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IMPROVING PATIENT SAFETY THROUGH SOCIALIZATION OF FALL RISK ASSESSMENT TOOLS: COMMUNITY SERVICE ACTIVITIES WITH HEALTH WORKERS

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ABSTRACT

Introduction: The socialization of the development of fall risk assessment tools is essential as it is part of the hospital patient safety service system that can provide a sense of security to patients in receiving healthcare services in the hospital. The purpose of this program is to improve nurses' knowledge, facilitate nurses in conducting fall risk assessments, and optimize the time in assessing fall risks.

Methods: This community service was conducted for 20 healthcare workers at RSU Anna Medika Madura. The method used involved interactive learning through lectures, demonstrations/simulations, and discussions. The instrument used was an adaptation of the Fall Risk Assessment Tool. Pre-test and post-test questionnaires were used to measure participants' knowledge levels. The data were analyzed using descriptive statistics and a one-sample t-test.

Results: The demographic characteristics of the participants were dominated by ages 24 (20%) and 28 (20%), with half of the respondents being female (50.0%) and half male (50.0%). Almost all respondents worked as nurses (95.0%), and the majority of respondents were from the inpatient unit (40.0%). The results of the one-sample t-test showed a p-value of 0.000, indicating a significant difference in healthcare workers' knowledge before and after being given a socialization program on the concept of patient safety and the development of a fall risk assessment instrument for patients.

Conclusion: Engaging in interactive learning through presentation methods significantly increases knowledge about patient safety concepts and the development of fall risk assessment instruments for patients. Knowledge about developing fall risk assessment tools should be updated regularly.

KEYWORDS

fall risk assessment; healthcare workers, knowledge; patient safety; socialization.

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1. INTRODUCTION

Patient safety is a significant public health issue. It is estimated that globally, about one in 20 patients experiences harm while receiving medical care in primary, secondary, and tertiary services worldwide, while half of these injuries are preventable. Traditionally, strategies to improve safety have

focused on solutions involving actions by institutions or professional organizations, including the development of incident reporting systems, changes to care systems, and professional behavior (Sarkhosh et al., 2022).

Hospital Patient Safety is a service system in hospitals that can provide a sense of security to patients in delivering health services (Hidayat et al.,

2020). Patient falls are the most concerning incidents in hospitals and can lead to injury or even death, and are the second most frequent adverse events in healthcare after medication errors (Aisyiah et al., 2025). These falls not only result in injuries but also prolong treatment and increase patient care costs (Fahriana, 2024). Factors that can put patients at risk of falling include the environment such as unmounted bed railings, wet floors the placement of call buttons that are too far from the patient, unmounted and untidy equipment, age, clinical diagnosis where the clinical conditions of patients vary according to each patient's diagnosis affecting the increased risk of falling, mental status, mobility disorders, medication use, where some types of medications affect the risk of patient falls, such as barbiturates, phenothiazines, sedatives, hypnotics, antidepressants (Nurfajrindah, 2023).

The report on patient safety incident in Indonesia found that the DKI Jakarta province had the highest rate at 37.9% among the other eight provinces (Central Java 15.9%, Yogyakarta 13.8%, East Java 11.7%, South Sumatra 6.9%, West Java 2.8%, Bali 1.4%, Aceh 1.07%, South Sulawesi 0.7%). KNC occurred and was reported more often (47.6%) compared to side effects (46.2%). Data from this report shows that 34 cases (14%) of falls occurred in hospitals in Indonesia. In this regard, it is hoped that the incidence of patient falls according to the minimum service standards of hospitals is 0% (Nurfajrindah, 2023). Nurses play a crucial role in the implementation of patient safety standards because they are the healthcare professionals who are in constant contact with patients 24 hours a day (Ahmad Fachrurrozi et al., 2023). RSU Anna Medika Madura is a developing hospital. Based on the results of interviews, observations, and documentation that we conducted, it was found that the fall risk assessment instruments for adults, geriatrics, and children have different assessment sheets and fall counts at RSU

Anna Medika Madura. The fall risk assessment has not been well documented.

Therefore, we feel it is necessary to socialize the development of a fall risk assessment tool. The goal of this community service is to increase nurses' knowledge about the development of fall risk assessment instruments, which is expected to reduce patient safety incidents in hospitals. The development of the fall risk instrument that has been socialized is a combination of fall risk assessment instruments for adults, geriatrics, and children, making it easier for nurses to assess fall risk and optimize time in evaluating fall risk.

2. MATERIAL AND METHODS

The community service activity on the Socialization of the Development of the Risk Fall Tool Instrument was held offline on January 29, 2024, at the Hall of RSU Anna Medika Madura, Bangkalan Regency, Madura, East Java. The event was attended by 20 people. At the beginning and end of the activity, a survey questionnaire was distributed to the participants to observe the differences in average scores on the assessment of knowledge aspects related to patient safety and fall risks. The stages of the implementation of the activity can be seen in the diagram below.

Stage 1, which is the planning and preparation stage, consists of the preparation of activity proposals, obtaining permits from Anna Medika Madura Hospital, and discussions with the management of Anna Medika Madura Hospital regarding the plan for implementing activities. In this stage, preparations are also made in the form of the preparation of facilities and infrastructure to support the activities.

Stage 2 is the implementation of activities, beginning with the preparation by the committee, participant registration, delivery of material (sharing session) on the concept of patient safety and fall risk, presentation on the development of fall risk assessment instruments, and a question-and-answer

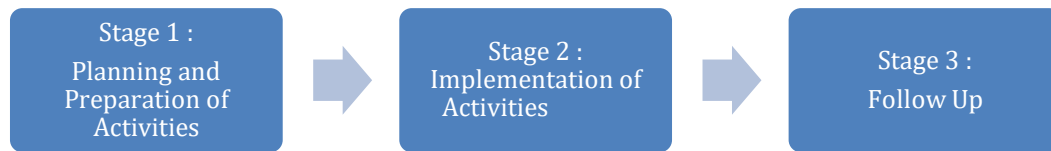


Figure 1. Stages of Implementation of Socialization Activities for the Development of the Risk Fall Tool Instrument



Figure 2. lecture on the concept of patient safety



Figure 3. Follow Up Activity

session. In addition, participants are given a questionnaire to assess whether there is a change in average scores regarding knowledge, patient safety goals, and fall risk among the participants. The questionnaire given to participants consists of two parts. The first part includes questions about the respondent's identity, such as name, age, and last education. The second part of the questionnaire consists of questions related to knowledge about patient safety goals and fall risk, consisting of 10 questions, each with "yes" and "no" answer options.

Stage 3 is the follow-up activity, which involves evaluating the effectiveness of the socialization activities through participant feedback, identifying obstacles that arise during the activities, and encouraging participants to discuss using the development of a fall risk assessment instrument.

3. RESULTS

The demographic characteristic data of the respondents includes age, gender, profession, and room unit. Based on Table 1 below, the respondents' ages are dominated by the age group of 24 years (20.0%) and 28 years (20.0%), half of the respondents are female (50.0%) and male (50.0%), almost all respondents are female (50.0%) and male

(50.0%). Most respondents are nurses (95.0%) and the majority of respondents come from the inpatient unit (40.0%).

The assessment of this socialization program has one criterion, which is the knowledge of respondents through pre-test and post-test scores. The results of the pre-test and post-test are presented in a table of statistical test results using a one-sample t-test with a total of 20 respondents.

Based on Table 2, it can be seen that there is an increase in the average knowledge score after the socialization program was implemented. The test results show a significant difference in the health workers' knowledge scores before and after the respondents were given the socialization program (from 17.7 to 19.4). Patient safety is an important part of healthcare services. Patient safety consists of the complexity of the medical service framework and the expansion of injuries in hospitals. Patient safety/security also plays a significant role in preventing and reducing harm, errors, and injuries that may occur during the service delivery cycle (Hijrianti et al., 2023). The Community Service in the form of socialization "Development of Fall Risk Assessment Tool" held at RSU Anna Medika Madura aims to increase nurses' knowledge, facilitate nurses

Table 1. Frequency Distribution of Respondent Characteristics (n= 20).

Characteristics of Respondents	Frequency (f)	Percentage (%)
Age		
24 years old	4	20.0
25 years old	1	5.0
26 years old	3	15.0
27 years old	1	5.0
28 years old	4	20.0
29 years old	3	15.0
30 years old	2	10.0
32 years old	1	5.0
36 years old	1	5.0
Gender		
Man	10	50.0
Woman	10	50.0
Profession		
Nurse	19	95.0
Midwife	1	5.0
Room Unit		
Installation of the Care Unit	1	5.0
Emergency Installation	7	35.0
Inpatient	8	40.0
Outpatient	4	20.0

Table 2. Results of One Sample t-test Knowledge (n=20)

	Means $\pm$ SD	Median	Minimum-Maximum	p-value
Pre-test	17,7 $\pm$ 1,34	18	15 - 19	0,000
Post-test	19,4 $\pm$ 1,42	19	18 - 22	

in assessing fall risk, and optimize time in evaluating fall risk. The implementation of the socialization was mostly attended by nurses from RSU Anna Medika Madura.

4. DISCUSSION

Patient safety in hospitals is a hospital system aimed at making patient care safer, which includes risk assessment, identification and management of patient-related risks, incident reporting and analysis, the ability to learn from incidents and follow-up actions, as well as the implementation of solutions to minimize the emergence of risks and prevent injuries caused by errors due to performing an action or failing to take an action that should have been taken (Mahdarsari & Rachmah, 2022) (Nurprilinda et al., 2024).

Various studies have shown that simple interventions such as training and the use of visual markers can reduce the incidence of falls in hospitals. A study by Kusmiati et al (2023) mentioned that

education and training on fall risks can increase procedural compliance up to 85%, while Jati (2018), in their community service activities, found that the use of patient warning stickers effectively reduced fall incidents by up to 40%. The implementation of fall patient stickers as visual markers on the beds of at-risk patients is part of the Standard Operating Procedure (SOP) aimed at increasing awareness and preventing fall incidents in hospitals (Mulyadi et al., 2021).

Patient safety is an important aspect of healthcare services. Patient safety involves the complexity of medical service frameworks and the expansion of injuries in hospitals. Patient safety/security also plays a significant role in preventing and reducing hazards, errors, and injuries that may occur during the service cycle process (Pratama & Artistin, 2025). The Community Service program in the form of socialization on the "Development of Fall Risk Assessment Tool" conducted at Anna Medika Madura

Hospital aims to increase nurses' knowledge, facilitate nurses in assessing fall risks, and optimize the time in evaluating fall risks. The socialization was largely attended by nurses from Anna Medika Madura Hospital.

Patient safety standards include patient rights, education for patients and families, patient safety in continuity, the use of performance improvement methods for evaluating and enhancing patient safety, leadership roles in improving patient safety, education for staff about patient safety, and communication, which is key for staff to achieve patient safety (Kemenkes, 2017) (Pebriyanti et al., 2024).

Based on the one sample t-test statistical values obtained from the questionnaire results, the comparison of pretest and posttest scores shows a value ($p = 0.000$) which means that the socialization that has been conducted is effective in increasing nurses' knowledge about the concepts of patient safety and the development of fall risk instruments for patients. The fall risk instruments used at RSU Anna Medika Madura are divided into three instruments: the fall risk assessment for geriatrics based on the Ontario instrument, the fall risk assessment for adults based on the Morse assessment, and the fall risk assessment for children based on the humpty dumpty assessment. Meanwhile, the development of the fall risk instrument that has been socialized is a combination of fall risk assessment instruments for adults, geriatrics, and children, so that by using one instrument, it can assess the fall risk across various ages, which will facilitate and optimize nurses' time in assessing fall risk.

5. CONCLUSION

The socialization conducted for healthcare workers at RSU Anna Medika was effective in increasing nurses' knowledge about the concept of patient safety and the development of patient fall risk instruments.

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