DESCRIPTION OF KNOWLEDGE, ATTITUDES AND SKILLS OF ACACIA ROOM NURSES ABOUT EARLY WARNING

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ABSTRACT

Background: Early warning score is a process of early detection of patients before the occurrence of emergency conditions. The Akasia Room in Dr. Bratanata Jambi adopts EWS from the Royal Collage of Physicians, 2017. Nurses who have good knowledge as well as a positive attitude can easily apply skills about EWS thus reducing the length of patient care. To overview of the knowledge, attitudes and skills of nurses about the Early Warning Score at Akasia room Dr. Bratanata Jambi hospital.
Methods: This study uses a quantitative research design with descriptive research methods and total sampling techniques, namely the number of samples used is the total of the total number of existing populations. Of the 16 samples, almost all respondents had good knowledge and one respondent had sufficient knowledge because they answered incorrectly in the EWS parameter category. All respondents had a positive attitude and carried out observations according to the number of scoring patients with *Early Warning Score* skills.
Conclusion: The nurses in the Acacia room have good knowledge and a positive attitude so that the skills about the *Early Warning Score* are carried out in the form of documentation and observation in accordance with the number of patient scoring scores.

Keyword: Attitude, Early Warning Score, Knowledge, Skills

PENDAHULUAN

The hospital is a place to provide care to patients with increasingly complex patient conditions. Physiological changes in patients can occur several hours until finally the patient's vital condition is abnormal (Bobonera et al. 2022) (Hakim 2023) . The increase in patient morbidity and mortality rates can be influenced by patient services while in the inpatient room which involves hospital service elements. Patients admitted to the inpatient room have stable conditions and there are also those whose conditions are unstable, this can be caused by the high demand for intensive care rooms that are not in accordance with the availability of existing rooms so that patients must be placed in ordinary care rooms with all the limitations that exist. Deterioration of the clinical condition of patients in the inpatient room is preceded by abnormal changes in the cardiovascular, respiratory and neurological systems (De Souza Esteves et al. 2025) (Yadav et al. 2024) (Yulia, Mustikasari, 2012).

The mortality rate is an indicator of the health service process which is classified into two categories, namely, deaths under 48 hours and deaths over 48 hours which are assessed through the Gross Death Rate (GDR) and Net Death Rate (NDR) indicators. The standard for patient mortality in hospitalization > 48 hours according to the minimum standard of hospital service is≤ 0.24%. Exact data on mortality rates in all Indonesian hospitals have not been found. In PKU Muhammadiyah Surakarta hospital, it was found that the GDR in 2016 showed a number of 14.73, while the NDR value was 7.73, which means that it is still high, exceeding the minimum standard of hospital services (Pratama, Mulia, 2017).

One of the hospital strategies to assess the worsening condition of patients is to use the Early warning Score (EWS), which is a system of requesting assistance to the code blue team to overcome patient health problems before the worsening condition of the patient (Burgos-Esteban et al. 2022) (Ii 2021). Assessment of changes in the patient's condition through systematic observation of all physiological changes in the patient (Ekawati A and Saleh J 2020) . This system is a proactive approach concept to improve patient safety and better clinical patient outcomes by standardizing the assessment approach and establishing simple scoring of physiological parameters (Thomas et al. 2021) (Masela, Kosasih, and Emaliyawati 2023) . Early Warning Score has been developed and there are several variations, including National Early Warning Scores (NEWS), Modified Early Obstetric Warning Scores (MEOWS), and Pediatric Warning Scores (PEWS) (Pagala, Shaluhiya, Widjasena, 2017).

The EWS scoring system on clinical changes in patients uses physiological assessment, namely systolic blood pressure, pulse, temperature, oxygen saturation, O2

device requirements, urine production and consciousness status to detect worsening of the patient's condition with the aim of reducing the mortality rate of hospitalized patients and preventing irreversible changes in the condition of hospitalized patients (Astuti, Trisyani, and Mirwanti 2023) . The Early Warning Score (EWS) assesses 6 physiologic components of the patient: consciousness, systolic blood pressure, pulse rate, oxygen saturation, respiratory frequency and temperature. Patient deterioration can occur when the evaluation and implementation of EWS is not in accordance with the algorithm (Wiliam, Alberti, Blinks, Durham, 2012).

Based on research conducted by Firmansyah (2015), Desy (2017) and Mentari (2017) that the implementation of EWS has not been implemented optimally, besides that EWS is a requirement for hospital accreditation and the implementation of EWS assessment in hospitals is very helpful for nurses in identifying declining patient conditions, so researchers are interested in conducting research on EWS. Researchers decided to choose Dr. Bratanata Jambi hospital to conduct research because the hospital is one of the teaching hospitals in Jambi City and there has been no research on EWS in the hospital.

The high number of code blue is one of the clues that the implementation of EWS has not been implemented properly (Gadhoumi et al. 2021) . After taking preliminary data in the Acacia room of Dr. Bratanata Jambi hospital, data were obtained that the incidence of code blue calls in 2019, 2020 and 2022 were 2, 4 and 2 events. This is the basis for conducting research in the Acacia room. The Acacia room adopted the EWS from Royal Collage of Physician, 2017 which has been adapted to the circumstances of Dr. Bratanata Jambi hospital.

The Acacia room is one of the adult special inpatient rooms with various diseases, both patients who are hospitalized, patients who will carry out surgery or patients who have carried out surgery with a total of 16 bads and the number of patients between 10-13 people. After the initial data collection in the Acacia room, it was found that the number of implementing nurses was 16 people.

Based on preliminary data surveys, researchers are interested in conducting research on how the Knowledge, Attitudes and Skills of Acacia Room Nurses about Early Warning Score (EWS) at Dr. Bratanata Jambi Hospital".

METHODS

This research was conducted with a quantitative approach using absolute numbers in the form of frequencies and relative values in the form of percentages. The research method used is descriptive research to describe events in the field in the form of knowledge, attitudes and skills of

nurses in the Acacia room of Dr. Bratanata Jambi hospital with a population of 16 nurses. Researchers used total sampling, namely the entire population as a sample in the study. The instruments used in this study are demographic data questionnaires, nurse knowledge questionnaires, nurse attitude checklists and nurse skill checklists adopted from the University of North Sumatra which are adapted to the conditions and assessments of the hospitals that researchers will use as research sites and have conducted validity and reliability tests by referring to existing concepts and theories.

RESULTS

Table 4.1 Frequency and Percentage Distribution of Respondents' Characteristics

Respondent Characteristics	Frequency	Percentage (%)
Age		
26-35 years old	7	43,8
36-45 years old	9	56,3
Gender		
Female	16	100
Education		
D III Nursing	16	100
Lenght of Service		
1-10 years	7	43,8
11-20 years	6	37,5
21-30 years	3	18,8

Table 4.1 shows that the characteristics of respondents include age, gender, latest education and length of work. The data obtained shows that the majority of respondents aged 36-45 years are 9 people (56.3%), 16 female respondents (100%), respondents who have a D III Nursing education level 16 people (100%), and respondents who have a long working experience of 1-10 years are 7 people (43.8%).

Table 4.2 Frequency and Percentage Distribution of Acacia Room Nurses' Knowledge of Early Warning Score (EWS) at the Hospital Dr. Bratanata Jambi

Nursing Knowladge	Frequency	Percentage (%)
Good	15	93,8
Simply	1	6,3
Less	0	0

Based on table 4.2, the results showed that of the 16 respondents who had been studied, there were a majority of nurses who had good knowledge about EWS as many as 15 people (93.8%), nurses who had sufficient knowledge were 1 person (6.3%).

Table 4.3 Frequency and Percentage Distribution of Acacia Room Nurses' Attitudes about Early Warning Score (EWS) at the Hospital Dr. Bratanata Jambi

Nurse Attitude	Frequency	Percentage (%)
Positive	16	100
Negative	0	0

From table 4.3 it can be seen that the results showed that of the 16 respondents studied, all nurses had a positive attitude about EWS as many as 16 people (100%).

Table 4.4 Frequency Distribution of Acacia Room Nurse Skills about Early Warning Score (EWS) at the Dr. Bratanata Jambi

Frequency Nurse	Patient Scoring Score	Description
9 people	0 (Green)	Perawat melakukan dokumentasi dan observasi setiap 8 jam
5 people	1 (Green)	Perawat melakukan dokumentasi dan observasi setiap 8 jam
1 people	2 (Yellow)	Perawat melakukan dokumentasi dan observasi setiap 2 jam
1 people	3 (Yellow)	Perawat melakukan dokumentasi dan observasi setiap 2 jam

Based on table 4.4, it can be concluded that all Acacia room nurses carry out early detection with EWS according to the number of patient scores and at the time of observation. Where there are no patients who have orange and red scoring, so nurses do not perform early detection on patients with orange and red scoring categories. So that the nurse's skills about EWS are carried out all according to the condition of the patients in the room.

Table 4.5 Frequency and Percentage Distribution of Acacia Room Nurse Skills about Early Warning Score (EWS) at the Dr. Bratanata Jambi

Nurse Skills	Frequence	Percentage (%)
Yes (Doing as per scoring)	16	100
No (Did not perform as scored)	0	0

Based on table 4.5, it can be concluded that the skills of nurses about EWS, all 16 room nurses perform early detection using EWS according to the patient's condition so that the documentation

and monitoring carried out are in accordance with the number of patient scores with a value of (100%).

DISCUSSIO

4.1 Acacia Room Nurses' Knowledge about Early Warning Score (EWS) at Dr. Bratanata Jambi Hospital

Knowledge is the result of a person knowing a certain object obtained through his sensory organs, both through the eyes and ears (Baruwa and Shutaleva 2022) (Ariga, Astuti, 2020)

The results showed that of the 16 respondents studied, the majority of room nurses had good knowledge about Early Warning Score as many as 15 people (93.8%). This shows that almost all respondents understand about EWS with the majority of correct answers on questions of purpose (100%), frequency of observation (100%), and case intervention (100%) with an average of all respondents answering correctly. For the question of parameters assessed in EWS, almost all respondents answered incorrectly, only 3 respondents (18.85) answered correctly with the average respondent's answer being diastole blood pressure, while the answer that should be used to assess EWS parameters is systole blood pressure.

One of the factors affecting nurses' knowledge in the Acacia room is good because nurses have more than 6 years of work experience, so that nurses' long enough work experience can help nurses to better understand and understand about EWS. This is in line with Mubarak's statement (Mubarak, 2011) that knowledge can be influenced by several factors including education and experience.

The results of this study are in line with research conducted by Manurung on the Overview of the Level of Knowledge of Nurses in the application of Early Warning Score (EWS) in the 2nd, 5th and 6th Floor Treatment Rooms of Siloam Dhirga Surya Hospital. It is said that almost half of the nurses (43.2%) have good knowledge, some nurses have sufficient knowledge (54.1%) and only 1 person (2.7%) has less knowledge about EWS.

The same research was conducted by Olang, et al about Nurses' Knowledge of Early Warning Score at a Private Hospital in Eastern Indonesia. In this study it was said that almost all nurses had good knowledge about EWS (81.25%). This can be caused by the large participation of nurses in attending training conducted once a month.

Another study conducted by Purnamasari, et al about the Relationship between Nurses' Knowledge of Initial Assessment and Aplication of Early Warning System at Emergency Department of Type A Hospital in Jakarta said that the higher the knowledge of nurses, the more behavior will increase. Of course, this must be balanced with regular training of nurses'

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concepts and skills to maintain good use of EWS.

Based on the results of the demographic data obtained, it shows that the majority of nurses in the Acacia room are 36-45 years old as many as 9 people (56.3%). This shows that age is also a factor that can affect the increase in one's knowledge. In line with research conducted by Mubarak that a person's maturity and strength will increase with age, thus affecting thinking patterns and the knowledge gained will be better.

From the results of other demographic data obtained, namely gender, where all respondents are female (100%). This is in accordance with Halpern's research (1997) which says that women are better in terms of verbal ability, in mathematical calculations, and tasks involving motor and perception, while men tend to be better at room skills and scientific reasoning so that the results of the study say that the majority of nurses' knowledge is in the good category.

The results of other demographic data obtained are that the education of nurses in the Acacia room is all D III (100%). According to Notoadmojo, knowledge can be obtained from the learning process during education. This is in line with Mubarak, the higher a person's education, the easier it is to receive information so that the knowledge gained will be wider. Meanwhile, nursing education is an important process that nurses must go through to achieve professionalism. Based on the above statement, it can be said that education is one of the supporting factors for a person's level of knowledge

4.2 Acacia Room Nurses' Attitudes about Early Warning Score (EWS) at Dr. Bratanata Jambi Hospital

Attitude is a person's reaction that involves emotional feelings towards an object that is considered in accordance with the state (Ajzen 2001) .

In this study the attitude of nurses about EWS showed that all nurses in the Acacia room had a positive attitude about EWS as many as 16 people (100%). This can be caused by the majority of nurses in the Acacia room having good knowledge so that according to Notoadmojo's statement, one of the things that affects a person's attitude is knowledge. This statement is in line with research conducted by Hehalatu on the description of nurse behavior in Early Warning Score (EWS) assessment in the 2nd, 5th and 6th floor inpatient rooms in private hospitals in western Indonesia with the results of EWS assessment behavior by nurses, namely 37 people (90.2%) nurses behaved well and 4 people (9.8%) nurses behaved quite well. All nurses have a positive attitude (100%) which can be caused by the knowledge possessed by nurses obtained either from education or from wider experience. In this study, almost all respondents answered strongly agree on

the statement of conducting assessments (100%), making observations (93.8%) and assessing EWS in accordance with the scoring set in the hospital (93.8%). The positive attitude of nurses about EWS means that nurses follow EWS guidelines to carry out documentation and observation so that the implementation of interventions carried out can be optimal. perceived.

4.3 Acacia Room Nurse Skills about Early Warning Score (EWS) at Dr. Bratanata Jambi Hospital

Skills are an ability that a person has after getting stimuli from around which is then applied in the form of action (Gordon 1979) .

In this study, the results of the Acacia room nurses' skills regarding EWS were that all nurses carried out documentation and monitoring according to the patient's condition and field conditions at the time of the study. At the time of observation, 14 nurses (87.5%) performed documentation and observation every 8 hours with a green scoring category because the patient's condition was stable in all EWS scoring parameters and 2 nurses (12.5%) performed documentation and observation every 2 hours with a yellow scoring category because the patient's condition was unstable such as a scoring value of 2 because the patient used a 3L nasal cannula and for a scoring value of 3 because the patient also used a 3L nasal cannula and the patient's pulse was 50x/minute.

The results of the skills of nurses in the Acacia room based on the values set by the researcher, namely all nurses in the Acacia room can perform early detection of patient worsening using EWS scoring as many as 16 people (100%). This is because the majority of patients in the Acacia room are not in severe condition, so nurses carry out documentation and observation according to the number of patient scores. The average scoring score of patients in the Acacia room is 0-2, so nurses do not carry out implementation for scoring orange, red and calling the code blue team. Nurses in the Acacia room also have good knowledge and a positive attitude, which is in line with Notoadmojo who says that knowledge is an important dominant in shaping a person's actions.

The skills of nurses in implementing EWS in accordance with the guidelines set out in each hospital are influential in determining the patient's condition before the condition worsens so that it can reduce the incidence of respiratory arrest or death. In this study, all nurses conducted documentation and observations in accordance with the number of patient scores and during direct observations made by researchers, no patients were found with scoring scores above 3.

EWS tutorial simulation is one method to improve nurses' knowledge and

skills. Based on Damayanti, et al's research on the Effectiveness of Early Warning Score (EWS) Tutorial Simulation on knowledge and clinical simulation showed a significant difference between pre-test and post-test, so that EWS tutorial simulation has an effect on improving nurse performance. With the training on EWS, nurses improve their skills for the better, this must also be supported by nurse compliance in filling out EWS scoring in accordance with the standardization set by the hospital.

CONCLUSION

Based on the results of research conducted at Dr. Bratanata Jambi hospital in 2022 with a total of 16 respondents, the results obtained All Acacia room nurses have a good level of knowledge about Early Warning Score with a total of 15 people and 1 person has sufficient knowledge because he answered wrong on the EWS parameter question. All Acacia room nurses have a positive attitude about Early Warning Score as many as 16 people. All Acacia room nurses carry out documentation and observation according to the number of patient scores in accordance with skills about Early Warning Score as many as 16 people.

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