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**RESEARCH ARTICLE** 

# Nurses' Perception of The Implementation of Patient Safety in the Inpatient Ward of a Teaching Hospital

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#### Abstract

Patient safety is a complex system to prevent injuries caused by mistakes and it allows the nurse to consider taking action or not to deal with the problem of patient safety. The purpose of this study was to explore the nurses' perceptions of the implementation of patient safety in the inpatient ward of a teaching hospital. A qualitative study was used. The sample consisted of 20 nurses who were involved in a focus group discussion for 70 minutes. The data was analyzed using content analysis as guided by Collaizi. This research found 5 themes that included events almost causing harm to the patients during shifts, obstacles related to reporting events, information about events that should be reported, primary concerns regarding patient safety and habits done to reduce the risk of making mistakes. The implementation of patient safety still needs to be improved due to the lack of perception among the nurses. Patient safety occupies an important position in the health services provided and it plays an important role in the perception of the nurse.

**Keywords:** Inpatient ward, Nurse perception, Patient safety.

### Introduction

The concept of patient safety was first introduced by Hippocrates around 2400 years ago. He stated that health care is basically about protecting patients. Patient safety is a basic quality of health care aimed at protecting patients from hazards or injuries that may occur related to health services [1]. In 2017, there were around 421 million patients undergoing hospitalization and around 42.7 million patients suffered from injuries during their hospitalization [2]. Adverse events can occur in various countries,

including injuries to the patients. A retrospective review of hospital patient records in 8 African countries estimated that the rate of injured patients at 8.2% [3]. Likewise, in Vietnam, infections acquired through health care range between 5.9% and 10.9% [4]. Medication errors in a geriatric hospital ward accounted for 20.4% in Indonesia [5].Patient safety is a complex system that not only depends on the actions of each health service provider but also on the environment [6].

Patient safety in hospitals is a system that the hospitals establish to maintain patient safety including risk assessments, the identification, and management of matters related to patient risk, the reporting and analysis of incidents, the ability to learn from incidents and the follow-up from it, and the application of solutions to minimize risk [7]. This system is expected to prevent injuries caused by mistakes and it allows the nurse to consider taking action or not to deal with the problem of patient safety [8].

A person's perception of patient safety tends to be varied; nurses who have become leaders are often associated with having a more positive perception [9]. The nurse's work experience and work position is closely related to their patient safety perception [10]. To support the work of the nurse, evidence-based practice guidelines can be used by the nurses to minimize injury.

The characteristics of the nurses' work and their communication patterns and types of decision-making processes predict cross-organizational variability that influences their decision making in the implementation of patient safety culture [11].

The patient safety round has proven to be a useful tool for developing a safety culture and contributing to the identification of risks and adverse impacts as well as being a reference strategy for improving the organization at all levels. The patient safety round has helped many organizations have a significant impact on safety culture [12]. Various activities have been carried out by the staff nurses and nurse managers when implementing patient safety in the inpatient room. Nurses can improve patient safety by implementing preventive

measures related to patient safety and preventing medical errors [13]. Nurses also play an important role in improving patient safety by providing education to the patients and their families [14] about the things that need to be considered and done by the patients and their families related to patient safety.

Nursing as a system takes care of a patient 24 hours a day [15]. Nurses handle many activities and medical procedures that have the potential to interfere with patient safety. In this regard, nurses must carry out all activities and their respective processes correctly. Therefore the role of nurses is critical in terms of supervising and coordinating patient care to reduce harm [16]. The purpose of this study was to explore the implementation of patient safety in the inpatient ward at a teaching hospital.

#### **Methods**

#### Research Design

This research was a qualitative study. A group interview which involved the head nurses and staff nurses was done to obtain an understanding of the nurses' perception of the implementation of patient safety in the inpatient ward at the teaching hospital.

#### **Participant**

Twenty nurses who volunteered to participate in this study were selected through purposive sampling. The inclusion criteria were as follows: 1) minimum education level of a Bachelor's degree and 2 years of experience, 2) communicative and 3) willing to be a participant.

#### **Data Collection**

This research was conducted on May 28th, 2019.

The data was collected through a focus group discussion conducted for 70 minutes. Probing techniques were performed to get in-depth information. The researcher used a semi-structured interview consisting of 5 open-ended questions that were developed by the researcher.

The researchers were to the students and had been for the last three years. They had been involved in other research projects. The researcher introduced himself and explained the aims and objectives of the study. The data collection continued until no new information was obtained and redundancy was achieved (saturated).

#### **Data Analysis**

The data obtained from the FGD were constructed in verbatim form and then analyzed using content analysis via the Collaizi method [17]. The step consisted of 1) reading and copying all of the transcripts disclosed by the patients 2) Extracting the research statements directly related to the research phenomena, 3) describing the meaning contained even in insignificant statements, 4) combining the meanings and formulating them into themes, 5) decrypting the themes completely, 6) identifying the structural basis of the phenomenon and 7) the participants. re-validating checking has been carried out to ensure that the researchers have analyzed the data correctly.

#### **Trustworthiness**

Credibility refers to the correctness of the data and its interpretation. Credibility was maintained through prolonged engagement techniques and member checking. Prolonged engagement was established by the researcher with the participants. All of the participants were co-workers about conducting hospital projects and they were students of the researcher. Member checking was done by cross-checking the data findings in the form of themes to be read by the participants to obtain objectivity concerning the data.

Transferability depends on the knowledge of the researcher about the context of the sender and the context of the recipient determined through the means of a detailed description. Dependability was carried out by the researchers discussing the FGD records and field notes to produce themes to obtain stability within the data. Confirmability was done by the checking of the emerging themes being conducted by an expert in qualitative research. Authenticity refers the authenticity appearing in the report when conveying the participants' feelings.

#### **Ethical Consideration**

This study was approved by the Commission of Health Research Ethics of the Faculty of Nursing, Universitas Sumatera Utara (Approval No.1812/V/SP/2019).

#### Results

This study involved 20 participants, most of who were aged 36-45 years old (11 people; 55%), while the other participants were aged 26-35 years old (9 people; 45%). Most of the participants had a Bachelor's degree (18 people; 90%) while the other participants had a Master's degree (2 people; 10%). The majority of the nurses had a position as team leader (11 people; 55%) while the other participants had the position of head nurse (9 people; 45%) (Table 1).

Table 1: Characteristics of the participant demographics (n=20)

Characteristic	n	%
Age		
26-35 years old	9	45
36-45 years old	11	55
Education		
Master's	2	10
Bachelor's	18	90
Position		
Head of unit	9	45
Team leader	11	55

The findings determined there to be 5 themes related to the nurses' perception of the implementation of patient safety in the inpatient ward, namely: 1) events that almost cause harm to the patients during shifts, 2) obstacles when reporting events that almost cause harm to the patients, 3) information about events should be reported, 4) primary concerns regarding patient safety and 5) habits put in place to reduce the risk of making mistakes.

## Theme 1 - Events that Almost Cause Harm to the Patients During Shifts

The participants in this study stated that events that almost cause harm to patients during the shifts included: 1) the implementation of handwashing involving five moments and six steps in the emergency room not being optimal; 2) Not carrying out hand rubbing with a hand scrub before going to and after returning from the hospital and 3)

The identification of hemodialysis patients using wristbands was not done optimally. Information on the events that almost cause harm to the patients during a shift was stated by several participants as in the following quotes:

"... Washing hands through five moments and six steps may still be lacking. However, this implementation is only in the emergency room" (L. 171)

"... The patient never washed his hands with a hand scrub before and after returning from the hospital as well" (L. 173)

## Theme 2 - Obstacles When Reporting Events that almost Cause Harm to the Patients

The participants in this study stated that the obstacles when reporting events that almost caused harm to patients came in the form of supervision rather than prevention and that the implementation of behavior to reduce the obstacle conducted by those who were responsible for patient safety was not yet available. Statements about events which almost cause harm to patients during a shift were put forward by several participants as in the following quote:

"... A form of supervision [regarding either] prevention or implementation is not yet available" (L. 319).

## Theme 3 - Information About Events Should be Reported

The participants in this study stated that the information about events that should be reported include the following: 1) Conducting patient assessments and it is related to determining the level of risk of falling and then preventing the risk of falling itself; 2) Identifying patients using the national mandatory quality indicators and 3) Ensuring that the effectiveness of communication is monitored from the reading done of the integrated nurse development record. The information related to events that must be reported was stated by several participants, as in the following quotes:

- "... We examine the patient. For example, we will determine the level of risk of falling. From there, we will lessen the falling risk" (L.6)
- "... We are identifying the patients using the national mandatory quality indicators" (L.91)
  "... The effectiveness of our communication is monitored [by] the reading done on the integrated nurse development record" (L. 119)

## Theme 4 - Primary Concerns Regarding Patient Safety

The participants in this study stated that the main concerns related to patient safety were:

1) site marking before entering the IBP room;

2) Putting a yellow sticker on the bracelet of a patient who has a high risk of falling and 3)

SEP proof of registration as part of the confirmation of the patient's identity.

Statements about the main concerns regarding patient safety were indicated by several participants, as in the following quotes:

- "... We do site marking before entering [the] IBP room" (L.165)
- "... We apply stickers. [A] yellow sticker for patients at risk of falling" (L.25)

"... As long as the bracelet is never printed, so the patient registers a check, getting SEP proof of registration is what we make to identify the patient" (L. 252).

# Theme 5 - Habits Done to Reduce the Risk of Making Mistakes

The participants in this study stated that the practices undertaken to reduce the risk of making mistakes include 1) implementing proper hand-washing discipline; 2) In the IBP room applying; the check-in, sign in, time out, sign out, and check out procedure and 3) Put a yellow sticker on patients at risk of falling. The habits put in place to reduce the risk of making mistakes were stated by several participants, as in the following quotes:

- "... For the prevention of infection, the most important thing [that] we do is to apply good hand washing discipline" (L.184)
- "... There are five big things that we [have] made to implement patient safety, including checking in, signing in, time out, signing out, and checking out" (L.44)
- "... We apply yellow stickers for patients at risk of falling" (L.25).

#### Discussion

This study revealed that several of the staff nurses experienced obstacles in implementation of patient safety, one of which is the events that almost cause harm to the patients during the nurse's shifts. This theme includes several categories, namely the washing of the hands through six steps in the emergency room not being optimal, not carrying out handwashing with a hand rub before going to and after returning from the identification hospital and the of hemodialysis patients using wristbands not running optimally. These categories correlate with some of the studies that state that

although hand washing is one of the ways to control infection in hospitals [18–20], the tendency to implement hand washing or hand hygiene in the emergency room contains more than one barrier, including a heavy workload and an increased capacity of patients, the high rate of invasive procedures and the variety of healthcare workers present [21, 22].

Using wristbands to confirm certain things about a patient can be a risk if there is an error in their medical records [23]. As the competency of nurses includes ensuring the safety of the patient's condition by minimizing harmful events [24], if the expectation of this has achieved nothing, then it can be caused by a situation in the workplace. To increase the awareness of patient safety, especially not causing harmful events involving the patients, daily briefings before beginning the shift can be implemented.

The second theme is the obstacles associated with reporting events that almost cause harm to the patients. Supervision forms for prevention or implementation, conducted by those who are working or responsible for patient safety, are not yet available. This finding has a similar view to the research conducted by Eldeeb who said that more than half of the nurses in their study were not officially reporting bad events.

However, there was no potential harm to the patient or the error occurred during supervision due to the good communication within the health team [25]. The unavailability of this form in the hospital might have a relationship with the urgency related to using supervision forms.

For several hospitals, this kind of form is contained in the nursing assessment form. Therefore to prevent any misunderstandings, the nurse managers should introduce all forms to the practitioner nurses.

The third theme is about the information in the incident reports that must be reported including conducting a patient assessment, identifying the patients included in the national mandatory quality indicators and the effectiveness of communication monitored from the reading back of the integrated nurse development record. Another study stated that the handling of reporting adverse events by the nurses is an obstacle [26].

However, reporting the patient's assessment is one of the nurses' responsibilities [27] to prevent errors that can cause harm to patients [28]. Implementing specific reports such as those above indicates that in terms of reporting the crucial event, there is a level of awareness among the nurses in this hospital.

The fourth theme refers to the primary concerns regarding patient safety which is in accordance with the results of the research conducted by Gizaw. Gizaw found that hospitals have low patient safety practices where the reporting of patient safety errors (28.32%), teamwork in all units (47.47%), hospital management support for patient safety (34.75%) the ineffective communication between staff and managers and poor feedback impedes the patient safety practices.

While the low reporting of errors related to patient safety indicates that there is a fear of punishment, the humiliation associated with mistakes made is an important component of achieving a learning culture [29].

The fifth theme is habits, referring to what is done to reduce the risk of making mistakes. These results are in line with the research conducted in Saudi Arabia and at Jimma University specialty hospitals. All health professionals are vulnerable to making mistakes and nurses are a vital role when it comes to improving safety in many aspects [29] and preventing a negative impact on patient health [30].

Other studies show that the application of standard infection control and transmission-based precautions is crucial to decreasing the risk of infection among nurses [31, 32]. A yellow wristband for patients with a grade 3 risk of falling is crucial [33]. The efforts made by the nurses to reduce the number of mistakes has indicated that in terms of patient safety about infections and the risk of falling, there has been a good response.

#### Conclusions

The implementation of a patient's safety still

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needs to be improved due to its lack of application. The barriers to implementation would not be present if the nurses, as the key-holders of patient safety, are aware of the essence of patient safety. Research recommends that nurses in hospitals should make an effort to ensure patient safety through the standard procedures for implementing patient safety in the ward.

The implementation of patient safety can be encouraged using a guide supported and carried out by the nurse manager to establish a patient safety culture among the nurses. The staff nurse's perception of patient safety will affect the services provided, the reporting of patient safety promptly and developing a positive culture of patient safety, all of which are supported by the hospital management in its implementation.

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