

Overview Management Triage at The Emergency Room of The Hospital at Jambi

Suryadi Imran¹, Agus Pairi², Marinawati Ginting³, Erwinsyah⁴

¹ Universitas Adiwangsa Jambi. Stikes Garuda Putih Jambi and suryadiimran72@gmail.com

² Universitas Adiwangsa Jambi. Stikes Garuda Putih Jambi and aguspairi07@gmail.com

³ Universitas Adiwangsa Jambi. Stikes Garuda Putih Jambi and marinajambi96@gmail.com

⁴ Universitas Adiwangsa Jambi. Stikes Garuda Putih Jambi and erwinsyah555@gmail.com

ABSTRACT

Triage, which comes from the French word trier, means sorting or sorting patients based on the patient's ABCD, the severity of the injury, the priority scale of the disease emergency, and the patient's life expectancy, so that the time needed to assess and stabilize the patient is not too long. The purpose of triage is not only to provide fast action but also to prevent disability and death of the patient. The research purposes to find out the description of nurses' knowledge regarding triage at the Emergency Room of Hospital Jambi. The design used in this study is descriptive quantitative w. here the variables are examined at the same time which aims to obtain an overview of the level of knowledge of nurses regarding triage in the IGD RS Jambi. samples from all existing populations, namely 50 nurses who were all on duty at the Emergency Room of Hospital. Province Jambi. Conclusion, results this research the level of knowledge of respondents about triage, the researcher can explain that the level of knowledge of respondents about triage is mostly good with a total frequency of 33 people or 66%, while respondents with sufficient knowledge are 17 people or 33%, meaning that most of the 33 respondents have good ability about triage. It can be concluded that the better the level of knowledge of the nurses, the better the understanding of nurses in the implementation of triage in the management emergency room

Keywords: Management Triage, Emergency Room, Hospital, Jambi

1. INTRODUCTION

Nurse knowledge is needed to support precise clinical decision making in conducting initial assessments and prioritizing patient care according to the type of emergency so that patients receive effective, optimal and targeted treatment, especially at the triage stage. It can be concluded that the better the level of knowledge of nurses, the better the understanding of nurses in the implementation of triage in the ER. Nurses' knowledge regarding triage is not only very useful when nurses are on duty in the emergency room, but also very much needed in disaster management activities. It is important for nurses to have knowledge about triage related to fast, precise and dynamic decision making in a short time with limited information. Nurse errors in triage can result in over triage or undertriage which has an impact on the treatment obtained by the patient and the safety of the patient's life.

In Indonesia itself, the triage system began to be developed in the late 1950s as the number of emergency room visits increased, which exceeded the ability of existing resources to carry out immediate treatment [1]. There are various types of patient classification in triage, for example the Revised Trauma Score (RTS) which uses the parameter of consciousness (GCS), systolic blood pressure (can use per palpation to speed monitoring), and respiratory rate; Injury Severity Score (ISS) which uses 3 body parts parameters, namely A (face, neck, head), B (thorax, abdomen), and C (extremities, soft tissue, skin), where each parameter is given a score of 0 – 5 and then squared and summed ($ISS = A^2 + B^2 + C^2$); Five color triage (in Germany) which uses red, yellow, green, blue and

black, as well as one of the simplest and most commonly used methods, namely the S.T.A.R.T or Simple Triage and Rapid Treatment method which divides sufferers into 4 categories, namely: Priority 1 or Red, Priority 2 or Yellow, Priority 3 or Green, and Priority 0 or Black (RSK. Budi Rahayu Blitar, 2010).

2. LITERATURE REVIEW

The marking on the ATS category describes the maximum time a patient can safely wait for medical assessment and observation. The decision to allocate a triage code using the ATS should take no more than five minutes. Each ED presentation must be assessed as a unique episode of individual illness/injury [2]. The philosophy underlying the use of ATS is based on the values of fairness and efficiency in health services. The ATS has been designed to provide timely assessment and timely medical intervention for everyone presenting to the ED. The implication of this framework is that, in principle, it is neither clinically nor ethically reasonable to allow patients to wait longer than two hours to obtain internal medical care in the ED. Fitz Gerald (1989) first tested the validity and reliability of the Ipswich Triage Scale (ITS), which is an adaptation of the Box Hill Hospital System. He tested the correlation between triage codes and outcome measures, including hospital mortality and visit rates. Informed by this research, the development and implementation of the National Triage Scale (NTS) across Australia occurred in 1993. Subsequent implementation of the ATS was supported by a consultation process by the Commonwealth Department of Family Health Services with clinicians and key professional bodies across Australia. Study by Whitby, Leraci et al (1997) is used in ATS to describe the clinical features associated with urgency and to develop comprehensive descriptions of each of the five triage categories.

Within the ATS framework, urgency is the level of the patient's clinical risk and the severity of the patient's symptoms [3]. The strength of the ATS lies in its use of physiological descriptors to assign a patient's common complaints to the appropriate triage category [4]. This approach can speed up decision making by reducing the time needed to determine the triage code. The implementation of the ATS is underpinned by the formulation of the main complaints identified from a brief history of current illnesses and injuries. Triage decisions using a scale are made on the basis of general appearance observations, focusing on clinical history and physiologic data. The clinician performing the role must have experience in the assessment and management of various diseases and injuries [5]. They must also meet the requirements set by the organization to perform the role. Assessment of their suitability for this role must also be assessed on an individual basis to consistently and independently make clinical decisions in a time-constrained environment. These can be met and are routinely evaluated against nationally recommended performance standards for each of the five ATS categories [6], [7], [8]. The performance thresholds for this indicator are described in the ATS policy document of the Australian Society of Emergency Medicine in detail ATS Categories for Measuring Sharpness and Performance Assessment. ATS Treatment Acuity Category (Time wait maximum) Performance indicator (%); 1. Soon 100, 2. 10 min 80, 3. 30 minutes 75, 4. 60 minutes 70, 5. 120 minutes 70.

The degree to which clinicians agree on the allocation of triage codes across the population is an indication of the reliability of the ATS. For more than a decade, studies have been conducted to assess the attainment of triage consistency using ATS [9]. Although studies have helped in understanding the ways in which nurses use the ATS, they have also repeatedly highlighted

difficulties associated with measuring triage consistency in clinical practice. For this reason, triage consistency evaluation is performed at the macro, not the micro level. For example, the distribution of presentations across the five categories of the ATS, commonly referred to as “footprints”, is helpful in assessing consistency. It can be compared between EDs with similar demographic profiles to detect systemic under or over triage. The collection of physiological parameters at triage requires clinicians to use their best senses to detect abnormalities (see for example, listening, taste and smell). The triage nurse must ensure that patients with physiological disorders are not delayed by the triage process and are allocated to a clinical area equipped to provide the assessment and treatment of their condition.

3. METHODS

Based on an internal study at Five Hospital in Jambi for several triage methods, it was decided to use the ATS (Australian Triage Scale). This method is considered more sensitive because it can divide the yellow and green categories in the START method into two categories. This triage system divides patients into 5 categories, namely 1 (patients not breathing spontaneously), 2 (patients shortness of breath with impaired circulation), 3 (patients not breathless with impaired circulation), 4 (patients can walk with minor injuries but require laboratory tests additional), 5 (the patient can walk with very minor injuries without having to perform additional laboratory tests). ATS began to be implemented at Hospital. Jambi since January 2023. Initial interviews with several emergency nurse practitioners at the Hospital in Jambi showed that ATS had an impact on reducing patient overcrowding in the triage room and these results were highly correlated with the consuming time in the triage room. There are many factors that affect the knowledge of nurses, especially regarding the proper and effective implementation of triage in the emergency room, namely: the level of education of nurses, work experience of nurses, information obtained by nurses, culture and habits (Notoatmojo, 2003). Realizing that the knowledge of the ER nurses regarding triage plays a big role in providing fast and satisfying service to customers in the ER, The ATS is used as an indicator of quality in the Emergency Department. The ATS aims to provide a timely assessment of all persons presenting to the ED based on clinical criteria. The time required for handling.

4. RESULTS AND DISCUSSION

Discussion

Based on the results of the frequency analysis related to the characteristics of the respondents, which consist of Gender, Age, Education Level, length of service and triage training that the respondent has attended, the researcher can explain in the table below:

Table 1. Frequency Distribution of Gender Characteristics, and Age of Respondents at Emergency Room in Hospital Jambi Year 2023

Amount	Sex				Age					
	LK	f	PR	f	20-30 year		31-40 year		>40 year	
					f	f	f	f	f	f
	28	56	22	44	14	28	28	56	8	16

From the results of the frequency distribution for the gender and age of the respondents, it can be explained that, for the sex of the officer on duty at the Emergency Room of Hospital On Jambi as many as 50 people, dominated by male sex, namely as many as 28 people or 56% and officers who are female as many as 22 respondents or 44%.

Then for the age characteristics of the respondents who served in the emergency room at emergency room Hospital in Jambi are in the age range of 31-40 years, namely 28 people or 56%, while for ages 20-30 years and ages over 40 years each are 8 people or 16%.

Then the characteristics of respondents based on education level and length of service can be seen in table 2 below:

Table 2. Frequency Distribution of Respondent Characteristics by Education Level in the Emergency Room at Hospital in Jambi Year 2023

No	Level of education					
	D III		D IV		Ners	
	f	f	f	f	f	f
N	34	68	0	0	16	32

Based on the results of the frequency distribution of the characteristics of the respondents according to the level of education of the respondents who served in the Emergency Room at Hospital In Jambi can the researcher explain that overall the respondents' level of education is Diploma III in Nursing.

Furthermore, the frequency distribution of respondents based on length of service in the Emergency Room at Hospital in Jambi can be seen in table 3 below:

Table 3. Frequency Distribution of Respondents Based on Length of Service in the Emergency Room at Hospital in Jambi Year 2023

No	Length of Working Period					
	< 1 year		1-3 year		> 3 year	
	f	f	f	f	f	f
N	0	0	0	0	50	100

Table 4. Frequency Distribution of Respondent Characteristics According to Triage Training History Attended

Amout	Triage Training			
	Ever		Never	
	f	f	f	f
N	50	100	-	-

Based on the frequency distribution of respondents who work Emergency Room At Hospital In Jambi, it is known that all respondents have attended training on emergency triage management.

Table 5. Distribution of Respondents' Knowledge Levels About Triage

No	Level Of Education	f	%
1	not enough	0	0
2	Enough	14	28
3	Good	36	72
	n	50	100

From the distribution table of respondents' level of knowledge about triage, the researcher can explain that the level of knowledge of respondents about triage is mostly good with a total frequency of 36 people or 72%, while respondents with sufficient knowledge are 14 nurse or 28%, meaning 50 respondents Most of them have good skills regarding triage.

Based on the results of the distribution of the characteristics of the respondents consisting of Gender, Age, from these two characteristics it can be concluded that even though it is not clear whether there is a relationship or not, these two characteristics can clearly answer that gender and age are not so influencing nurses on duty in the emergency room to their knowledge of triage. Furthermore, for educational characteristics, years of service and triage training followed, it can be explained that these characteristics play a role in nurses' knowledge of triage in the Emergency Room at Hospital in Jambi.

Furthermore, regarding the level of knowledge of nurses in the Emergency Room At Hospital In Jambi, with the research results Most of their knowledge is good, because they have received training and applied the concept of intra-hospital triage with the Australian Triage Scale (ATS) riage model, this is in accordance with the theoretical concept put forward by Pusponegoro, (2010) Triage originating from trier French means sorting or sorting patients based on the patient's ABCDEs, the severity of the injury, the priority scale of the disease emergency, and the patient's chances of survival, so that the time needed to assess and stabilize the patient is not too long. The purpose of triage is not only to provide fast action but also to prevent disability and death of the patient. Nurses' knowledge regarding triage is not only very useful when nurses are on duty in the emergency room, but also very much needed in disaster management activities. It is important for nurses to have knowledge about triage related to fast, precise and dynamic decision making in a short time with limited information. Nurse errors in triage can result in overtriage or undertriage which has an impact on the treatment received by the patient and the patient's mental safety.

Then the concept put forward by SSR. Budi Rahayu Blitar, (2010), There are various types of classification of patients in triage, for example Revised Trauma Score (RTS) which uses awareness parameters (GCS), systolic blood pressure (can use per palpation to speed up monitoring), and respiratory frequency; Injury Severity Score (ISS) which uses 3 body parts parameters, namely A (face, neck, head), B (thorax, abdomen), and C (extremities, soft tissue, skin), where each parameter is given a score of 0 – 5 and then squared and summed ($ISS = A^2 + B^2 + C^2$); Five color triage (in Germany) which uses red, yellow, green, blue and black, as well as one of the simplest and most commonly used methods, namely the S.T.A.R.T or Simple Triage and Rapid Treatment method which divides sufferers into 4 categories, namely: Priority 1 or Red, Priority 2 or Yellow, Priority 3 or Green, and Priority 0 or Black.

Furthermore, Royal Darwin Hospital, (2012) Autralian Triage Scale or ATS is used as an indicator of quality in the Emergency Room. The ATS aims to provide a timely assessment of all people who come to the ER based on clinical criteria. The time required for treatment listed in the ATS category represents the maximum time a patient can safely wait for medical assessment and observation. The decision to allocate a triage code using the ATS should take no more than five minutes. Each ED presentation should be assessed as a unique individual episode of illness/injury. The triage nurse must ensure that patients with physiological disorders are not delayed by the triage process and are allocated to a clinical area equipped to provide the assessment and treatment of their condition. Diagram 1 illustrates the recommended triage method.

This research is also in line with research conducted by Ifa Khairina, Hema Malini, Emil Huriani (2020). The results of the study found that in the aspect of knowledge that was least practiced by nurses was the aspect of selecting the triage category with a percentage of 96.3%, and the aspect of nurses' triage skills in allocating patients was in the sufficient category, namely as much as 83.3%. The purpose of triage management was to ensure that patients who need health services through the Emergency Room (ER) receive treatment according to their priority level. Triage training and the use of modules and algorithms can make the triage process more practical, optimal and efficient so as to improve service quality and patient satisfaction.

However, this research is not in line with Ita Rosita's research (2018). With the results of the study the majority were middle adults 59.4%, DIII Nursing education 90.6%, working period PK III 9-13 years 56.3%, attended triage training 68.8%, had good knowledge 68.8%. Bivariate analysis

statistically showed a significant relationship between age ($p=0.016$), attending triage training ($p=0.000$) and nurses' knowledge of the triage system ($p<0.05$). There was no significant relationship between education level ($p=0.936$), length of work ($p=0.772$) and nurses' knowledge of the triage system ($p>0.05$). This means that the results of this study explain that length of service does not affect nurses' knowledge of triage.

Although these two studies are different, there are similarities which explain that good knowledge influences nurses in carrying out triage in the Hospital Emergency Room, so that from the results of research conducted by researchers it can be assumed that good knowledge can influence the implementation of triage for nurses on duty in the Emergency Room At Hospital In Jambi. Of course, there are several efforts that must be made by nurses and management, such as continuing to increase knowledge about triage either through training or seminars or workshops that are routinely carried out to update and upgrade nurse knowledge so that nurses become more understanding and skilled in conducting triage in the emergency room

CONCLUSION

Based on the results of this study, it can be concluded that the better and more frequently the officers attend training on triage, the higher the level of knowledge so that they can carry out triage actions in Emergency Room at Hospital in Jambi very well.

FURTHER STUDY

In general, this study only looks at the general description of nurses' knowledge about triage in the emergency department of Emergency Room at Hospital in Jambi, with a simple analytical method, apart from that this research was conducted in only one place so it cannot be generalized to all hospitals in the city of Jambi. for further research it is necessary to do with a larger number of samples and compared with 2 Province or more hospitals, so that the sample characteristics are more varied, with an analytical model that can compare the results of studies from several different places

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