The Objective of this Study is to Examine the Relationship Between Nurses' Knowledge Levels of Patient Safety Identification and the Implementation of These Practices in Hospitals

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ABSTRACT

Patient safety is one of the main components in improving the quality of health services (Permatha Indah et al., 2022). Patient safety includes a series of actions aimed at preventing injury or unwanted complications during the care process (Sari, 2020; Sitepu, 2020; (Oktiana Tamba, 2020). This study aims to explore the relationship between nurses' level of knowledge about identification in patient safety and the implementation of these procedures in the inpatient room. This study used a descriptive correlational design with a quantitative approach. This design was chosen to determine the relationship between nurses' level of knowledge about identification in patient safety and the implementation of this identification in the inpatient room. Most respondents have a fairly good level of knowledge as many as 50 people (78.1%), while only 14 people (21.9%) have good knowledge. based on the implementation of identification in patient safety is quite good as many as 51 people (79.7%), while only 13 people (20.3%) carry out well. The p-value of 0.0001 indicates a significant relationship between the level of knowledge of nurses about identification in patient safety with the implementation of identification in patient safety. Understand the importance of effective education and training to improve knowledge and implementation of identification, which ultimately aims to improve patient safety.

Keywords : Knowledge Level, Patient Safety, Nurses

INTRODUCTION

Patient safety is one of the main components in improving the quality of health services (Permatha Indah et al., 2022). Patient safety includes a series of actions aimed at preventing unwanted injuries or complications during the treatment process (Sari, 2020; Sitepu, 2020; (Oktiana Tamba, 2020). One of the crucial aspects in patient safety is proper identification, where accurate and consistent identification of patients can prevent potentially fatal medical errors (br Barus, 2020; Manurung, 2020).

Patient identification is one of the important aspects in ensuring patient safety in the inpatient ward. Nurses' knowledge of patient identification greatly influences the implementation of effective patient identification. Studies have shown that nurses' level of knowledge about patient identification has a significant relationship with the implementation of patient identification in the inpatient ward (Arsyawina et al., 2023; Fırat Kılıç & Cevheroğlu, 2023).

In a hospital setting, nurses play a central role in the patient identification process. They are responsible for ensuring that every medical action taken is in accordance with the correct patient identity. Adequate knowledge of patient identification procedures is essential for nurses in carrying out this task. Lack of knowledge about patient identification may result in inappropriate implementation, which in turn may increase the risk of medical errors (Farach et al., 2023; Mardiantina, 2022).

In this context, nurses' knowledge of patient identification involves not only theoretical knowledge, but also the practical ability to identify patients accurately and quickly. Research shows that nurses with better knowledge of patient identification tend to have more positive attitudes and are more likely to carry out patient identification correctly (Biresaw et al., 2020).

The implementation of patient identification in the inpatient ward is also influenced by factors such as work culture, hospital rules, and socialisation. Studies have shown that a supportive work culture and clear rules can improve the implementation of patient identification (Ningtias & Sundari, 2024). The implementation of correct identification in the inpatient ward largely depends on the extent to which nurses understand and implement correct patient identification procedures. In recent years, efforts have been made to improve the implementation of patient identification in the inpatient ward. One such effort is through the implementation of stricter accreditation standards, such as the one conducted at Royal Prima Hospital Medan. Research shows that the implementation of accreditation standards can improve the quality of care services, including the implementation of patient identification (Silalahi et al., 2022).

Previous studies have shown that continuous training and education can improve nurses' knowledge and skills in critical aspects of patient safety. However, more in-depth studies are needed to see the extent to which this knowledge is implemented in daily practice, particularly in the context of patient identification in the inpatient ward. This study aims to explore the relationship between nurses' level of knowledge about identification in patient safety and the implementation of these procedures in the inpatient ward. By understanding this relationship, it is hoped that effective

strategies can be found to improve the implementation of correct patient identification, so that patient safety can be better ensured.

Therefore, this study focused on: (1) Measuring nurses' level of knowledge about identification in patient safety, (2) Assessing the implementation of patient identification in the inpatient room, and (3) Analysing the relationship between nurses' level of knowledge and the implementation of identification. The results of this study are expected to make a real contribution to improving the quality of health services, especially in the aspect of patient safety in the inpatient room.

METHODS

This study used a descriptive correlational design with a quantitative approach. This design was chosen to determine the relationship between the level of knowledge of nurses about identification in patient safety with the implementation of identification in the inpatient room. The population in this study were all nurses who worked in the inpatient room, sampling was carried out using simple random sampling technique. The sample size was determined using the Slovin formula with a confidence level of 95% and a margin of error of 5%. The questionnaire for knowledge consists of a series of questions that measure the level of knowledge of nurses about identification in patient safety including aspects of the theory and practice of patient identification. The identification implementation checklist is used to assess the implementation of patient identification in the inpatient room, including important indicators in patient identification procedures, such as checking patient identification through identification bracelets, confirming names and dates of birth.

Data were analysed using descriptive analysis obtained from knowledge questionnaires and identification implementation checklists were analysed descriptively to describe frequency distribution, mean and standard deviation. Correlation test to determine the relationship between the level of knowledge of nurses about identification in patient safety with the implementation of identification, Pearson correlation test was used, this test determines whether there is a significant relationship between the two variables. This research will be carried out by taking into account the ethical aspects of research. Approval from the hospital ethics committee will be obtained before the study begins. Each nurse who becomes a respondent will be given an explanation of the purpose of the study and asked to provide written consent (informed consent). Confidentiality of respondents' data will be guaranteed and used only for the purposes of this study.

RESULTS

1. Characteristics of Respondents

a. Characters Of Respondents Based On Gender Type

Table 1. Characters Of Respondents Based On Gender Type

Gender Type	f	Percentage (%)
Male	20	31,2
Famele	44	68,8
Total	**64**	**100**

b. Respondent Characteristics by Age

Table 2. Respondent Characteristics by Age

Age	f	Percentage (%)
20 – 30	8	12,5
31 – 40	47	73,4
> 40	9	14,1
Total	**64**	**100**

c. Respondent Characteristics Based on Working Time

Table 3. Respondent Characteristics Based on Working Time

Working Time	f	Percentage(%)
20 – 30	8	12,5
31 – 40	47	73,4
> 40	9	14,1
Total	**64**	**100**

2. Univariate Analysis

a. Frequency Distribution of Respondents Based on Knowledge of Identification in Patient Safety

Table 4. Frequency Distribution of Respondents Based on Knowledge of Identification in Patient Safety

Knowledge Level	f	Persentase (%)
Good	14	21,9
Good enough	50	78,1
Total	**64**	**100**

b. Respondent Frequency Dispersion Based on Implementation of Identification in Patient Safety

Table 5. Respondent Frequency Dispersion Based on Implementation of Identification in Patient Safety

Implementation of Identification in Patient Safety	f	Percentage (%)
Good	13	20,3
Enough	51	79,7
Total	**64**	**100**

3. Bivariate analysis

a. Relationship of Nurses' Level of Knowledge about Identification in Patient Safety with its Implementation

Table 6. Relationship of Nurses' Level of Knowledge about Identification in Patient Safety with its Implementation

Knowledge Level	Implementation of Identification in Patient Safety				Total		p-value
	Good		Enoguh				
	f	%	f	%	f	%	
Good	10	71,4	4	28,6	14	100	
Enough	3	6,0	47	94,0	50	100	0,001
Total	**13**	**20,3**	**51**	**79,7**	**64**	**100**	

DISCUSSION

1. Respondent Characteristics

a. Based on Gender

In this study, the respondents consisted of 64 people who were divided into two gender categories, namely men and women. From the data displayed in Table 1, 20 respondents (31.2%) were male and 44 respondents (68.8%) were female. This shows that the majority of respondents in this study were women.

The nursing profession is often dominated by women in many countries. Gender role theory states that the nursing profession is historically and culturally associated with traits that are considered feminine such as caring, empathy, and nurturing, which may explain why more women choose a career in this field than men. Socialisation theory suggests that from an early age, women are more often encouraged to choose care-oriented and service professions, such as nursing. This is due to the social norms and expectations that prevail in many societies. In contrast, men may be more often directed towards professions that are perceived as more masculine or technical. Research shows that gender dynamics in the workforce can influence the distribution of jobs by sex. In the

health sector, especially nursing, the perception that this profession is more suitable for women has led to the dominance of women in this field.

From the analysis of related theories and research assumptions, it can be concluded that the dominance of women in the nursing profession observed in this study can be explained by various social theories and gender dynamics. The assumptions made in this study serve to provide a framework for understanding the distribution of respondents by gender and the factors that influence it. The results of this study are in line with existing trends and theories, strengthening our understanding of gender roles in the nursing profession.

b. By Age

Based on age, respondents were grouped into three age categories, namely 20-30 years, 31-40 years, and more than 40 years. From the data in Table 2, it is known that most of the respondents were in the age range of 31-40 years as many as 47 people (73.4%), followed by the age category >40 years as many as 9 people (14.1%), and age 20-30 years as many as 8 people (12.5%). This indicates that the majority of respondents are in the productive and mature age range.

This theory states that productive age is usually in the range of 25-45 years, where individuals reach the peak of physical, mental, and emotional abilities. In this age range, individuals tend to have the best performance at work because they have the optimal combination of energy, experience, and maturity. According to Donald Super's career development theory, individuals in the age range of 31-40 years are in the "establishment" stage. At this stage, individuals strive to build a stable career and develop professional expertise. This is the period when individuals often reach peak performance and productivity at work (Priangani, 2021). The theory suggests that as workers age, they experience changes in work priorities and abilities. Younger workers (20-30 years) may focus more on learning and adaptation, while older workers (>40 years) focus more on long-term stability and development. Workers in the 31-40 age range are usually at the peak of their careers, combining experience with prime physical and mental capabilities.

From the analysis of related theories and research assumptions, it can be concluded that the dominance of respondents in the 31-40 age range can be explained by various theories of career development and age productivity. The assumptions made in this study serve to provide a framework for understanding the distribution of respondents by age and the factors that influence it. The results of this study are in line with existing trends and theories, strengthening our understanding of the role of age in the nursing profession and work productivity.

c. By Length of Service

The distribution of respondents by length of service was also grouped into the same three categories as the age category. From Table 3, it can be seen that most respondents have a working period in the range of 31-40 years as many as 47 people (73.4%), followed by a working period of >40 years as many as 9 people (14.1%), and a working period of 20-30 years as many as 8 people

(12.5%). This is in line with the age distribution, where most respondents are in a mature working period.

This theory states that work experience is closely related to productivity and professional competence. Workers with longer tenure usually have better skills, a deeper understanding of the job, and the ability to handle complex situations more effectively. Career stages theory identifies several stages in an individual's career journey, including exploration, establishment, maintenance and decline. A working life of 31-40 years tends to be at the maintenance stage, where workers focus on strengthening and optimising the skills they have developed over the course of their career. The theory argues that investment in human capital, such as education and work experience, will increase individual productivity. Workers with long tenure have accumulated significant human capital, which is reflected in increased efficiency and effectiveness in their work. Job satisfaction often increases with work experience, as more experienced workers tend to have greater control over their work, professional recognition and career stability. This contributes to labour retention and better performance.

From the analysis of related theories and research assumptions, it can be concluded that the dominance of respondents with 31-40 years of service can be explained by various theories of work experience, human capital, and career stages. The assumptions made in this study serve to provide a framework for understanding the distribution of respondents by tenure and the factors that influence it. The results of this study are in line with existing trends and theories, strengthening our understanding of the importance of work experience in the nursing profession and its impact on productivity and job satisfaction.

2. Univariate Analysis

a. Knowledge about Identification in Patient Safety

The frequency distribution of respondents based on the level of knowledge about identification in patient safety can be seen in Table 4. Most respondents had a fairly good level of knowledge as many as 50 people (78.1%), while only 14 people (21.9%) had good knowledge. This shows that although the majority of respondents have good knowledge, improvement is still needed to achieve a more optimal level of knowledge.

According to adult learning theory, adults tend to learn differently compared to children. They are more motivated to learn when the material is relevant to their work and when they can see the practical application of what they are learning (Storm, 2023). Therefore, a well-designed training programme that focuses on identification in patient safety can be more effective in improving knowledge. This theory states that increased professional knowledge should be followed by appropriate practical application to improve performance outcomes. Fairly good knowledge of identification in patient safety needs to be improved to good knowledge through continuous training and relevant practical experience. According to social learning theory, knowledge and skills can be improved through observation and interaction with more experienced colleagues. Mentorship and team-based training programmes can play an important role in improving

knowledge of identification in patient safety (Koumparaki, 2019). This theory states that individuals' beliefs in their ability to carry out certain tasks (self-efficacy) influence how they approach these challenges and tasks. By increasing knowledge about identification in patient safety, nurses' self-efficacy in carrying out identification correctly will also increase, which ultimately improves patient safety.

From the analysis of related theories and research assumptions, it can be concluded that although the majority of respondents have a fairly good knowledge of identification in patient safety, knowledge improvement is still needed. Adult learning theory, knowledge and practice, social learning, and self-efficacy all support the importance of ongoing training and relevant learning methods to improve knowledge. The assumptions made in this study serve to provide a framework for understanding the need for knowledge improvement and strategies to achieve it, ultimately aiming to improve patient safety.

b. Implementation of Identification in Patient Safety

The frequency distribution of respondents based on the implementation of identification in patient safety is also shown in Table 5. From this data, it is known that most respondents carry out identification quite well as many as 51 people (79.7%), while those who carry out well are only 13 people (20.3%). This shows that there is room for improvement in the implementation of patient safety identification to achieve a better level.

This theory states that good practice in the work environment, including in nursing, is influenced by knowledge, skills, and experience. Good practice depends not only on theoretical knowledge but also on the ability to apply it in real situations. According to this theory, a person's intention to perform a particular behaviour is influenced by attitude towards the behaviour, subjective norms, and perceived behavioural control. In this context, the implementation of identification in patient safety is influenced by nurses' attitudes towards patient safety, support from colleagues and superiors, and their belief in their ability to carry out identification correctly. This theory states that an individual's belief in their ability to perform a particular task (self-efficacy) greatly influences the performance of that task. Nurses who have high self-efficacy are more likely to carry out identification in patient safety well, because they are confident in their ability to do it correctly. This theory emphasises the importance of a systems approach in ensuring patient safety. Good implementation of patient safety identification requires supportive systems, including clear protocols, effective training, and a strong safety culture within the organisation.

From the analysis of related theories and research assumptions, it can be concluded that although the majority of respondents implemented identification in patient safety quite well, there is still room for improvement. Theories of practice implementation, planned behaviour, self-efficacy, and patient safety systems all support the importance of increased knowledge, systemic support, and safety culture in improving identification implementation. The assumptions made in this study serve to provide a framework for understanding implementation improvement needs and strategies to achieve them, ultimately aiming to improve patient safety.

3. **Bivariate Analysis**

a. **Relationship between Knowledge Level and Implementation of Identification in Patient Safety**

Bivariate analysis was conducted to see the relationship between the level of knowledge of nurses about identification in patient safety with its implementation. Table 6 shows that of the 14 respondents who had good knowledge, 10 people (71.4%) implemented identification well and 4 people (28.6%) implemented it quite well. Conversely, of the 50 respondents who had good knowledge, only 3 people (6.0%) carried out well and 47 people (94.0%) carried out fairly well.

The p-value of 0.0001 indicates a significant relationship between the level of knowledge and the implementation of identification in patient safety. This indicates that the better the knowledge of nurses about identification in patient safety, the better the implementation.

Knowledge-Practice Theory: This theory states that good knowledge is the basis for good practice. In-depth knowledge of identification in patient safety allows nurses to carry out tasks more effectively and efficiently, reduce the risk of errors, and improve patient safety. Self-Efficacy Theory: This theory states that an individual's belief in their ability to perform a particular task (self-efficacy) greatly influences the performance of that task. Nurses with good knowledge of identification in patient safety will have higher self-efficacy, which allows them to carry out identification better. Theory of Planned Behaviour: According to this theory, the intention to perform a behaviour is influenced by attitudes towards the behaviour, subjective norms, and perceived behavioural control. Good knowledge increases positive attitudes towards identification in patient safety and increases perceived behavioural control, which in turn increases identification implementation.

From the analysis of related theories and research assumptions, it can be concluded that there is a significant relationship between nurses' level of knowledge about identification in patient safety and its implementation. Theories of knowledge and practice, adult learning, self-efficacy, and planned behaviour all support the importance of increasing knowledge to improve implementation. The assumptions made in this study serve to provide a framework for understanding the importance of effective education and training to improve knowledge and implementation of identification, which ultimately aims to improve patient safety.

CONCLUSIONS

It can be inferred from the data that the majority of respondents in this study are female, with an age range and work experience that is predominantly between 31 and 40 years old. The majority of respondents demonstrated a satisfactory level of knowledge regarding patient safety identification, with the majority also exhibiting satisfactory implementation. There is a significant correlation between knowledge level and the implementation of patient safety identification, whereby higher knowledge levels are associated with superior implementation.

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