

The Relationship between Knowledge and Skills of Nurses and Triage Measures in the Emergency Room (Igd) of the Islam Malahayati Hospital in Medan in 2022

Syamsul Idris

Nursing Science Study Program, Faculty of Health Sciences, Universitas Haji Sumatera Utara

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ABSTRACT

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Data on patient visits to the emergency room around the world has increased from year to year where 50% of them are visits with non-urgent conditions. In Indonesia, the data on patient visits to the ER is 4,402,205 patients (13.3%) of the total of all visits at the General Hospital, where this makes nurses have to sort out patients quickly and precisely according to priorities. To support this, knowledge and skills are needed to minimize the separation of types and emergencies of patients in triage, so that the treatment carried out is more optimal. The aim of the study was to determine the relationship between knowledge and skills of nurses and triage measures. Triage is a way to select or sort victims based on their level of emergency. This type of research is Correlation Research with a quantitative cross sectional research design. The population in this study were all nurses in the Emergency Room at the Malahayati Islamic Hospital in Medan. The sampling technique is saturated sample, with a total sample of 14 nurses. The instrument in this study was a questionnaire consisting of a questionnaire on nurses' knowledge about triage and nurse skills. The research instrument uses an observation sheet. Bivariate analysis with Chi square test. The research results show that there is a relationship between nurse knowledge and nurse skills with triage measures with a p-value coefficient of $0.03 < 0.05$, which means H_0 is rejected and H_a is accepted. The conclusion is that there are 11 (78.6%) respondents who have a moderate level of knowledge with a ready skill level in the Emergency Room of the Islam Malahayati Hospital, Medan. From this study it is suggested that nurses always increase their knowledge, especially about triage.

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Corresponding Author:

Syamsul Idris,
Faculty of Health Sciences,
Universitas Haji Sumatera Utara
Email: syamsulidris30@gmail.com

INTRODUCTION

Hospital is an integral part of a social and health organization with the function of providing comprehensive (comprehensive), disease healing (curative) and disease prevention (preventive) services to the community. Based on Permenkes No. 147 of 2010 concerning Hospital Licensing is a health service institution that organizes full individual health services that provide inpatient, outpatient, and emergency services.

The Emergency Room (IGD) is a unit that functions as the main door in handling emergency cases. The Emergency Room provides services 24 hours a day. Broadly speaking, emergency room patients around the world have conditions that vary from life-threatening cases to mild conditions.

Triage is a way to select or sort victims based on their level of gravity. The selection and sorting of victims aims to speed up providing assistance, especially to victims who are in critical or emergency conditions so that their lives can be saved. *triage* is divided into 3 categories, namely emergency, urgent and non-urgent. In order to quickly and accurately assess the initial condition of an emergency patient, it is necessary to carry out a brief history and systematic examination of the airway (A), breathing (B), circulation (C), disability (D) and environment (E).

The triage system that is often used and easy to apply is START (Simple triage and rapid treatment), which uses color priority as an assessment. Priority I is red, priority II is yellow, priority III is green, priority 0 is black, the possibility of survival is very small, the wound is very serious. In conducting triage the time needed is less than 2 minutes because the purpose of triage is not to seek a diagnosis but to examine and plan for action.

The high number of visits to the emergency room, both patients with urgent and non-urgent conditions, is the main cause of overcrowding in the emergency room, where this has an impact on long waiting times and patient dissatisfaction with emergency room services so that sometimes patients with serious conditions cannot be treated on time. and to minimize it.

Data on patient visits to the emergency room around the world has increased from year to year where 50% of them are visits with non-urgent conditions. In Indonesia, data on patient visits to the emergency room were 4,402,205 patients (13.3%) of the total number of visits to general hospitals with 12% of visits to the emergency department coming from referrals to the number of existing hospitals. Number of General Hospitals 1,033 public hospitals out of 1,319 existing hospitals. This significant number then requires considerable attention with emergency patient services (Decree of the Minister of Health, 2009 in Nurhasim, et al 2017).

Data from 208 hospitals in North Sumatra, 203 of which have emergency handling capabilities, consisting of 186 general hospitals and 17 other special general hospitals. In 2016, there were 202 hospitals out of 208 hospitals with emergency capabilities, consisting of 177 general hospital units and special hospital units. In 2016, only 117 out of 208 general hospitals had 4 basic specialties (43.75%), including 20 hospitals with class C from 182 general hospitals.

In 2015, 123 General Hospitals (69.49%) had 4 basic specialties. Thus, there has been an increase in the number of hospitals with emergency capabilities in North Sumatra in 2017. In 2017, only 141 of 208 general hospitals in North Sumatra were recorded as having 4 basic specialties (55.34%). All hospitals with class C (14 hospitals) are recorded as having basic specialist doctors. The achievement of hospitals with 4 specialties increased from 43.75 in 2016 to 55.34% in 2017 (Regency/city health profile 2017).

In carrying out triage, nurses have low knowledge in determining triage accurately, and there are 42% of nurses who do not receive triage training, 14% of nurses are not adequately prepared to carry out triage. Lack of triage education is the main reason for the low knowledge of nurses about triage (Haghigh, Ashrafzadeh, Mojaddami, & Kord, 2017).

Research conducted by Tam HL et al (2018) revealed a lack of triage training and consistent training for health workers in the ER will affect the accuracy of patient triage. Another study was conducted by Febrina and Sholehah (2018) in the emergency room of the Achmad Mochtar Bukittinggi Regional General Hospital, it was said that the ability to sort patients is still

not effective and not optimal and needs to be given attention because it can affect the quality and accuracy of patient care.

Malahayati Islamic Hospital is a type C Private General Hospital located at Jalan Diponegoro No. 4 Medan which is engaged in providing medical or public health services. At the beginning of the establishment of Malahayati Islamic Hospital, it was aimed at healing patient health, patient comfort and safety, attitudes and behavior of medical and non-medical services in an Islamic way to meet patient satisfaction, as well as helping the government serve the community in the field of improving health status, one of which was in the room. Emergency departments.

Based on the initial survey conducted by researchers, on February 5, 2022, data obtained from the Malahayati Islamic Hospital Medical Records, especially in the emergency room, in 2020 there were 4,546 patients, and in 2021 there were 4,368 patients. In the initial observations carried out in the emergency room at the Malahayati Islamic Hospital, there were 14 nurses consisting of 4 nurses and 10 D3 nurses. (Medical Records of Malahayati Islamic Hospital Medan).

And the results of interviews and initial observations that have been carried out by researchers are that nurses in the emergency room of the Malahayati Islamic Hospital Medan have often even experienced difficulties in handling patients in the emergency room in an overload state so nurses often ask for help to Karu for additional or assistance from officers from the emergency room. another room. So nurses in the emergency room of the Malahayati Islamic Hospital in Medan really need a triage action where nurses can directly handle patients with the level of emergency.

Based on the above background, I am interested to see "the relationship between knowledge and skills of nurses and triage actions in the IGD Room of the Malahayati Islamic Hospital in Medan. This thesis aims to determine the relationship between knowledge and skills of nurses with triage actions in the emergency room.

RESEARCH METHOD

Research Type and Design

This type of research is correlation research, according to Sugiyono (2017), correlational research is a type of research with problem characteristics in the form of a correlational relationship between two or more variables. The purpose of correlation research is to determine whether or not there is a correlation between variables or to make predictions based on correlations between variables. The approach method uses cross-sectional research studies, namely research conducted by taking a certain relatively short time at a certain place. The way to collect data for independent and dependent variables is done one time at the same time. This study examines the relationship between the knowledge and skills of nurses and triage in the Emergency Room of the Islam Malahayati Hospital, Medan.

Research Locations

The research location was in the Emergency Room of the Malahayati Islam Hospital in Medan because the sample was sufficient, it had never been studied, and there was a problem, namely nurses in the Emergency Room at the Islam Malahayati Hospital in Medan, who had often experienced oversight in handling patients in the Emergency Room in an Overloaded state so that nurses often asked for help. to the Head of the Emergency Room for additional or assistance of officers from other rooms.

Population

Population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2008: 117). The population in this study were all 14 nurses in the emergency room at the Malahayati Islamic Hospital in Medan. This is because the researcher wants to know the knowledge and skills of nurses by applying triage measures in the ER Islam Malahayati Hospital

Medan with the consideration that the nurses on duty in the ER must be able to handle patients quickly, precisely and correctly based on the SOP that applies at the Malahayati Islamic Hospital Medan. .

Sample

The sample is part of the overall object under study and is considered to represent the entire population (Setiadi, 2007:177). In this study, the sample consisted of 14 nurses in the emergency room at the Malahayati Islamic Hospital in Medan. According to Arikunto (2002) that if the population is less than 30 people then the whole is taken. The sampling technique is a saturated sample with a total of 14 people.

Data Collection Techniques

The procedure for collecting data was by submitting an application for a research permit from the institution (Haji University of North Sumatra) and sending it to the research location (Malahayati Islamic Hospital, Medan). Data collection in this study was carried out by the Head of the Emergency Room at the Malahayati Islamic Hospital in Medan.

After obtaining permission to conduct research, the next thing to do is collect data using questionnaires distributed to respondents. The process in this study begins with the researcher distributing questionnaires, the researcher and research assistant introduce themselves to the respondents and explain the purpose and process of the research.

Then the researcher explained to the respondents regarding the research objectives and a brief description of the questionnaire and observation sheet, then the questionnaire was distributed to the respondents regarding the research to be carried out. Researchers distributed questionnaires and explained about the correct filling instructions regarding the questionnaire. After the respondent understood, the respondent was asked to fill out the questionnaire correctly within 30 minutes. Filling out the questionnaire was collected back to the researcher. Questionnaires - questionnaires that have been filled will be assessed by researchers.

Processing and analysis of results includes data collection activities of research subjects, data before and after, data classification, tabulation which then performs analysis through statistical tests using SPSS. Completing the thesis, the thesis is approved by the supervisor and then takes care of the letters for the comprehensive exam.

Data Analysis

In this study, researchers used the SPSS program to carry out univariate and bivariate data analysis.

RESULTS AND DISCUSSION

Univariate analysis

Distribution of Respondents Based on Nurse's Knowledge

Table 1. Frequency Distribution of Knowledge with Triage Actions on Nurses in the Emergency Room of Islam Malahayati Hospital Medan

Nurse Knowledge	Amount	Percentage (%)
Tall	2	14.3
Currently	11	78.6
Low	1	7.1
Total	14	100

Source: primary data, 2022

The distribution of respondents based on the knowledge of nurses, where in this study the most respondents were moderate knowledge of 11 (78.6%).

Distribution of Respondents Based on Nurse Skills

Table 2. Distribution of the Frequency of Nurse Skills in the Emergency Room at the Malahayati Islamic Hospital Medan

Nurse Skills	Amount	Percentage (%)
Very ready	2	14.3
Ready	12	85.7
Not ready	0	0
Total	14	100

Source: primary data, 2022

The distribution of respondents based on the skills of nurses in the Emergency Room of the Malahayati Islamic Hospital in Medan, where in this study the most respondents were in the ready category, namely 12 respondents (85.7%).

Bivariate Analysis

The results of the research on the Relationship between Nurse Knowledge and Skills and Triage Measures in the Emergency Room of the Islam Malahayati Hospital in Medan can be seen in the following cross tabulation:

Table 3. Cross-tabulation of the Relationship of Knowledge and Skills of Nurses with Triage Measures in the Emergency Room at Malahayati Islamic Hospital Medan

Nurse Knowledge	Skills						Total		P-Value
	Very ready		Ready		Not ready		F	%	
	F	%	F	%	F	%			
Tall	0	0.00	2	14.3	0	0.00	2	14.3	0.03
Currently	1	7.1	10	71.5	0	0.00	11	78.6	
Low	1	7.1	0	0.00	0	0.00	1	7.1	
Total	2	14.2	12	85.8	0	0.00	14	100	

Source: primary data, 2022

Based on Table 4.6 above, it can be seen that most respondents have a moderate level of knowledge with a ready skill level of 11 (78.6%) respondents. Hypothesis testing is done by using Chi-Square correlation analysis.

Based on Table 4.6, it is found that the p-value is $0.03 < 0.05$, which means H_0 is rejected and H_a is accepted, thus it is concluded that there is a relationship between knowledge and skills of nurses and triage actions in the ER, Malahayati Islamic Hospital, Medan.

Discussion

Univariate Analysis

Gender

Based on observations, it is known that the majority of nurses in the emergency room of the Malahayati Islamic Hospital Medan are female as many as 8 people (57.1%). This is in accordance with the theory which states that there is no consistent difference between men and women in problem solving ability, analytical skills, competitive drive, motivation, sociability or learning ability.

Age

Based on age, it is known that the majority of respondents are 20-30 years old, as many as 7 people (50.0%). This age includes the productive age which is very much needed by nurses who work in the ER in handling emergency situations for patient safety and recovery. Age affects the level of knowledge and skills of nurses in handling this triage.

The more mature, the level of maturity and strength of a person will be more mature in thinking and working. This will also mature experience and mature soul. A more mature age is generally more responsible and more thorough than a young age. (Nursalam, 2015).

The results of this study support the research results of Pradana et al (2016) and Maulana et al (2017) where most of the nurses in the emergency room are 25-30 years old. Mature age to be able to perform triage in the room is needed. For ages > 30 years is a mature age in the world of nursing work in carrying out triage actions. Work experience can influence triage measures in taking appropriate actions. affect knowledge.

Working Time

Based on the results of observations, it is known that the majority of nurses in the Emergency Room of the Malahayati Islamic Hospital in Medan have worked for >5 years, namely 6 people (42.9%). This shows that the nurses in the Emergency Room of the Malahayati Islamic Hospital in Medan have had experience in handling emergency problems related to the implementation of this triage for a long time. They have sufficient knowledge related to triage and make appropriate decisions in the implementation of triage in the emergency room.

This is in accordance with the opinion of Martanti et al (2015) where the majority of nurses in the emergency room have work experience for 1-10 years. One's knowledge is obtained through years of work experience, so it can be concluded that one's knowledge can or will increase through work experience.

Lutfi et al (2015) stated that the majority of nurses have worked for > 5 years. The length of working period causes health workers to have unlimited time to study. The longer the work period, the health workers will have good knowledge and skills. This can affect the ability of health workers to provide health services in hospitals, especially in the emergency department. The bivariate analysis shows that there is a relationship with a moderate level of closeness between the length of service of health workers and the ability of hospital triage in the Emergency Room. Sufficient length of work results in a large number of experience of health workers, so that the health services provided are more effective and efficient.

Knowledge of Nurses with Triage actions.

Based on the results of univariate analysis, it is known that the majority of respondents have moderate knowledge of triage as many as 11 people (52.9%). This shows that the majority of respondents are quite knowledgeable about triage and they are able to take emergency actions well.

Especially when determining and making decisions correctly sorting patients who come to the ER whether they are emergency, urgent or non-urgent, so that patient treatment can be carried out according to the triage given by the nurse for the safety and recovery of the patient.

The results of research by Laoh and Rako (2014); Sari and Sutanta (2017); Maulana et al (2017) support the results of this study where the majority of nurses also have knowledge that is included in triage action. The triage position involves a high level of alertness and a high level of stress. The telephone ringing and waiting for an ambulance stroller, walking patients, visitors who ask a lot of questions and various disturbances, besides that they also have to do an assessment and make the right decision. This is an endurance test which is a common experience for triage nurses. Circumstances like this can be a factor that affects the implementation of triage in the emergency department.

Nurse Skills with Triage actions

Based on the results of the univariate analysis, it is known that the majority of nurses have skills including ready as many as 12 people (85.7%). The skills that nurses are ready for in the implementation of triage in the emergency room here have been very helpful in the context of patient safety and recovery. The statement of the skills of nurses who are ready and very ready in the implementation of triage is related to the factors that influence the attitude of nurses in the implementation of triage.

The research results of Amriyanti and Setyaningsih (2013); Sari and Sutanta (2017) support the results of this study where the majority of nurses have skills that are ready for triage in the emergency room where the implementing nurses in the emergency room have carried out the best practice of triage before serving patients who come and need help.

Bivariate Analysis

Based on the results of bivariate analysis to determine whether there is a relationship between knowledge and skills of nurses with triage action using the chi square test, it shows that the significance value (p value) is $0.03 < 0.05$. This means that H_0 is rejected and H_a is accepted, which means that there is a relationship between the knowledge and skills of nurses and triage actions

in the ER, Malahayati Islamic Hospital, Medan. Supported by the results of the cross tabulation analysis, it shows that nurses with moderate knowledge will have skills that are ready and good for triage actions in the ER. Nurses who have good knowledge will tend to have good skills with triage actions in the ER for patients. However, nurses who have less knowledge about triage actions will also have a bad attitude in carrying out triage actions in the emergency room for patients. The results of this study indicate that the better the level of knowledge, the better the nurse's skills in carrying out triage actions. Knowledge is an important aspect that must be owned by an officer because it can affect certain skills. A person with high knowledge will be able to carry out all tasks effectively and efficiently, so that performance will improve. A person with a high level of knowledge can comply with every action he takes. The results of this study indicate that the better the level of knowledge, the better the skills of nurses in implementing triage actions. Knowledge is an important aspect that must be possessed by an officer because it can affect certain skills. A person's high knowledge will be able to carry out all tasks effectively and efficiently, so that performance is getting better. A person with a high level of knowledge can obey every action he takes. The results of this study indicate that the better the level of knowledge, the better the skills of nurses in implementing triage actions. Knowledge is an important aspect that must be possessed by an officer because it can affect certain skills. A person's high knowledge will be able to carry out all tasks effectively and efficiently, so that performance is getting better. A person with a high level of knowledge can obey every action he takes.

The results of this study are in line with the results of research by Ayni (2019) and Vincensius (2021) showing that there is a relationship between knowledge and triage measures in the ER. Knowledge of triage is needed by nurses to determine treatment priorities and make appropriate decisions for patients. Nurses must be able to prioritize patient care on the basis of clinical decision making where knowledge is important for nurses in the initial assessment, and nurses must be able to prioritize patient care on the basis of making appropriate decisions. To support this, special knowledge, attitudes, and skills are needed in terms of separating the types and emergencies of patients in triage, so that patient management can be more optimal and directed.

This is also in line with the research results of Sukamto et al (2013); Santosa et al (2015) which shows that there is a significant relationship between knowledge and action based on triage labeling and has a very strong relationship. Knowledge is the result of human sensing, or the result of someone knowing about objects through their senses.

According to the researcher's assumptions, from the results of the research and the opinions above, it can be concluded that respondents with good knowledge can have good actions. Knowledge here is the basis for a person so that actions are formed according to needs, knowledge is an intrinsic factor from within nurses that affects the formation of actions / skills. Knowledge is an important thing that must be owned by a professional nurse in order to carry out their duties and responsibilities properly. The higher the knowledge of nurses about triage,

CONCLUSION

The level of knowledge of nurses with triage measures in the Emergency Room of the Malahayati Islamic Hospital in Medan at most has a moderate level of knowledge. The skills of nurses with triage actions in the Emergency Room of the Malahayati Islamic Hospital in Medan have the most ready skill level. There is a significant relationship between the knowledge and skills of nurses with triage measures in the Emergency Room of the Islam Malahayati Hospital, Medan. From this study it is suggested that nurses always increase their knowledge, especially about triage.

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