

Relationship Between the Level of Knowledge of Nurses About Triage with The Application of Triage at Emergency Department Hospital

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Abstract

Introduction: In the globalized world, it is important to be used triage system in emergency department so that you can classify the patient with triage categories according to the value of trauma or illness to start service quickly. **Objective:** This research was carried out to identify the level of knowledge of nursing about triage, the application of triage also to know the relationship between the level of knowledge of nurse about triage and application of triage in the emergency department of Hospital Nacional Guido Valadares Dili Timor-Leste. **Method:** the research of methodology the researcher uses the quantitative type with a cross sectional approach and a correlational study. **Result and Discussion:** through the research to identify 40 nurses in emergency department of Hospital Nacional Guido Valadares Dili Timor-Leste. The research identifies that the existing sample of 40 for variable level of knowledge, show that many had good knowledge with respondent 30 (75.0%) and respondent 2 (5.0%) with low knowledge and about the variable of triage implementation showed that many nurses agreed with the application of triage with 27 respondents (67.5%) and not in agreement with the application of triage with 3 respondents (7.5%). Based on the results of the study, it shows that there is a positive relationship between the level of knowledge and the application of triage with a value of $r = 0.463$ and a p value of 0.003 which is higher than the alpha value (0,05) meaning that H_0 rejects H_a accept. **Conclusion:** This study shows that there is a relationship between the level of knowledge of nurses about triage and the application of triage at emergency department of Hospital Nacional Guido Valadares Dili Timor-Leste with a significant value of $0,003 < \alpha = 0,05$

Keywords: Level; Knowledge triage; Nurses;

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Introduction

Triage system is an implementation of a risk management system in the emergency bank so that the patient who comes in a timely and accurate manner can meet the needs are use the available resources. Application of triage in the emergency bank is caused by an increase in the number of patients at the emergency bank (Sunyoto et al., 2014). Many of the patients that cause emergency facilities to be under great pressure and responsibility for managing patient care.

A significant presence and responsibility will affect the performance of all health teams in emergency facilities (Widyatmojo, Rohendi, Wahyudi, & Andikarya, 2023). The lack of facilities such as a patient's bed, lack of health equipment, low number and skilled headed the case will affect the success of patients being treated in an emergency bank (Sensi & Nur♦, 2023)

According to Thabo Arthur phuku (Phukubye, Mbombi, & Mothiba, 2019), in their research results at rural hospital in Limpopo province, South Africa showed that many people died 24 hours after they came to hospital 61% of poor triage practices, while only 30% have evidence of good practice.

According to Asrullah nurh (Asrullah, 2019), the Survey results were conducted at IDG rsup dr. Westerners in South Sudan revealed that 33 respondents had very low levels of knowledge and had not followed the implementation the implementation of 8 triage test (72.7%), as respondents had a good level of knowledge according to the application of 17 respondents (77.3%).

Through the observation obtained during the 2020 internship at the Hospital Guido Nacional Valadares, nurses demonstrated that they have a minimum knowledge of triage because of a lack of training, poor working conditions, and facilities to do a minimum patient triage and lack of health personnel lack of knowledge of the triage results in inaccurate screening and can influence poor health outcomes and will affect time for diagnosis and time for treatment, use of resources and facilities. This impacted on increasing mortality and morbidity (Oglias & zuniga, 2016) at (Ramadhani, 2021)

The lack of adequate implementation a triage and put in place adequate risks to the lives of patients that is that reach the emergency bank. The treatment action to the patient via the patient's orders is not being evaluated before determining the level of emergency illness or previous screening can result in late intervention to patients with critical conditions, potential death. Taufani (2018) at (Malik, 2022)

The knowledge of nurses is very important, and it is expected that training in the preparations and education of screening at hospital as well as in hospital can be ensured in the triage process. To save many patients at a short time in the emergency bank, knowledge, attitudes, and skills of nurses. The knowledge of nurses in relation to the knowledge that is fundamental to emergency medical service actions is particularly important, given the rapid and accurate action is dependent on the knowledge of nurses, and the researchers want to research the level of knowledge of nurse and the application of a triage in the Hospital Nacional Guido Valadares.

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Method

This research use quotative methods with cross-sectional approaches and non-correlational research. data collection has been used using scientists and observations. Research researchers carried out and assessment of the screening and application of screening. This sample of 40 respondents used the total sample of sampling forms (saturate sample) that all the nurses who were in the Hospital Nacional Guido Valadares were selected as a sample.

Result and Discussion

Result

Data of the Characteristics respondents

Table 1

Distribution of the frequency by respondents based on gender, age, level of education and duration of work

Characteristic	Frequency	Percentage (%)	Total
Gender			
Female	21	52.5	40
Man	19	47.5	100%
Age			
25 - 30 years	25	62.5	40
31 - 40 years	10	25.0	100%
41 - 50 years	5	12.5	
Level of education			
Secondary degree (SPK)	4	10.0	40
Bechamel degree (D3)	14	35.0	100%
Pos's graduate	22	55.0	
Maestra	0	0	
Duration of work			
0-1 years	10	25.0	40
1-2 years	5	12.5	100%
2-3 years	1	2.5	
3-4 years	2	5.0	
4-5 years	10	25.0	
>5 years	12	30.0	

Respondent frequency distribution is based on gender, level of education and duration of working. The survey was conducted at the Hospital Nacional Guido Valadares emergency bank. There were 40 nurses as a respondent, by the total 40 respondents have 21 female respondents (52.5%) and a majority age 25-30 years (62.5%) based on the level of education majority a pos graduate total respondent 22 (55.0%) and duration of worked longer than 5 years total respondents 12 (30.0%)

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Table 2

knowledge level of nurses about triage

No	Level of knowledge	Frequency	Percentage (%)
1.	Good	30	75.0
2.	Average	8	20.0
3.	Less	2	5.0
Total		40	100.0

According to table 2 shows that the level of knowledge for triage majority knowledge are good of 30 respondents (75.0%) and the lowest level of knowledge is less with frequency 2 (5.0%)

Table 3

Application Triage

No	Application Triage	Frequency	Percentage %
1.	Follow	27	67.5
2.	Some times	10	25.0
3.	Never	3	7.5
Total		40	100

According to table 3 shows that more than 27 respondents did follow the triage application with a total 27 respondents 67.5 and the minority never application a triage total 3 respondents 7.5%.

Table 4

Distribution of frequency crosstabulation of level knowledge with application triage and correlations between two bivariate

			Application triage				Spearman Rank	
			follow	sometimes	Never	Total	Coefficient Correlation	P-value
Level of knowledge	Good	F	24	5	1	30	0.463	0.003
		%	60.0	12.5	2.5	75.0		
	Average	F	2	5	1	8		
		%	5.0	12.5	2.5	20.0		
	Less	F	1	0	1	2		
		%	2.5	0.0	2.5	5.0		
Total		F	27	10	3	40		
		%	67.5	25.0	7.5	100.0		

According to table 4. Shows that 40 respondents with a good of knowledge followed the application triage of 24 respondents (60.0%). Meanwhile, a nurse with good knowledge did not follow an application triage total 1 respondent (2.5%). Meanwhile, less experienced nurses followed a triage application of 1 respondent (2.5%), while only one nurse with less knowledge with while only one nurse with less knowledge with less knowledge about the application triage of 1 respondent triage (2.5%).

Based on the results of analysis of statistic test Spearman Rank with value $0.003 < 0.05$. The results show that with H_0 reject H_a accept. H_0 is concluded that this research has a relationship with a level of knowledge of nurses and the application of a

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triage at the emergency Hospital Nacional Guido Valadares. On the other of value of the coefficient correlation between the two variables in 0.463 thus justify the two variables have sufficient correlations.

Discutient

1. Characteristic

Total number of nurses the research was considered as a sample of 70 nurses working in the emergency bank but only 40 nurses were fulfilled the questionnaire and 30 nurses did not appear to be respondents due to being busy with work. It is a characteristic of the respondent that consists of age, gender, level of education and working duration.

Based on the results of table above. It shows that the age group of respondents from nurses working in the emergency bank the majority age 25-30 years total 25 respondents (62.5%). The result shows that the respondents with age 25-30 years is young, have a good knowledge and ability of doing good work. According to Budiman & Rianto knowledge, (2013) at (Ayni, 2019) said that knowledge is training that increases individual knowledge, especially for younger people, continuing by the constant reorganization of the new understanding.

Based on the results of table above its shows that gender from nurse working in the emergency bank, most women with 21 respondents (52.5%). It is according to the Kinark (2013) has learned about the history of nursing and carrying out the role of a founding person with knowledge, skills, and behavior to provide better services to others. Based on the results of most nurses/girls are women and others who work with more discipline to comply with regulations and to achieve better care for nurses.

Based on the results of table above its shows that the level of education of respondents from nurses working in the emergency bank is mostly with 22 graduates of nurses (55.0%). The results shows that most nurses employed in the emergency bank have knowledge and skills in the performance of the work. According to the knowledge that Fitriani and Yuliana (2017) have said that education is an important effort in individual development and capacity building for individuals in school or outside of school. Each individual and his or her level of education is easy to obtain information from others or can also be from the mass. A great deal of information will give good knowledge.

Based on the results of table above shows that length of work for nurses working in the emergency bank is mostly with a maximum duration of > 5 years working in 12 respondents (30.0%). Based on the result the nurse who has worked for more than 5 years with better work experience and good communication according to Kinark (2013), the normally duration of the work is normally in connection with start of the working period, where experience is also a factor in which people can define people's work. When people have been working for a long time, communication is also good because they are already working with their work.

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2. Level of Knowledge

According to table above researchers identified that from the 40 sample that have to a level of knowledge shows that more have a good knowledge with total 30 respondents (75.0%) and 2 respondents (5.0%) had less knowledge.

According to (Phukubye et al., 2019) said that education is a process of growth and development of capacity and behaviors of people receiving new ideas and technology. When someone's level of knowledge increases, will also increase the experience that influence individual knowledge.

According to Thabo Arthur phulkari researches. (2019), in their research results at rural hospital in the Limpopo province, south Africa revealed that from 105 nurse's respondent, 61% of respondents had knowledge of triage and 39% of respondents had little knowledge of triage.

According to researchers Afaya, a., et.al (2017) in their research conducted at the emergency hospital in Tamale metropolis, Ghana, it appears that more than 60 nurses have a good knowledge of the 40 respondents (61.5%) application triage. Additionally, more than 60 nurses have a good understanding of the indication of 46 respondents (70.8%) and more than 60 nurses have a good understanding of the time limits to 36 respondents (55.4%) (Afaya, Azongo, & Yakong, 2017)

When correlations with the theory and reality that have, the nurses get knowledge that mention above the are possibilities of being influenced by other factors such as age, media of information, environment, and others.

3. Application triage

Based on table above for triage application variable shows that more than 27 nurse (67.5%) followed a triage application (67.5%) and did not comply the application of 3 respondents (7.5%).

According to (Malik, 2022), the triage is one of the most important steps in the emergency unity, while the triage focused on the patient's priorities based on their medical condition, as well as on effective management equipment to regulate, monitor, evaluate patients and resources in the emergency unit.

According to Ibraos a.g., et al (2020) in their research findings show that from 69 nurses, it is indicated that 65.2% of respondents practiced in accordance with the application of triage and 34.8% of respondents did not practice any form of screening. According to Asrullah nurh researcher (2019), the survey results were conducted at emergency Wester in South Sudan revealed that 33 respondents, most of which followed the application of 20 respondents (60.6%) and 13 respondents did not comply with the application of a tirage (39.4%).

In connection with the historical concept and the reality that exists, most of them follow the application of screening relating to the patient's severity of trauma and determine the patient's emergency level prior to aiding. Research identified that nurses did follow a triage application even though patients were not whereof their work in the

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triage area and were often noisy and experienced by nurses because they did not understand the triage procedures. With this situation, nurses did not attend the patient quickly even though they followed the existing triage procedures. Some nurses did not follow a triage application. It is possible to relate to factors that influence education, experience, and volume of work.

The relationship between the level of knowledge of nurses on the screening and applications of triage results illustrates a significant relationship between the level of knowledge of nurse triage and the application of a triage ($p=0.003 < 15/593 = 0,05$) which shows that the level of knowledge influences the application of the screening.

Like the research carried out in IGD rumah sakit puri Jakarta shows that, knowledge, skills, and attitudes of nurses in relation to the application of triage if there are some factors that are not well implemented can lead to a failure to classify a patient's level (Firdaus, 2018). Emergency nursing association (2014) says that the skills, knowledge, and experience that nurses have will influence in the application of a screening. the survey was conducted at the Hospital Nacional Guido Valadares of 40 respondents who researchers had a higher level of knowledge with a total application of 24 respondents (60.0%).

Meanwhile, a nurse with good knowledge did not follow a triage application of 1 respondent (2.5%), while only one nurses with less knowledge with less knowledge about the application of 1 respondent triage (2.5%) based on the results of analysis of the relationship between the level of knowledge of nurse and the application of the triage at the Hospital Nacional Guido Valadares which analyzed the formula for the correspondent with the added value. (2-tailed) 0.003 lower than $593=0.05$ ($0.003<0.05$), it is interpreted that there is a significant relationship between the two variable persons, on the other side, there is an added value of the added value of the added 0.463 , indicating that there is sufficient level of the relationship between the two variables and the positive correlations due to the taste level of knowledge, including the application of this indicator. The result shows that nurses have knowledge of how to classify patients at a level of illness, provide urgent treatment to patients with critical condition according to their triage priorities.

Also, from the research conducted by court monitors et all (2018) added that their research results conducted in Addis ababa, Ethiopia showed a strong relationship between the level of knowledge and triage skills with the coefficient value of 0.68 and significant 0.01 ($0.01<0.05$).

Conclusion

Based on the results, the relationship between the two variables shows that based on the long duration of work may also be a training for them to increase their skills, knowledge of skills and abilities during course of working finally, see the discussion above, and the researchers concluded that the hypothesis formulated “relates to the knowledge of nurse and the triage application at the Hospital Nacional Guido Valadares,

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it was agreed that there was a relationship between the level of knowledge variable and the application of a triage.

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