

THE ROLE OF PRECEPTOR AND KNOWLEDGE OF STUDENTS ON TRIAGE SKILLS IN THE EMERGENCY UNIT

PERAN PEMBIMBING DAN PENGETAHUAN TERHADAP KETERAMPILAN TRIASE MAHASISWA DI INSTALASI GAWAT DARURAT

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ABSTRACT

Nurse profession students are required to have skills in triage. So that when students do triage, there will be no over-triage and under-triage. This study aimed to determine the relationship between the preceptor role and knowledge of nursing profession students' perceptions of triage skills. This study was a descriptive-analytic study using a cross-sectional approach. The sampling technique used a consecutive sampling technique where the research was conducted for one month. The number of respondents in this study was 84 students of the nursing profession. Data were collected using instruments preceptor role questionnaire (PRQ), triage knowledge questionnaire (TKQ), and triage skill questionnaire (TSQ). Analysis of the research data showed that 58.3% of the students' preceptor roles were good, 53.6% had sufficient triage knowledge, and 58.3% of students perceived their triage skills to be good. There were significant correlations between the preceptor's role and expertise with the perception of triage skills of nursing profession students with a p-value <0.05. It is recommended to improve the knowledge and skills of professional nursing students through lectures on triage using a role-play or scenario learning system to enhance the knowledge and skills of triage students of the nursing profession.

Keywords: triage skills; preceptor role; knowledge

ABSTRAK

Mahasiswa program profesi ners dituntut untuk kompeten dalam melakukan keterampilan triase sehingga terhindar dari kesalahan dalam melakukan triase seperti over triage dan under triage. Tujuan penelitian ini adalah untuk mengidentifikasi hubungan peran preceptor dan pengetahuan dengan keterampilan triase pada mahasiswa program profesi ners. Desain penelitian adalah deskriptif analitik dengan pendekatan cross-sectional study. Jumlah sampel adalah 84 orang mahasiswa program profesi ners yang praktek di Instalasi Gawat Darurat salah satu rumah sakit di Kota Padang. Instrumen penelitian yang digunakan yaitu Preceptor Role Questionnaire (PRQ), Triage Knowledge Questionnaire (TKQ), dan Triage Skill Questionnaire (TSQ). Analisis statistik yang digunakan adalah uji Chi-square. Hasil penelitian menunjukkan bahwa peran preceptor baik (58,3%), pengetahuan triase cukup (53,6%), dan keterampilan triase mahasiswa baik (58,3%). Peran preceptor dan pengetahuan berhubungan dengan keterampilan triase mahasiswa program profesi ners dengan ($p < 0,05$). Disarankan agar institusi pendidikan menerapkan metode pembelajaran role play atau skenario untuk perkuliahan mengenai triase agar dapat meningkatkan pengetahuan dan keterampilan triase mahasiswa program profesi ners.

Kata Kunci: keterampilan triase; peran preceptor; pengetahuan



INTRODUCTION

Emergency services are vital in providing services for patients who need various types of emergency assistance (El-Guindy et al., 2021). An emergency is a clinical situation where the patient has a risk of losing his life or being disabled, so it requires immediate medical attention (Said & Mappanganro, 2018). For this reason, the hospital provides an Emergency Room (ER) as the first point of contact with patients.

Every year, the number of patients coming to the emergency room always increases; in 2017, there were around 5 million people, increasing in 2020 to more than 8 million people (Awwad et al., 2021). Every year, the Ministry of Health of the Republic of Indonesia reports an increase in the number of patient visits to all emergency departments by 30% in 2018 (Damansyah & Yunus, 2021).

Health workers in the emergency room need to provide responses and actions according to the emergency priority level for each patient by referring to the triage system (El-Guindy et al., 2021). Each emergency room in each country uses a specific triage system as a guideline for assessing the level of emergency and treatment priorities for patients who need treatment (Ahsan et al., 2019).

Triage is a system of classifying patients quickly and precisely according to priority and providing care to patients with urgent conditions first. Through triage, patients can be separated from non-urgent conditions and will not experience life-threatening conditions if they wait for treatment (Moon et al., 2021). The main goal of triage is that patients can be grouped according to treatment needs, and treatment priorities can be determined (Admin et al., 2020). Triage is useful as a support for health workers in identifying life-threatening conditions, establishing appropriate assessments, and setting treatment priorities according to severity (Lampi et al., 2018).

Emergency nurses can do triage properly, and skills in doing triage are an essential aspect. Skills are based on having

adequate knowledge to perform a specific action (Stanley & Williamson, 2017). The impact that can occur if the nurse has inadequate skills in triage is over-triage or under-triage. A study by Goldstein et al. (2017) showed that inaccurate triage assessments occurred in 50% of patients who came to the emergency department.

Knowledge about triage skills is needed for nurses who experience it. However, this is also experienced by students in the professional nursing program, following the results of research by Widiawati et al. (2021), where 39.5% of students have low triage skills. A similar picture can also be seen from the research conducted by Harigustian (2021), which showed that 42.9% of students had terrible skills.

Various factors affect the skills of students practicing the nursing profession in clinical practice in hospitals, one of which is the role of clinical supervisor. If the clinical supervisor carries out his role well, it can improve student skills. This is consistent with the results of previous research, which showed that the role of clinical supervisors was in the excellent category and student satisfaction in clinical practice was in the suitable category (Damanik et al., 2021).

Various roles were identified as the role of natural clinical supervisors to improve the skills of health students. These roles include a socializer, skill developer, role model, and critical thinker in taking action in hospital services (Widiawati et al., 2021). In addition to the factor of the supervisor's role, the knowledge factor also influences students' skills in conducting triage. A previous study by Duko et al. (2019) showed that almost half of the triage nurses had insufficient knowledge about triage.

Various factors affect the skills of nursing students in carrying out clinical practice in hospitals, one of which is the role of clinical supervisor. If the clinical supervisor carries out his role well, it can improve student skills. This is consistent with the results of previous research, which showed that the role of clinical supervisors was in the excellent category and student satisfaction in clinical practice was in the suitable category (Damanik et al., 2021).

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METHODS

This research is quantitative research with an analytical design (analytical). This study used a cross-sectional approach in which the research was carried out by measuring/observing data on the variables of the supervisor's role, knowledge, and triage skills in students of the professional nursing program in the ER which were carried out once at the same time.

Determination of the sample using consecutive sampling technique, where students who practice at the research location at the time of data collection are used as samples. The sample in this study was 84 students from the professional nurse program who came from 4 educational institutions and practiced at the time of data collection, which was for one month, with the inclusion criteria of the research sample, namely, students of the nurse profession program who are willing to be respondents, students of the nurse profession program with the High School (SMA) pathway and students of the nurse profession program who have been in charge of the triage department of the ER RSUP, Dr M. Djamil Padang. Meanwhile, the exclusion criteria for this research sample were students of the nursing profession program who were in exam week at Dr M. Djamil Padang.

The instruments in this study used the preceptor role questionnaire (PRQ) (Widiawati et al., 2021), the triage knowledge questionnaire (TKQ) (AlMarzooq, 2020), and the triage skill questionnaire (TSQ) (Widiawati et al., 2021). The

supervisor role questionnaire consists of 15 question items using two answer options: yes and no. The assessment on this questionnaire is that the answer yes gets point 1 and the answer does not get point 1. The categorization of results uses the median value where the role of the supervisor is good if median (28) and the role of the supervisor is lacking if < median (28). The validity value of this instrument was obtained by Cronbach's Alpha = 0.962.

In the triage knowledge questionnaire, 18 question items are using multiple choice with an assessment of the number of correct answers getting point 1 and wrong answers getting point 0. The categorization of triage knowledge uses percentages by Swarjana (2022), namely good category (76% -100%), category enough (56%-75%), and less (<56%). The results of the validity and reliability tests with the Cronbach alpha value obtained for this questionnaire were 0.935 (Almarzooq, 2020).

The triage skills questionnaire instrument has 15 question items with alternative answers using a Likert scale, never getting point 1, sometimes getting point 2, often getting point 3, and always getting point 4. The categorization of results follows the provisions, namely either mean (≥ 48) and less good mean (< 48). The results of the validity test obtained Cronbach's Alpha value = 0.967. Data collection was carried out using google from the link, which was directly distributed to respondents. The research Ethics Committee of RSUP Dr M Djamil Padang No LB.02.02/5.7/150/2022 dated 19 April 2022.

RESULTS

Table 1 states the characteristics of the 84 research respondents from 4 educational institutions, with the majority of respondents aged 24 years and a small proportion of respondents aged 25 years. The percentage of students in the nursing program with female sex is more than males with 92.9%.

Table 1. Respondents' Demographic Characteristics (n=84)

Characteristics	f	%
Age		
23 years	23	27.4
24 years	45	53.6
25 years	16	19.0
Gender		
Male	6	7.1
Female	78	92.9

Preceptor Role, Knowledge, and Triage Skills

Table 2 shows that 49 students of the professional nursing program rated their supervisor's role as good, with a percentage of 58.3%. Most of the students in the professional nurse program regarding triage had sufficient knowledge, namely, as many as 45 students in the nurse profession program. Moreover, 49 students of the professional nursing program perceived their triage skills as good, with a percentage of 58.3%.

Table 2. Role of Preceptor, Triage Knowledge, and Triage Skills (n=84)

Variable	f	%
Role of preceptor		
Good	49	58.3
Poor	35	41.7

Triage Knowledge		
Good	23	27.4
Sufficient	45	53.6
Poor	16	19.0
Triage Skills		
Good	49	58.3
Poor	35	41.7

The Relationship between the Role of Preceptor and Knowledge with Triage Skills

The chi-square test results showed $p = < 0.05$, which means that there is a relationship between the supervisor's role and triage skills. Most of the nursing profession program students assessed that their supervisor's role was not good, with their triage skills also not good, namely 68.6%. Meanwhile, almost all students of the nursing profession program rated their supervisor's role as good with good triage skills, namely 77.6%.

Based on the chi-square test showed $p = < 0.05$, which means there is a relationship between knowledge and triage skills. Most nursing professional program students have poor knowledge and triage skills, namely 68.8%. At the same time, almost all students from the nursing profession program had good knowledge with good triage skills, namely 91.3%.

Table 3. The relationship between the Role of Preceptor and Knowledge of Triage Skills (n=84)

Triage Skills							P Value
Poor		Good		Total			
f	%	f	%	f	%		
Preceptor role							0,000
Poor	24	68.6	11	31.4	35	100	
Good	11	22.4	38	77.6	49	100	
Total	35	41.7	49	58.3	84	100	
Knowledge							0,000
Poor	11	68.8	5	31.3	16	100	
Sufficient	22	48.9	23	51.1	45	100	
Good	2	8.7	21	91.3	23	100	
Total	35	41.7	49	58.3	84	100	

DISCUSSION

The results of this study indicate that most of the students in the nursing profession program assess the role of the supervisor as good. This is in accordance with research conducted by Damanik et al., (2021) that almost all the roles of

student supervisors during practice at the TK IV Army Hospital were in the excellent category, with a percentage of 82.7%, while only a tiny portion of the role of student supervisors is in the less category, namely 17.3%.

Based on questions from the questionnaire on the role of supervisors in skill building, almost all students said that the role of student supervisors was good, namely as much as 90.5%. The role of supervisors in skill building is considered reasonable by students, this can be caused by supervisors who only guide 3-5 students. Therefore, with a small number of students whom supervisors supervise, the guidance process is expected to be more optimal.

The supervisor's role in critical thinking gets first place with a destructive role, namely 38.1%. The role of supervisors in critical thinking needs to be improved to be caused of the lack of supervisors in guiding students in the professional nursing program due to limited time to guide students. When students get a supervisor who has an important position in the hospital, this dramatically impacts the unavailability of tutoring time for students, due to the busyness of the supervisor. Suppose the relationship between supervisors and students could be more harmonious. In that case, it can lead to situations and conditions in the teaching process that are not conducive, so the transfer of knowledge is not optimal, and the achievement of competencies is hampered (Mailani & Handayani, 2020).

Most students in the professional nursing program have sufficient knowledge about triage. This is in line with research conducted (Harigustian, 2021). Almost half of the nursing students have poor knowledge. All students answered correctly based on questions from the triage knowledge questionnaire regarding the definition of triage. This can be caused because students who, before leaving the profession in the ER, have been given an orientation regarding triage and the provision of knowledge regarding triage during lectures first.

Student knowledge regarding the purpose of triage has the first order with the less category, which is equal to 85.7%. Lack of student knowledge, one of which can be caused

by the ineffectiveness of the lecture methods used by institutions in increasing student knowledge.

Increasing student knowledge can be increased by increasing lecture meetings regarding triage. Role-playing methods can also be carried out by students playing roles in an environment similar to a clinical environment so that students are better prepared to deal with real cases while in the hospital.

As many as 49 students of the nurse profession program perceived their triage skills as good. This is consistent with research conducted by Harigustian, (2021) that most nursing students have good triage skills, with a percentage of 57.1%.

Based on questions from the triage skills questionnaire, students perceive their skills well regarding categorizing patients, which is equal to 69%. With the large number of patients arriving at the Emergency Room of RSUP, Dr M. Djamil Padang then, this can train students skills in conducting triage on patients. In addition, the provision of knowledge that students get during lectures and practicum lectures can also be the cause of good student skills.

Triage skills in conducting rapid assessments of students perceive their skills to be not good, namely 48.8%. This can be caused by the need for more opportunities for students to participate in triage. In addition, because students are still in the learning stage for rapid assessment, it is a challenge for students, and it takes time to practice.

Educational institutions must improve the triage skills of professional nurse program students to avoid mistakes in determining patient triage. One of them is that institutions can evaluate the lecture system so that institutions can find out whether the causes of lecture methods are less effective or from the small number of practicum meetings. In addition, simulations in conducting triage carried out repeatedly will also impact increasing students' skills in conducting triage (Addiarto & Wahyusari,

2018).

Almost all students in the nursing profession program rated their supervisor's role as good with good triage skills, namely 77.6%. Meanwhile, the majority of students in the nursing profession rated the role of supervisor as unfavorable, with poor triage skills, namely 68.6%. This is because the supervisor is very influential on student skills in carrying out triage skills.

This study's results align with research conducted by Widiawati et al. (2021), which showed a relationship between the role of supervisors and the triage skills of nursing students in the ER Jambi Provincial Hospital in 2019.

By what was said by Wiji et al. (2018) that clinical supervisors significantly contribute to student learning while in the hospital to get good learning outcomes. The study's results stated that 38 students rated the supervisor's role as good, and 77.6% of students perceived their skills as well. Meanwhile, of the 24 students who rated the supervisor's role as poor, 68.6% of students perceived their skills to be poor. This indicates that student supervisors significantly contribute to improving student skills.

Supervisors need to maximize their role as mentors so that students of the nursing profession program have good skills. Students must also have the desire to learn from the knowledge that their supervisor has given. Because when the clinical supervisor gives his role as a supervisor to the fullest, but if the student does not want to learn from his supervisor, then it will affect the potential that will be achieved by the student (Sihombing, 2020).

A total of 21 students from the nursing profession program had good triage knowledge with good triage skills, namely 91.3%. Nearly half of the nursing professional program students have sufficient knowledge with poor triage skills, namely 48.9%. For the triage knowledge of students in the professional nurse program, the percentage of 68.8% could be better. This study's results align with research conducted by Widiawati et al. (2021), which showed a

relationship between knowledge and triage skills of nursing students in the ER at Jambi Provincial Hospital in 2019.

The study's results stated that 21 students rated their knowledge of triage as good, and 91.3% perceived their triage skills as well. This can be caused by the number of patients who come to the emergency room of RSUP Dr. There are many M. Djamil Padang, so students' triage skills will also be trained. In addition, students are also equipped with knowledge about triage before going down to the profession in the ER because students need to learn triage to be skilled at doing triage. Meanwhile, 5 students rated their triage knowledge poorly, and 31.3% perceived their skills as good. This is because, with the large number of patients arriving, students' skills will continue to be trained so that students can perceive their skills well.

Increasing students' knowledge and skills regarding triage is changing learning methods using role-playing or simulation methods so that there are no mistakes in categorizing patients based on triage. With a lot of learning experience, it will become the basis for students in conducting triage so that student triage skills can increase significantly (Addiarto & Wahyusari, 2018)

CONCLUSION

The clinical supervisor of the nursing profession program students in the ER showed a role in the excellent category, the knowledge of the nursing profession program students was in a suitable category, and the triage skills of the nursing profession program students were in the excellent category. There is a relationship between the role of mentors and knowledge of the triage skills of the nurse profession program students in the ER.

Nursing professional program educational institutions are expected to be able to apply role-playing-based learning methods to increase the knowledge of nursing professional program students about triage. The hospital is expected to be able to reconsider the appointment of clinical supervisors for students practicing the nursing

profession so that nurses who have positions at the hospital are not used as clinical supervisors for students.

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