobs have an effect on the work stress of nurses in the inpatient unit of the Regional General Hospital of Doctor Zubir Mahmud in East Aceh Regency. Researchers recommend that hospitals conduct good communication routinely before work to define duties and responsibilities, give social support, enhance the abilities of nurses to adapt to current changes, and assess the ability of nurses to deal with stress.

Introduction

The hospital as an institution that has the function and task of providing health services to the community in a complete manner is a very complex organization because the human resources that work consist of various disciplines and types of expertise. Hospital is one form of organization whose activities provide good services in the form of promotive, preventive, curative, and rehabilitative. To achieve this, it takes employee performance, especially good nurses which are subjective, influenced by age, gender, mental attitude, personality, education (Ahsan, 2017). About 40 percent of the human resources directly involved in providing services to hospital patients are nurses. Nursing services are an integral part of the health care system so that the interests of nursing services have an important meaning for clients for 24 hours continuously, especially in the process of healing and rehabilitation in hospitals (Simamora, 2019).
A nurse is defined as a person who has completed nursing education both domestically and internationally, as stated in Regulation No.HK.02.02/MENKES/148/1/2010 on the License and Implementation of Nursing Practice issued by the Minister of Health of the Republic of Indonesia. This regulation can be found on the website of the Minister of Health of the Republic of Indonesia. In order to improve the overall standard of care that patients get, a nurse's professionalism is very essential. The growing pressures that nurses face on the job may cause them to experience anxiety (Sulastri & Onsardi, 2020).

Because nurses are charged with the responsibility of preserving human life, the nursing profession is associated with a very high risk of stress. One of the most typical challenges that nurses face is increased work stress brought on by the ongoing pressure they are under to give the highest possible level of care to their patients. Stress may be a problem for nurses because of the nature of their work and the demands placed on them. A nurse's day-to-day responsibilities include interacting not just with patients, but also with patients' families, patients' friends, patients' co-workers, doctors, workplace rules, and a workload that is sometimes regarded incompatible with the nurse's physical conditions, psychological as well as emotional (Ammouri & Hamaideh, 2017). The consequences of high amounts of stress on different people might be rather variable. The effects of stress may be seen in a person's behavior and can have an effect on their mental and physical health. Prolonged stress may cause psychological problems, which can then lead to seeking psychotherapy, abusing drugs or alcohol, or drinking to excess, which can then result in missed work, and it can also reduce the body's resistance to sickness.

Work-related stress among nurses can be caused by a variety of factors, including night shifts, multiple role conflicts, a lack of social support, conflict between work and family, diverse and inappropriate task demands, excessive workload, uncomfortable working conditions, job uncertainty, the absence of rewards, over-promotion or under-promotion, and an imbalance between the number of nurses and the number of patients. In addition, nurses have significant obligations and responsibilities regarding the protection of human life, and they are strongly encouraged to provide patients with the highest possible level of care, to record the conditions of patients on a regular and continuous basis, to monitor patients to ensure that their conditions do not deteriorate, and to provide accurate information regarding all patient conditions to the general public.

According to previous research carried out by Kiftia (2016) and titled "The relationship between nurses' workload and the application of caring for nurses in male and female inpatient rooms, surgical wards, pulmonary care rooms, and neurological care, at the health service agency of RSU dr. Zainoel Abdi Banda Aceh," on a total of 32 nurses, it was determined that nurses who work in inpatient rooms with a greater workload experience greater levels of stress. It's possible that this may cause stress for nurses at work. The level of stress that a nurse experiences on the job will almost certainly be reflected in the quality of care that is provided to patients. The physical, mental, and emotional health of nurses will suffer if they are subjected to workplace stress (Kiftia, 2016). The World Health Organization (WHO) identifies stress as a condition that is rapidly spreading throughout the world. The American Institute of Stress estimates that the yearly cost to the economy of stress-related ailments in the United States is more than one hundred billion dollars. A survey of people working in nursing care in the United States found that 46% of respondents thought their job was stressful and that 34% had contemplated leaving their jobs in the previous year due to stress caused by their jobs (Zaghloul, 2008).

According to the American National Association for Occupational Safety, the amount of stress experienced by nurses is the greatest of any other workforce occupation. 74% of nurses in France reported feeling stressed, which is consistent with the results of a survey that was carried out in that country. In the meanwhile, a study that was conducted by Swedish nurses indicated...
that over eighty percent of nurses reported experiencing significant stress connected to their jobs. Research conducted in 2007 by the Indonesian National Nurses Association (PPNI) found that 50.9% of Indonesian nurses working in four provinces experienced stress on the job, frequently felt dizzy and exhausted, did not take breaks because the workload was too heavy and time-consuming, and received low pay without incentives. In addition, these nurses were dissatisfied with their pay adequate (Darni, 2014).

One of the community-serving hospitals in the category C level that can be found in the East Aceh Regency is the Regional General Hospital dr. Zubir Mahmud. As a direct consequence of this, the Regional General Hospital dr. Zubir Mahmud, located in the East Aceh Regency, is in desperate need of qualified Human Resources (HR) in order to provide the most all-encompassing community health services that are feasible. Without an adequate number of nurses, the nursing services that have been developed by the field of nursing at Regional General Hospital dr. Zubir Mahmud in the East Aceh Regency would not be able to fulfill the demands that are placed on them by patients. At 2021, there were 122 nurses working in the Inpatient Installation of the Regional General Hospital, Dr. Zubir Mahmud, located in the East Aceh Regency, according to the information on the number of workers at the hospital.

Dr. Zubir Mahmud of the Regional General Hospital in the East Aceh Regency made observations from a vantage position that makes it possible for an increase in the number of patients. It is possible that nurses will experience job stress as a result of work fatigue and an overwhelming workload due to the large number of patients who are admitted to the hospital. Based on the findings of an initial survey that was carried out on 20 nurses at the Inpatient Installation of the Regional General Hospital, dr. Zubir Mahmud, in the East Aceh Regency on June 12, 2021, it was determined that the symptoms of work stress that manifest in nurses include having headaches while they are working, having heart palpitations while they are working, having abdominal pain while they are working, having stiff muscles while they are working or after they have finished working, having fatigue while they are working, having difficulty concentrating. They are anxious and have problems conversing with colleagues and the patient’s family.

The results of a pilot survey showed that forty percent of shift nurses reported that symptoms of job stress frequently emerged during the afternoon and evening shifts. This was attributed to the large number of patients and the shortage of nurses, which resulted in an increasing burden for shift nurses. Dr. Zubir Mahmud of the East Aceh District conducted interviews with several nurses who were responsible for installing the inpatient room at the Regional General Hospital. Based on the findings of these interviews, Dr. Zubir Mahmud came to the conclusion that the workload of shift nurses was significantly higher than that of the morning shift nurses due to longer working hours and fewer nurses on duty. As a result, the nighttime, which should be used for resting but is instead used for working, is a source of stress.

The high prevalence of job stress symptoms among nurses in the inpatient room of the Regional General Hospital dr. Zubir Mahmud, East Aceh Regency, was identified as a problem by this research. Based on the data that were presented earlier, this problem was identified as having a prevalence of forty percent. If it is not well controlled, the stress that occurs during the afternoon and night shifts in the inpatient room may lead to physical and psychological issues, as well as affect the amount of work that is required of the nurse in caring for patients. As a result, and on the basis of this phenomenon, the researcher is interested in conducting research on the analysis of factors that impact Nurse Work Stress in the inpatient room of the Regional General Hospital, dr. Zubir Mahmud, in the East Aceh Regency.

Methods
The sort of research design that was implemented for this particular study was an analytical survey that was designed in a cross sectional fashion. A study that employs this kind of research
design is one that investigates the workings of a correlation and the impact that one independent variable has on another variable that is under investigation. While at the same time making an effort to identify the elements that contribute to the stress that is encountered on the job by nurses who work in the inpatient rooms of hospitals. The East Aceh Regency is now being looked for by Zubir Mahmud, who is the Regional General Doctor.

Population and Sample

Population

The total number of participants in this research was 129, and all of them were registered nurses who worked in the Inpatient Room at the Regional General Hospital, Dr. Zubir Mahmud East Aceh. According to the distribution list of the number of nurses that dr. Zubir Mahmud East Aceh in 2021 acquired from the staffing area of the Regional General Hospital (Employment Subdivision, 2021).

Sample

The sample in this study were some of the nurses who served in the inpatient room at the Regional General Hospital of Doctor Zubir Mahmud, East Aceh Regency. The number of samples in this study was determined using the slovin formula, namely:

Information:

\[ n = \text{Sample Size} \]
\[ N = \text{Large Population} \]
\[ d = \text{Precession or degree of belief i.e. 10\%}. \]
\[
\begin{align*}
n &= \frac{N}{1 + N (d)^2} \\
&= \frac{129}{1 + 129 (0.1)^2} \\
&= \frac{129}{2.29} \\
&= 56,3 \approx 56 \text{ nurses}
\end{align*}
\]

Based on the above formula, the total sample was 56 nurses who served in the inpatient room at the Regional General Hospital Doctor Zubir Mahmud, East Aceh Regency. The sampling technique used was an accidental sampling system, namely sampling that happened to exist or was available until a sample of 56 nurses was obtained in the inpatient room, so that the sample taken was the nurse on duty when the researcher was in that place.

Determination of the Number of Samples for Each Inpatient Room

Determination of the number of samples for each inpatient room with the formula:

\[
\begin{align*}
n^1 &= \frac{\sum \text{Nurses}\text{ Inpatient Room Class III}}{\sum \text{N}} \times \sum n
\end{align*}
\]

Information:

\[ n^1 : \text{Sample/Space} \]
\[ n : \text{Sample} \]
\[ N : \text{Population} \]
Table 1. Proportion of Nurses By Inpatient Room of Regional General Hospital Doctor Zubir Mahmud, East Aceh Regency

| No. | Inpatient Room                          | Number of Nurses | Number of Samples |
|-----|-----------------------------------------|------------------|-------------------|
| 1   | Classroom I                             | 17               | 7                 |
| 2   | Classroom II                            | 20               | 9                 |
| 3   | Puerperal Room                          | 20               | 9                 |
| 4   | Surgical Treatment Room (RPB)           | 16               | 6                 |
| 5   | Men's Internal Medicine Room (RPDP)     | 19 pm            | 8                 |
| 6   | Women's Internal Medicine Room (RPDW)   | 22               | 12                |
| 7   | VVIP Space                              | 15               | 5                 |
|     | TOTAL                                   | 129 Nurses       | 56 samples        |

**Sample Criteria:** (1) Implementing nurse; (2) Willing to be a respondent; (3) Currently serving at the time of data collection; (4) Not on leave.

**Data Collection Methods**

**Type of Data:** (1) Primary data is data on respondent characteristics, workload, career uncertainty, and dual roles; (2) Secondary data includes descriptive at the research site; (3) Tertiary data is research data that is officially published such as journals and research reports.

**Data Collection Technique**

The data collected in this research are in the form of primary data and secondary data.

**Primary data**

Primary data is data collected by the researchers themselves. The nurse data collection method used is the distribution of questionnaires using closed questionnaires which are self-administered questionnaires, namely asking for responses and answering questions themselves, thus giving less opportunity for nurses to give opinions or express their hopes and experiences in a holistic manner verbally.

The technique of collecting data from selected respondents is done by distributing questionnaires directly to respondents to be filled out by respondents. Before filling out, respondents were briefed by officers on the procedure for filling out the questionnaire.

**Secondary Data**

Secondary data is primary data that has been further processed and presented either by primary data collectors or other parties. In this study, secondary data sourced from literature studies and archive and document studies in the form of profiles of the Regional General Hospital dr. Zubir Mahmud, East Aceh Regency in the form of workload and work stress of nurses and other data related to this research.

**Tertiary Data**

Tertiary data is collected through the results of previous research, theses, both from the internet and libraries that can be used to support the discussion.

**Validity and Reliability Test**

**Validity**

The validity test is carried out to determine the extent of the accuracy and accuracy of a measuring instrument in measuring a data, and is tested to determine whether the measuring instrument used has a high validity number. A measuring instrument with high validity will have a small error rate, so that the data collected is accurate and adequate data.
Test the validity using the Pearson Product Moment formula. This validity test was carried out at the Abdul Aziz Shah Peureulak General Hospital which was carried out on 20 respondents. From the results of data processing, some statements are considered less valid because the value of \( r_{\text{count}} \) is less than the value of \( r_{\text{table}} \) with an alpha of 5%. Then there is a question that must be tested for content validity. These questions are in fact questions 5, 7, 9, 18, 23, 25 with an \( R \) table of 0.444. So the question was changed to the editor. The steps in conducting the validity test are; (1) Step 1 is to identify operationally the concept to be measured; (2) Step 2 is to test the measuring scale on a number of respondents; (3) Step 3 is to prepare the answer tabulation table; (4) Step 4 is to calculate the correlation between each statement and the total score using the product moment correlation technique formula. Product Moment Correlation Technique Criteria Namely; (a) If \( r_{\text{count}} > r_{\text{table}} \), the question is said to be valid; (b) If \( r_{\text{count}} < r_{\text{table}} \), the question is said to be invalid. The results of the validity test show that all items on the Workload variable are declared valid because they have an \( r_{\text{count}} > r_{\text{table}} \). The complete results can be seen in the following table:

**Reliability**

A measuring instrument's reliability may be measured using an index that displays the degree to which the tool can be trusted or relied upon. If the same event is measured using the same measuring equipment on two separate occasions and the findings of both measurements are comparable to one another, then the measuring instrument may be considered dependable. To put it another way, dependability demonstrates how consistent a measuring device is when it comes to monitoring the same symptoms. To determine whether or not a question can be trusted, one may check the \( r \)-value (also known as alpha Crobanch) by comparing it to the value 0.60 on the \( r \)-table. The requirements for this comparison are as follows; (1) If Cronbach's Alpha value > 0.60 then the question is declared reliable; (2) If Cronbach's Alpha value < 0.60 then the question is declared unreliable.

The reliability test will be carried out on 20 nurses who work in the inpatient room of the Abdul Aziz Syah Peureulak General Hospital, East Aceh Regency. The results of the reliability test of workload variables, career uncertainty, multiple roles, and work stress show that the six variables have a higher value than the limit of Cronbach's Alpha value > 0.60, so the questionnaire is said to be reliable. More details can be seen in the following table:

Table 2. Reliability Test Results of Workload Questionnaire, Career Uncertainty, Dual roles, and Nurse work stress

| No. | Variable               | \( r_{\text{Calculate}} \) | \( r_{\text{Table}} \) | Information |
|-----|------------------------|-----------------------------|-------------------------|-------------|
| 1.  | Workload               | 0.814                       | 0.60                    | Reliable    |
| 2.  | Career uncertainty     | 0.884                       | 0.60                    | Reliable    |
| 3.  | Dual roles             | 0.840                       | 0.60                    | Reliable    |
| 4.  | Nurse's work stress    | 0.906                       | 0.60                    | Reliable    |

**Data Processing Methods**

According to Muhammad, the collected data is processed by computerization with the following steps:

**Collecting**

Collecting data derived from questionnaires, questionnaires and observations.

**Checking**

It is carried out by checking the completeness of the questionnaire answers or observation sheets with the aim that the data is processed correctly so that data processing provides valid and reliable results and avoids bias.
Coding
In this step, a code is given to the variables studied, for example, the name of the respondent is changed to number 1,2,3.

Entering
Data entry, namely the answers from each respondent that are still in the form of "codes" (numbers or letters) are entered into the SPSS application.

Data Processing
All data that has been input into the computer application will be processed according to the needs of the research.

Data Analysis

Univariate Analysis
The purpose of this analysis is to explain the frequency distribution of each variable, namely the variables Workload, Career uncertainty, Multiple roles, Work stress of nurses in hospitals.

Bivariate Analysis
The purpose of this bivariate analysis is to explain the influence between independent variables that are strongly suspected to have a meaningful influence with dependent variables. The bivariate analysis in this study used the chi square test at a 95% confidence level, namely to analyze the influence between independent variables of workload, career uncertainty, and dual roles on dependent variables, namely Nurse work stress in hospitals. If the results of the analysis have a significant relationship with the value of $p < \alpha$ (0.05).

Multivariate Analysis
Multivariate analysis is a statistical analysis imposed on data consisting of many variables and between variables correlated with each other. Multivariate analysis aims to further analyze bivariate analysis which is intended to identify independent variables that have an influence on dependent variables provided that the probability value of variables in bivariate analysis $\leq 0.25$ and dichotomous dependent variables (two categories).

Results and Discussion

Univariate Analysis

Characteristics of Respondents
Respondents in this study were seshed nurses who were on duty in the outpatient room at the General Regional Hospital Doctor Zubir Mahmud East Aceh Regency as many as 56 nurses.

Age
Table 3. Frequency Distribution of Respondents Characteristics in the Inpatient Room of the General Area Hospital Doctor Zubir Mahmud East Aceh Regency

| Characteristics                  | Frequency (f) | Percentage (%) |
|----------------------------------|---------------|----------------|
| Age                              |               |                |
| Early Adult (25-30) Years        | 16            | 28.6           |
| Young Adults (31-35) Years       | 28            | 50.0           |
| Old Adult (>36-45) Years         | 12            | 21.4           |
| Total                            | 56            | 100.0          |

Based on table 3 age frequency of respondents who have an age of 20-29 years (Early adulthood) as many as 16 people (28.6%), respondents aged 31-35 years (Young Desawa) as...
many as 28 people (50.0%), respondents with an age of 36-45 years as many as 12 people (21.4%), so the number of respondents with the most age is 31-35 years, which is 28 respondent or 50.0%, and the least age frequency is older adults >36-45 years from the total sample.

**Gender**

| Characteristics | Frequency (f) | Percentage (%) |
|-----------------|---------------|----------------|
| Man             | 19            | 33.9           |
| Woman           | 37            | 66.1           |
| **Total**       | **56**        | **100.0**      |

Based on table 4, the frequency of gender of respondents with female sex was 37 people (66.1%), and male respondents were 19 people (33.9%). The highest frequency of gender of respondents was women with 37 or 66.1% of the total sample, and the gender frequency of the fewest respondents was male with 19 or 33.9% of the total sample.

**Education**

| Characteristics            | Frequency (f) | Percentage (%) |
|----------------------------|---------------|----------------|
| Bachelor of Nursing        | 25            | 44.6           |
| Diploma                    | 31            | 55.4           |
| **Total**                  | **56**        | **100.0**      |

Based on table 5, the frequency of education of respondents with an S1 education level of 25 people (44.6%), and a DIII education level of 31 people (55.4%). The highest frequency of respondents' education levels was DIII education with 31 or 55.4% of the total sample, and the least frequency of respondents' education was S1 with 25 or 44.6% of the total sample.

**Service life**

| Characteristics        | Frequency (f) | Percentage (%) |
|------------------------|---------------|----------------|
| >2 Years               | 25            | 44.6           |
| <2 Years               | 31            | 55.4           |
| **Total**              | **56**        | **100.0**      |

Based on table 6 the frequency of service of respondents with a working period of <2 years, namely 31 (55.4%), respondents with a working period of >2 years, which is 25 (44.6%). So the respondents with the most service life were <2 years, which was 31 or 55.4% of respondents, and the respondents with the least service period were >2 years, which was 25 or 44.6% of the number of respondents.

**Workload**

Workload is a work activity oriented towards productive work that is directly or indirectly related to the patient without paying attention to work standards and rotational (rotating) work action time carried out by implementing nurses who work in the inpatient room including morning, afternoon and evening shifts.
Table 7. Workload Frequency Distribution di Room Rawat Inap Rumah Sakit General Area Doctor Zubir Mahmud East Aceh Regency

| Workload | F | % |
|----------|---|---|
| Tall     | 37 | 66.1 |
| Low      | 19 | 33.9 |
| Total    | 56 | 100.0 |

Based on table 7, it can be seen from 56 respondents, respondents who experienced a high workload were 37 people (66.1%), while those who had a low workload were 19 people (33.9%).

Career Uncertainty

Career uncertainty is a state of insufficiency of information, about understanding or knowledge related to an event that is likely to occur in the future regarding the patient's condition.

Table 8. Frequency Distribution of Career Uncertainty in Inpatient Room General Hospital Area Doctor Zubir Mahmud East Aceh Regency

| Career Uncertainty | F | % |
|--------------------|---|---|
| Uncertain          | 36 | 64.3 |
| Certainly          | 20 | 35.7 |
| Total              | 56 | 100.0 |

Based on table 8, it can be seen from 56 respondents, respondents who have career uncertainty totaled 36 people (64.3%), while those who had career certainty were 20 people (35.7%).

Dual Roles

A dual role is a conflict that arises in a nurse when the responsibility in one of the roles conflicts with the role of the other.

Table 9. Frequency Distribution of Dual Roles di Room Rawat Inap Rumah Sakit General Area Doctor Zubir Mahmud East Aceh Regency

| Dual Roles | F | % |
|------------|---|---|
| Bad        | 33 | 58.9 |
| Good       | 23 | 41.1 |
| Total      | 56 | 100.0 |

Based on table 9, it can be seen from 56 respondents, respondents who had a bad dual role were 33 people (58.9%), while those who had a good dual role were 23 people (41.1%).

Nurse’s Work Stress

Work stress is an emotional state experienced by nurses at the Regional General Hospital doctor Zubir Mahmud, East Aceh Regency due to stressors coming from the work environment.

Table 10. Frequency Distribution of Nurses’ Work Stress in Inpatient Room General Hospital Pain Doctor Zubir Mahmud Area East Aceh Regency

| Work Stress | F | % |
|-------------|---|---|
| Tall        | 34 | 60.7 |
| Low         | 22 | 39.3 |
| Total       | 56 | 100.0 |

Based on table 10, it can be seen from 56 respondents, respondents who had a high level of work stress were 34 people (60.7%), while respondents who had low levels of work stress were 22 people (39.3).
Bivariate Analysis

The bivariate analysis in this study will explain the correlation or relationship between dependent variables to independent variables, namely between the level of stress to the workload, the level of stress to career uncertainty and the level of stress to the double load. The collected data is presented in the form of a frequency distribution table, as follows:

The Effect of Workload on the Level of Work Stress of Nurses in the Inpatient Room of the Regional General Hospital, Doctor Zubir Mahmud, East Aceh Regency.

Table 11. Workload Impact on Work Stress of Nurses in the Inpatient Room of the Regional General Hospital of Doctor Zubir Mahmud, East Aceh Regency

| Workload | Work Stress | Sum | P (Sig) |
|----------|-------------|-----|---------|
|          | Tall | Low | F | % | F | % | F | % |
| Tall     | 32   | 57,1 | 5 | 8,9 | 37 | 66,1 |
| Low      | 2    | 3,6 | 17 | 30,4 | 19 | 33,9 | 0,000 |
| Total    | 34   | 60,7 | 22 | 39,3 | 56 | 100,0 |

According to the data shown in the table that is located above, 57.1% of the respondents who reported having a high workload also reported having a high degree of stress. There were 37 respondents who reported having a high workload. In the meanwhile, it was discovered that 17 (30.4%) of the respondents who had low workloads also had low stress levels. There was a total of 19 respondents who reported having low workloads. It is possible to draw the conclusion, based on the findings of the statistical tests, that there is an influence of workload on the level of work stress experienced by nurses working in the inpatient room of the Regional General Hospital, Doctor Zubir Mahmud, in the East Aceh Regency. The Chi-Square test obtained a meaningfulness value of $p = 0.000$, which is less than 0.05.

The Effect of Career Uncertainty on Nurses' Work Stress in the Inpatient Room of the Regional General Hospital, Doctor Zubir Mahmud, East Aceh Regency

Table 12. The Effect of Career Uncertainty on the Level of Work Stress in the Inpatient Room of the Regional General Hospital, Doctor Zubir Mahmud, East Aceh Regency

| Career Uncertainty | Work Stress | Sum | P (Sig) |
|--------------------|-------------|-----|---------|
|                    | Tall | Low | F | % | F | % | F | % |
| Uncertain          | 30   | 53,6 | 6 | 10,7 | 36 | 64,3 |
| Certainly          | 4    | 7,1 | 16 | 28,6 | 20 | 35,7 | 0,000 |
| Total              | 34   | 60,7 | 22 | 39,3 | 56 | 100,0 |

Based on Table 12 shows that of the 36 respondents who had uncertain career uncertainty, 30 (53.6%) respondents had a high level of work stress. Meanwhile, of the 20 respondents who had career certainty, 16 (28.6%) respondents had a low level of work stress. From the results of statistical tests, Chi - Square obtained a meaningfulness value of $p = 0.000$ (<0.05), it can be concluded that there is an influence between career uncertainty and the level of work stress in nurses in the inpatient room of the Regional General Hospital, Doctor Zubir Mahmud, East Aceh Regency.
The Effect of Dual Roles on Nurses' Work Stress in the Inpatient Room of the Regional General Hospital, Doctor Zubir Mahmud, East Aceh Regency

Table 13. The Effect of Dual Roles on the Level of Work Stress of Nurses in the Inpatient Room of the Regional General Hospital of Doctor Zubir Mahmud, East Aceh Regency.

| Dual Roles | Work Stress | Sum | P (Sig) |
|------------|-------------|-----|---------|
|            | Tall | Low |       | F  | %   | F  | %   | |
| Bad        | 28   | 5   | 8,9   | 33 | 58,9 |
| Good       | 6    | 10,7| 30,4  | 23 | 41,1 |
| Total      | 34   | 60,7| 39,3  | 56 | 100,0 |

Using the data found in Table 13 The preceding demonstrates that out of 33 respondents whose management of their multiple roles is poor, 28 (50.0%) respondents had a high degree of stress brought on by their jobs. In the meanwhile, out of the 23 respondents who were able to handle their multiple roles well, 17 (30.4%) of them reported having modest levels of stress. It is possible to draw the conclusion, based on the findings of the statistical tests, that there is an influence between multiple roles on the level of work stress experienced by nurses working in the inpatient room of the Regional General Hospital Doctor Zubir Mahmud in Aceh Regency. The Chi-Square test obtained a significance value of p = 0.000 (0.05), which led to the finding.

Multivariate Analysis

The purpose of doing this multivariate analysis was to investigate the degree to which the factors of a number of independent variables, all of which were assessed jointly on the dependent variable, are related to one another. All of the variables in this investigation are of the categorical kind. Given this, the logistic regression test is the multivariate analysis that should be used to evaluate the data since it is most suitable.

Candidate Selection

During this stage of the process, we will determine which independent variables may be considered for inclusion in the multivariate test model. The one that is practicable is the one that has a significant level (sig.) or a P value of 0.25 when using the "Enter" procedure in logistic regression. This approach involves executing logistic regression one by one between each independent variable and the dependent variable.

Table 14. Analysis of Factors Affecting the Work Stress of Nurses in the Inpatient Room of the Regional General Hospital of Doctor Zubir Mahmud, East Aceh Regency

| No. | Sub variables    | P value |
|-----|------------------|---------|
| 1   | Workload         | 0,000   |
| 2   | Career Uncertainty | 0,000  |
| 3   | Dual Roles       | 0,000   |

The results of the analysis show that the P value of the variables is, Workload (0.000), Career Uncertainty (0.000), Multiple Roles (0.000). This means that all variables are included in the multivariate test because the P value is 0.25. The next step is to include all the variables that have been selected as candidates in the logistic regression.

Logistics Regression Test

In the first stage of logistic regression, the variables that are being tested are all independent variables that have been stated to have a significance level of 0.25 in the bivariate analysis. These variables include workload, career uncertainty, and the dual role that nurses play in the inpatient room of the Regional General Hospital Doctor Zubir Mahmud, which is located in
the East Aceh Regency. In the following table, you'll find the outcomes of the first step of the test of logistic regression, which included an examination of the variables.

Table 15. Analysis of the Most Dominant Factors Affecting the Work Stress of Nurses in the Inpatient Room of the General Hospital of The Zubir Mahmud Doctor's Area, East Aceh Regency

| No. | Research Variables       | Df | Sig. | Exp (B) |
|-----|--------------------------|----|------|---------|
| 1   | Workload                 | 1  | 0.004| 19.222  |
| 2   | Career Uncertainty       | 1  | 0.031| 7.954   |
| 3   | Dual Roles               | 1  | 0.045| 5.908   |
|     | **Constant**             | 1  | **0.000** | **0.049** |

The results of the research analysis showed that all variables have an influence on the level of work stress of nurses, because they have a sig value <0.05. However, from all variables, it can be seen that the workload has the most influence (dominant) on the level of work stress of nurses in the inpatient room at the Regional General Hospital of Doctor Zubir Mahmud, East Aceh. This can be seen from the workload factor which has a Sig value of 0.004 with an Exp (B) value or an Odd Ratio of 19.222.

The Effect of Workload on Nurses' Work Stress Levels in the Inpatient Room of the Regional General Hospital Doctor Zubir Mahmud, East Aceh

According to Table 4.6, of the 37 respondents who are unable to deal with the amount of work that has been given to them, 32 of these respondents are under a significant amount of stress. In the meanwhile, it was discovered that 17 of the 19 respondents who are capable of handling the workload had low stress levels. This represents 30.4% of the total respondents. It is possible to draw the conclusion, based on the findings of statistical tests, that there is an effect of workload on the level of work stress experienced by nurses working in the inpatient room of the Regional General Hospital Doctor Zubir Mahmud in the East Aceh Regency. Chi-square obtained a significance value of p = 0.000 (0.05), and this value indicates that there is a significant relationship between workload and stress.

According to the findings of this study, the findings of Nurini et al (2017) are consistent with the findings of the bivariate test of workload and work stress, which obtained a p value of 0.001 (p 0.005), indicating that there is a relationship between workload and work stress. The findings of this study were based on the findings of the bivariate test of workload and work stress. Another relevant study, namely the investigation that was carried out by Manabung et al. (2018), produced a p-value of 0.004 (p less than 0.05), which indicates that there is a connection between workload and work-related stress. According to the findings of yet another study that is appropriate, namely the investigation that was carried out by Fedianfi (2015), the p-value was 0.014 (p 0.05), which indicates that there is a connection between workload and workplace stress.

The results showed that the workload had a significant effect on the work stress of nurses in the hospital. A heavy workload is a trigger for stress, because everyone has limitations both in terms of knowledge or skills and physical abilities, where if the work is a lot and requires completion in a fast time it will make the work less precise (errors), mistakes in doing work especially services to patients at the puskesmas can result in fatal effects for patients. Errors in taking action will result in complaints from patients and superiors which have an impact on the psychology of the nurses who carry out the work, causing stress.

The workload is too much activity load that causes tension in a person and causes stress, this is because the level of expertise required is too high, the work speed is high, the work volume may be too much and so on (Muhith, 2017). According to Sunyoto (2019), excessive workload and too little workload are stress generators, physical and mental overload, namely having to
do too many things which is a source of work stress. The workload of nurses at Putri Hijau Hospital is different, nurses have higher job demands than other medical personnel and sometimes the capacity of nurses does not match the demands of the job.

Almost every workload can cause work stress, depending on the worker's reaction to it and the amount of stress. Stress on nurses will affect the emergence of health, psychological and behavioral/social problems. Reaction to stress can be a psychological or physical reaction. In physical disorders, a person experiencing stress will be susceptible to disease, in prolonged mental stress will result in tension, this tends to damage the body and health problems. When overloads are managed properly and the burden is shared so that each nurse is responsible for each patient, there will be less stress. Although the actual ratio of patients to nurses is the same in both cases, if responsibilities are divided into small groups, the stress will be less.

The capacity of the worker's body to take on work is referred to as the workload. Every workload that is given to a person must, from the perspective of ergonomics, be suitable for and proportionate to the physical and psychological capabilities of the workers who are given the workload. Both the physical and mental aspects of a person's life may contribute to their overall burden. Lifting, caring for others, and pushing are examples of the kind of heavy tasks that may constitute a physical workload. While the psychological stress might come in the form of the degree to which people compete with one another in terms of their level of knowledge and job performance, this competition can also take the shape of interpersonal conflict.

According to Mashkati, the term "Hariyati" Saefullah & Amalia (2017) refers to a disparity between the capacity or aptitude of employees and the expectations of the task that must be met. Saefullah's definition can be found here. Given that cerebral and physical labor are both components of human activity, there are varying degrees of specialization within each category. The level of difference that is too great enables the expenditure of an excessive amount of energy, which in turn leads to overstress. On the other side, when the intensity of the loading is too low, it may lead to boredom and saturation, as well as understress.

In this context, "workload" refers to the tasks and responsibilities that are assigned to nurses while they are performing their jobs at the Puskesmas or their workplaces. Examples of workload include working longer than the allotted hours, performing other tasks in addition to the primary duties of nursing, or nurses performing multiple tasks at the same time, as well as an unbalanced ratio of nurses to patients. The situation known as "workload" is one that makes it difficult for workers to complete their assigned tasks, both physically and mentally. The presence of environmental conditions that are either not physically or not physically supportive can make these conditions significantly worse.

According to Permendagri No.12/2008 (Sitepu, 2018), the workload is the amount of work that must be carried out by a position or organizational unit and is the product of the work volume and the time norm. Workload is the amount of work that must be carried out by a position or organizational unit. When a worker's capabilities exceed the requirements of their employment, they may experience feelings of boredom as a result. On the other hand, an increased risk of fatigue is associated with a worker whose capabilities fall short of the requirements of the job. There are three distinct scenarios that might exist with regard to the amount of work assigned to employees: a workload that is up to the standards, a workload that is too high (over capacity), and a burden that is insufficiently high (under capacity).

This is of course very necessary to manage time and how to work quickly and precisely as well as good cooperation between colleagues, such as helping each other with the work of other nurses if they have the time and opportunity so that each job feels lighter and can be completed quickly, work professionally, namely using competence and time appropriately so that work does not accumulate and fail so that there is no need to do work repeatedly, work wholeheartedly, sincerely and love the work being carried out, so that there is no increase in
stress levels for nurses. Even though they have a high workload, with proper management they can increase work efficiency without increasing stress on nurses, stress levels due to workloads can be overcome with solid teamwork, where each member of the nurse helps each other and supports colleagues to be fast and precise. In carrying out their duties, sincerely and wholeheartedly in working and working with professionalism and proper time management, of course this can improve good workload management so that the stress level on nurses also decreases.

**The Effect of Career Uncertainty on Nurses’ Work Stress Levels in the Inpatient Room at the Regional General Hospital of Doctor Zubir Mahmud, East Aceh Regency**

Based on Table 4.7 shows that of the 36 respondents who have career uncertainty, 30 (53.6%) respondents have a high level of work stress. Meanwhile, from 20 respondents who had career certainty, 16 (28.6%) were found. respondents have a low level of work stress. From the results of statistical tests, Chi-Square is obtained a significance value of \( p = 0.000 \) (<0.05), it can be concluded that there is an influence between career uncertainty on the level of work stress on nurses in the inpatient room of the Regional General Hospital Doctor Zubir Mahmud Regency East Aceh.

This study is in line with research conducted by Nurazizah with the title Factors Associated with Work Stress on Nurses in Class III Inpatient Hospital X Jakarta 2017. The results of this research are, based on the results of a preliminary study on 30 nurses in the inpatient room class III RS X it is known that 53.3% of nurses (16 of 30 nurses) experienced symptoms of high stress. If not managed properly, stress on nurses can lead to errors in patient care and endanger patient safety.

This research is a quantitative research with a cross sectional study design. The research sample was all nurses in the third class inpatient room (flamboyant, rose, jasmine, and cempaka) totaling 109 people. Data were collected by filling out a questionnaire (NIOSH Generic Job Stress Questionnaire). Bivariate analysis was carried out with Spearman correlation test and Mann Whitney test and multivariate analysis was performed using multiple linear regression. The results showed that there were four variables included in the final multivariate modeling, namely career uncertainty, unused abilities, responsibility for others and social support. While the most dominant factor associated with work stress is the ability that is not used.

Each workforce works according to its role in the organization, meaning that every workforce has a group of tasks that must be carried out in accordance with existing rules and as expected by their superiors, however, the workforce does not always succeed in playing its role without causing problems. Not good role function is a stress generator that includes role conflict and job ambiguity.

Role ambiguity is a lack of understanding of the rights, privileges, and obligations that a person has to carry out work (Gibson, 2017). Role ambiguity is felt if a worker does not have enough information to be able to carry out its duties, or does not understand or realize the expectations associated with a particular role.

Career uncertainty can lead to job uncertainty for nurses, where this will certainly affect the services provided by nurses. Health workers are the main spear of improving public health, where accuracy in service is a fixed price. Nurses must provide services in accordance with SOPs and must provide maximum results from these services. Where this can certainly create its own mental pressure for nurses which can greatly trigger increased stress on nurses.

Career uncertainty that can also trigger stress levels is due to the lack of competence possessed by nurses. The act of caring for patients is of course very necessary skills, adequate competence so that nurses can provide maximum health services without feeling afraid of being wrong or doubting in providing services to patients. High self-confidence in providing services is needed
to minimize errors in providing services to patients, this will certainly be realized if the nurse has adequate skills and competencies in their fields. If the nurse has maximum competence, of course this will make the nurse able to carry out her duties without hesitation and relieve mental pressure in every service because she always believes that she is able to provide the best service to patients.

Based on the theory and research results above, according to the research findings, career or job uncertainty can increase stress, this is due to unclear work or steps taken in caring for patients, so this can increase the turmoil of work stress on nurses. When the nurse does not get clear orders or information about the treatment or action she will take clearly, the nurse will automatically be anxious, panicked and even afraid to take any action, even though she is also required to always be alert and ready to serve patients, this is This can lead to increased stress. This situation can occur because of unclear communication between doctors and nurses or fellow colleagues and because of the lack of competence or expertise of the nurses themselves.

The Effect of Multiple Roles on Nurses' Work Stress Levels in the Inpatient Room at the Regional General Hospital Doctor Zubir Mahmud, East Aceh Regency

According to the data shown in Table 4.8, out of the 33 respondents whose management of their multiple roles is inadequate, 28 of them have a high degree of stress brought on by their jobs. In the meanwhile, out of the 23 respondents who were able to handle their multiple roles well, 17 (30.4%) of them reported having modest levels of stress. It is possible to draw the conclusion, based on the findings of the statistical tests, that there is an influence between multiple roles on the level of work stress experienced by nurses working at the Regional General Hospital of Dokter Mahmud in the East Aceh Regency. The Chi-Square test obtained a significance value of $p = 0.000$, which is less than 0.05.

The findings of this research are consistent with those of a study that was carried out in 2018 by Simatupang Febrianto Hadi and titled The association between multiple duties and job stress in hospital nurses. H. Abdul Manan Simatupang Range. On the basis of the findings of the analysis, it was discovered that there was a relationship between multiple roles and work stress. The correlation coefficient of $r_{xy}$ was found to be 0.436 with $p = 0.002$ ($p = 0.05$), which indicated that the hypothesis was accepted, which stated that there was a relationship between multiple loads and work stress.

The dual role conflict may have a negative influence on employee performance, which in turn can have a negative impact on employee commitment to the business, increase absenteeism, and increase the desire to quit the firm (Boles et al., 2001). Therefore, this predicament poses a threat to the organization since it has the potential to impede the process of putting work into effect, which, in turn, has the potential to bring about a decline in the performance of the organization. When it comes to the processing of human resources, this is one of the aspects that businesses need to pay attention to in order to be able to increase their work efficiency and effectiveness (Nurhayati, 2018).

A conflict may be described as any sort of interaction that is in direct opposition to one another and involves two or more participants. Organizational conflict is a disagreement between two or more members of an organization that arises because the members of the organization have to use scarce resources together and because the members of the organization have different statuses, goals, values, and perceptions of the organization. different.

The tension between work and family Many scholars are interested in researching the origins of the impacts of work-family conflict as a result of the fact that changes in the demographics of the workforce, such as a rise in the number of working women and spouses who both work, have led to conflicts between work and family life. the household (work-family conflict). Professional-family conflict, as defined by Greenhaus & Beutell (2018), is a kind of role...
conflict that occurs when the demands of a person’s work function and their role as a family member are mutually incompatible in multiple ways.

Multiple roles are not something that is easy to do, because in this case it is necessary to achieve a balance between work and family, and this is where conflicts often arise which are inevitable and even trigger emotional imbalances due to the pressure on double burdens. Multiple roles are something that are not something that is easy to do. The mental conflict that often occurs in female nurses is a good illustration of this phenomenon. Because many female nurses also play important roles in their own households, the responsibilities they have as nurses and as wives and mothers frequently come into conflict with one another.

There is a sort of inter-role conflict known as work-family conflict. This type of conflict occurs when the role constraints from work and family cannot be ignored or harmonized in some parts (Utami et al., 2020). The strain that results from an enormous workload and a short amount of time to finish the task, such as work that must be done in a hurry and has a deadline, is directly correlated to the demands of the job. Work family conflict is a conflict that happens in a person due to accepting several responsibilities, both at work and in the home, where time and attention is overly committed to one function, so that the needs of other roles cannot be performed optimally. women to play multiple roles, also known as multiple career households, as a result of an increasing number of female workers combining work and family roles and demanding that they share roles effectively to avoid conflicts between these roles. This has led to an increase in the number of households with multiple career women. completed with success and no failures (Seren Intepeler et al., 2019).

Based on the theory and the results of the research above, according to the findings of the researcher, dual roles can affect the level of work stress of nurses, this is because the double burden requires a balance between personal needs and work demands which of course will be very difficult to balance. Where this often does not meet stability, where often a nurse prioritizes her function in the family rather than carrying out her function as a nurse. Talking about profession and family is indeed very difficult to ask which is more priority, this is what makes it unbalanced, because the demands between personal and professional interests often overlap. So that work-family conflicts arise which lead to increased stress on nurses. After the researchers conducted research, it was found that one of the problems that arose as a result of work-family conflict was that there were too many nurses who could not be present on time at the hospital due to taking care of family matters first so they experienced a lot of honorarium cuts, irregularities in work due to lack of time, which triggered stress levels on nurses themselves.

**Conclusion**

There is an effect of workload on the level of work stress of nurses in the inpatient room at the Zubir Mahmud Regional General Hospital, East Aceh Regency, with a p-value of 0.004 (<0.05). There is an effect of career uncertainty on nurses' work stress levels, with a p-value of 0.031 (<0.05). There is a dual role effect on nurses' work stress levels, with a p-value of 0.045 (<0.05). The most dominant factor influencing the level of work stress of nurses is the workload factor with the final result p-value sig 0.004 with the value of Exp (B) or Odd Ratio 19.222. Hospitals are expected to evaluate the comfort of health workers in hospitals to cope with stress levels for health workers who are in hospital, conduct open communication or provide a forum for suggestions where each member of health workers can express opinions or submit complaints in order to avoid an increase in work stress on workers. health and improve the quality and work ethic of health workers. It is expected to improve the management of work with a team or individually, carry out work management quickly and precisely. Improve work ethic by maintaining cohesiveness between colleagues by helping each other if there is more work than usual capacity. Nurses are also expected to be mentally prepared, sincere in their
work and prioritize work so that they can reduce mental stress at work. It is hoped that this research can be used as insight and knowledge in conducting further research and as a reference for comparison in conducting future researchers.

References

Ahsan., (2017). Stres Kerja Shift Malam dan Kinerja Perawat Pelaksana di Ruang Rawat Inap RS Wava Husada Kepanjen. (online), (http://www.jurnalppni.org/ojs/index.php/jppni/article/download/18/14).

Ammouri, A., & Hamaideh, S.H. (2017). Jordanian nurses job stressor in stressful and non stressful clinical areas. A Journal for the Australian Nursing Profession is the Property of Econtent Management, 37(2), 173-181.

Boles, J. S., Howard, W. G., & Donofrio, H. H. (2001). An investigation into the inter-relationships of work-family conflict, family-work conflict and work satisfaction. Journal of Managerial issues, 376-390.

Darni, N. S. (2014). Stres Kerja dan Sikap Perawat Tentang Keselamatan Pasien di Ruang Operasi Rumah Sakit Kota Medan. Jurnal Ners Indonesia, 1(1), 19-20.

Fedianti, K. (2015). Hubungan Antara Beban Kerja Dengan Stres Kerja Pada Karyawan Pelayanan Teknik (YANTEK) PT. PLN (Persero) Rayon Madiun Kota. Fakultas Kesehatan Masyarakat, Universitas Diponegoro.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. Academy of management review, 10(1), 76-88.

Hamaideh, S. H., & Ammouri, A. (2011). Comparing Jordanian nurses’ job stressors in stressful and non-stressful clinical areas. Contemporary Nurse, 37(2), 173-187.

Kiftia. (2016). Hubungan Beban Kerja Perawat Dengan Penerapan Prilaku Caring Perawat Pelaksana Ruang Rawat Bedah Pria Dan Wanita Badan Pelayanan Kesehatan RSUD dr. Zainoel Abidin. Skripsi. Banda Aceh: Program Studi Ilmu Keperawatan Fakultas Kedokteran Universitas Syiah Kuala. 2016.

Muhith, A. (2017). Pengembangan model mutu asuhan keperawatan dan MAKP. repository.unusa.ac.id

Munandar, A. S. (2016). Psikologi Industri dan Organisasi. Jakarta: Edisi UI Press

Nurhayati, D. (2019). Hubungan Antara Faktor Pembentuk Budaya Keselamatan Kerja dengan Safety Behaviour pada Pekerja di PT. Pertamina (Persero) Terminal BBM Banjarmasin Tahun 2018 (Doctoral dissertation, Universitas Islam Kalimantan).

Nurini, N., Rahmawati, A., & Nuraeni, T. (2017). Faktor yang Berhubungan dengan Stres Kerja Pada Karyawan di PT. PLN (Persero) TJBT APP Cirebon. Afiasi: Jurnal Kesehatan Masyarakat, 2(2), 60-67.

Saefullah, E., & Amalia, A. N. (2017). Pengaruh Beban Kerja dan Stres Kerja Terhadap Produktivitas Kerja Karyawan. Jurnal Akademika, 15(2), 117-122.

Seren Intepeler, S., Esregfl, G., Yilmazmis, F., Bengu, N., Gunes Dinc, N., Ileri, S., ... & Dirik, H. F. (2019). Role of job satisfaction and work environment on the organizational commitment of nurses: a cross-sectional study. Contemporary nurse, 55(4-5), 380-390.

Simamora, H. (2019). Manajemen Sumber Daya Manusia. Edisi Ke-3. Yogyakarta: STIE YKPN. 2019

Sinambela, L, P, (2016). Manajemen Sumber Daya Manusia. Jakarta: Bumi Aksara.
Sitepu, A. J. M. (2018). Pengaruh Dukungan Sosial, Stres Kerja, Dan Kepuasan Kerja Terhadap Kinerja Anggota Pada Satuan Reserse Narkoba Di Kepolisian Resor Banjarbaru. *Kindai, 14*(3).

Sulasstri, S., & Onsardi, O. (2020). Pengaruh Stres Kerja, dan Beban Kerja, terhadap Kinerja Karyawan. *Journal of Management and Bussines (JOMB)*, 2(1), 83-98.

Sunyoto, D. (2016). *Sumber Daya Manusia*. Yogyakarta: Caps.

Sulastri, S., & Onsardi, O. (2020). Pengaruh Stres Kerja, dan Beban Kerja, terhadap Kinerja Karyawan. *Journal of Management and Bussines (JOMB)*, 2(1), 83-98.

Sunyoto, D. (2016). *Sumber Daya Manusia*. Yogyakarta: Caps.

Utami, R. B., Siti, U., Sari, C., & Sopianingsih, J. (2020). Efektifitas penggunaan media melalui whatsapp dan booklet terhadap sikap ayah asi di wilayah kerja Puskesmas Tuan Tuan Kecamatan Benua Kayong Kabupaten Ketapang. *Jurnal Kebidanan Khatulistiwa, 6*(2), 83-90.

Zaghloul, A. A. (2008). Developing and validating a tool to assess nurse stress. *J Egypt Public Health Assoc, 83*(3), 223-227.