



Factors Affecting Nurses in Implementing Patient Safety in Hospitals: A Literature Review

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A B S T R A C T

Patient safety is the most important indicator in the healthcare system that is expected to be a reference for producing ideal healthcare services and reducing patient incidents. The nurse factors are the main factor related to patient safety because nurses interact more often with patients. This study aims to identify the factors influencing nurses implementing patient safety in hospitals. This article was a literature review with a descriptive approach by collecting several journals and articles from the Indonesia One Search and Google Scholar databases with specified inclusion criteria. Based on the results of a review of six articles shows that several factors influence nurses in implementing patient safety, including age, attitude, knowledge, work motivation, workload, length of work, supervision, and organizational culture. The implementation of patient safety goals by nurses in hospitals can be categorized as either good or bad because several factors influence it. For this reason, the coordination of the hospital must carry out activities to strengthen the factors that affect nurses so that patient safety can be adequately implemented.

INTRODUCTION

Patient safety is a process in healthcare facilities that provides patient care safely (Tutiany et al., 2017). It is expected that the implementation of patient safety in hospitals can create safer patient care. Patient safety is the most important indicator in the healthcare system that is expected to be a reference for producing ideal healthcare services and reducing incidents in patients (Delvita, 2021). As a form of concern in improving the quality and safety of patient-focused healthcare services, in 2013, the Joint Commission International (JCI) issued six patient safety goals (International Patient Safety Goals), which are currently being implemented as a standard for all hospitals worldwide. Patient safety goals have six key points, including accurate patient identification, increased effective communication, maintaining the safety of the high-alert medication, ensuring the right location, the right patient for surgery, and the correct procedure for patients, reducing the risk of infection, and reducing the risk of patient falls (Kemenkes, 2017).

Hospitals are the most vulnerable place for patient safety incidents as a place that is labor-intensive, capital-intensive, technology-intensive, and problem-intensive with various procedures, professions, and standards. A patient safety incident is any unintended event that may result in or potentially result in injury to patients that could have been prevented. According to the Regulation of the Minister of Health of the Republic of Indonesia Number 1691 of 2011, types of patient safety incidents consist of

Unexpected Incidents (KTD), Near Miss Incidents (KNC), No Harm Incidents (KTC), and Potential Harm Incidents (KPC) (Menkes, 2011). The consequences of these incidents can lead to injury, endangerment of life, prolonged treatment, and even death (Cahyono & Suharjo, 2008).

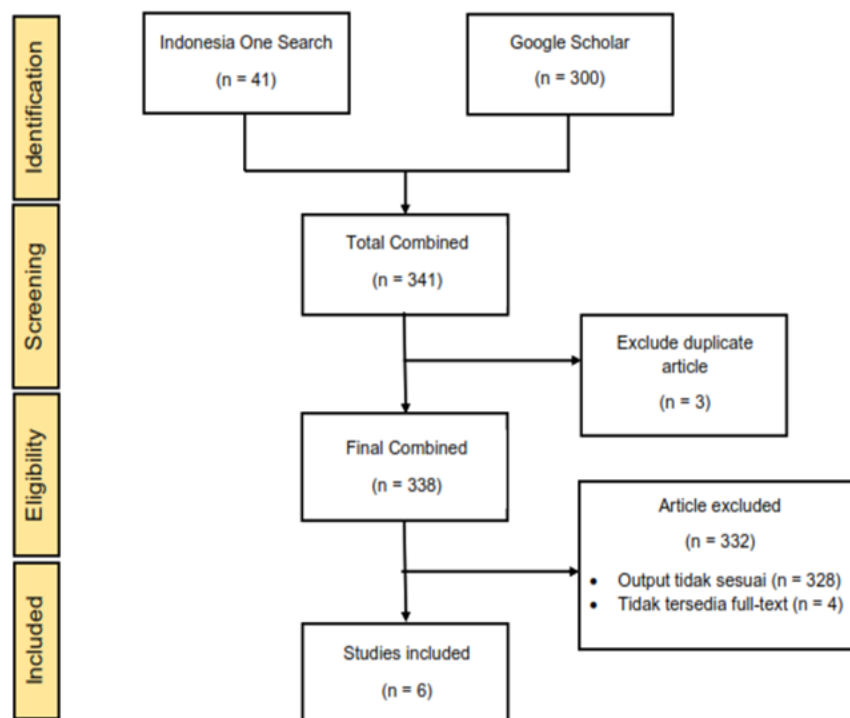
Based on data from the National Patient Safety Committee (KNKP), the number of patient safety incident reports in Indonesia from 2015 to 2019 continues to increase. In 2019, the number of reported incidents was 7.465 cases, a drastic increase compared to the previous year's 1.489 cases. Of the 7.465 cases, 38%, or as many as 2.837 cases, were categorized as Near Miss Incidents (KNC). 31% or as many as 2.314 cases were categorized as No Harm Incidents (KTC), and 2.314 cases were categorized as Unexpected Incidents (KTD). These incidents resulted in 171 deaths, 80 cases of serious injury, 372 cases of moderate injury, 1.183 cases of minor injury, and 5.659 cases of no injury. The occurrence of these incidents should be minimized by implementing patient safety goals by the hospital to prevent incidents that harm patients. One of the inputs related to implementing patient safety in hospitals is healthcare workers. Nurses are directly involved with patients in providing care, making them more at risk of safety hazards than other healthcare workers. This makes nurses the main factor in patient safety in hospitals, such as the case in the Inpatient Ward of the Tanjungpura University Hospital in Pontianak, where information related to treatment was not provided by nurses to the patient or their families. Nurses also did not double-check with other nurses and did not correctly identify the patient according to standards before giving medicine (Safitri, 2018). Therefore, strengthening the implementation of patient safety, particularly in terms of human resources, is necessary. The implementation of patient safety in hospitals must be carried out by all nurses with a target achievement of 100% so that it does not become the root cause of many other errors.

This study aims to identify the factors influencing nurses implementing patient safety in hospitals. The results of this study are expected to be useful for hospitals and the profession to optimize the factors that affect the implementation of patient safety, thus encouraging better patient safety implementation in hospitals.

METHOD

This article was a literature review with a descriptive approach by collecting several journals and articles from the Indonesia One Search and Google Scholar databases. The keywords used were in Indonesian, namely "patient safety" AND "nurse" AND "hospital". The inclusion criteria for determining articles were original research articles published within the last five years, from 2017 to 2022, available for free access, in full text and the Indonesian language, and articles that studied the factors influencing nurses in implementing patient safety in hospitals. From several literature findings, the author chose to use six research articles that were considered relevant to the topic of discussion using the PRISMA (Preferred

Reporting Items for Systematic Reviews and Meta-analyses) framework and combined them with being reviewed and concluded in the literature review.



Picture 1. PRISMA flow diagram of article selection

RESULT

Table 1. Summary of literature review findings

Author (Years)	Objective	Location	Design	Sample	Results
Pambudi et al., (2018)	To determine the factors influencing nurses in implementing the 6 Patient Safety Goals (SKP) on Joint Commission International (JCI) Accreditation in inpatient wards.	Inpatient unit, Panti Waluya Hospital Malang	Descriptive analytic with cross sectional approach.	124 nurses	Implementing 6 Patient Safety Goals (SKP) in the inpatient ward has mostly been done well. Factors that influence the implementation of the 6 SKP are the length of work ($p = 0.018$), nurse's knowledge ($p = 0.002$), number of dependents ($p = 0.018$), nurse's motivation ($p = 0.019$), organizational influence ($p = 0.029$), and supervision ($p = 0.001$).
Faridah et al., (2019)	To identify the factors influencing the implementation of patient safety culture among nurses in inpatient care.	Inpatient of Tangerang General Hospital	Quantitative with cross sectional approach	68 nurses	Most nurses have implemented patient safety cultures well. There is an influence of motivation ($p = 0.002$), level of knowledge ($p = 0.007$), and leadership support ($p = 0.028$) on the implementation of patient safety.
Sarasanti et al., (2018)	To identify the factors influencing the	Inpatient unit, X Hospital,	<i>Cross sectional</i>	48 nurses	The implementation of patient safety goals has been running

Author (Years)	Objective	Location	Design	Sample	Results
	implementation of patient safety inpatient units.	Jakarta			well. There is an influence of facilities ($p = 0.000$), organizational culture ($p = 0.000$), and supervision ($p = 0.033$) on the implementation of patient safety goals.
Kalsum et al., (2022)	To determine the factors influencing the implementation of patient safety in inpatient wards.	Inpatient unit, Permata Madina General Hospital, Panyabungan	<i>Cross sectional</i>	35 nurses	There are still healthcare workers who pay less attention to patient safety. Supervision ($p = 0.038$) and knowledge ($p = 0.008$) have a significant influence on the implementation of patient safety in the inpatient ward.
Aminayanti et al., (2021)	To analyze the influence of nurses' knowledge, attitudes, and work motivation on implementing of patient safety in inpatient units.	Inpatient unit of Sekayu Regional Public Hospital	Quantitative with a causal survey approach.	105 nurses	There are still nurses who work without applying patient safety principles. Nurse's attitude ($p=0.000$) and knowledge ($p=0.000$) variables significantly affect the implementation of patient safety
Handayani & Kusumapradja, (2018)	To identify the factors that influence and have the most impact on implementing of patient safety programs in inpatient units.	Inpatient unit, X Hospital, Tangerang Selatan	Quantitative approach, survey method, and correlational technique.	30 nurses	The implementation of the patient safety program is only 43.3% of respondents and is categorized as low. There is an influence of age ($p = 0.002$) and nurse's work motivation ($p = 0.000$) on the implementation of the patient safety program.

DISCUSSION

The Implementation of Patient Safety

Based on the results analysis of the study in the table above, it is known that nurses' implementation of patient safety goals in several hospitals is categorized as good. However, in several other hospitals, nurses' implementation of patient safety is still inadequate. This is influenced by several factors in nurses. Implementing patient safety in hospitals running well can be seen from the number of nurses who say often and consistently and the relatively high level of compliance with hand hygiene procedures when carrying out actions (Sarasanti et al., 2018).

However, in some hospitals, nurses' implementation of patient safety is categorized as inadequate. This is evident from the continued presence of healthcare workers who make mistakes in identifying patients and the risks to patients and their management. In addition, there are also discrepancies in incident reporting and analysis and a lack of solutions to minimize the risks and prevent injuries resulting from inappropriate actions (Kalsum et al., 2022). This is supported by other research indicating that in the low implementation of patient safety, the indicator of reducing patient fall risk has the lowest implementation value compared to the other five indicators (Handayani & Kusumapradja, 2018). The lack of awareness

by patient families when accompanying the patient and limited human resources are obstacles to reducing patient fall risk (Tanjung et al., 2021).

Factors Influencing the Implementation of Patient Safety

Based on the results analysis of the study in the table above, it was found that several factors that influence nurses in implementing patient safety in hospitals, including age, attitude, knowledge, work motivation, workload, length of work, supervision, and organizational culture.

According to Uswantari in Noli et al., (2021), age is the length of time a person has lived since birth. Age is one of the factors that influences nurses in implementing patient safety goals in hospitals (Galleryzki et al., 2021), because age can describe how a nurse behaves with their views and responsibilities in properly implementing patient safety goals. This is supported by other research that shows that the age factor positively affects the implementation of patient safety programs (Handayani & Kusumapradja, 2018). Other research has shown that the increasing age of health workers is accompanied by decreased patient safety incidents because they become wiser, more careful, and comply with policies, procedures, and SOPs (Rahayu et al., 2018).

The tendency to react to a thing, person, or object with likes, dislikes, or indifference is the definition of attitude (Sabri, 1996). The results of research conducted by Aminayanti et al., (2021) show that attitude positively affects patient safety implementation. This means that the higher the value of attitude, the higher the implementation of patient safety. The nurse's attitude toward patient safety is strongly related to the level of education, experience, and frequency of attending patient safety training (Salih et al., 2021). Attitude greatly influences, as seen from nurses who implement patient safety poorly tend to have negative attitudes, such as impatience, noncompliance, and irresponsibility (Mukhlis, 2021).

According to Notoatmodjo in Masturoh & Anggita, (2018), knowledge is the result of knowing, and occurs after someone senses an object. Based on research by Pambudi et al., (2018), a p-value=0.002 was obtained, meaning there is an influence between knowledge and the behavior of implementing patient safety goals, etc., in hospitals. This is supported by other research, which shows that out of 16 nurses with good knowledge, 13 nurses implement patient safety in a good category (Kalsum et al., 2022). In this case, nurses must understand the concept of hospital patient safety (KPRS) and the six patient safety goals (Faridah et al., 2019).

Motivation is how needs to encourage someone to carry out activities to achieve certain goals (Goni et al., 2021). Based on research conducted by Pambudi et al., (2018), the statistical test results of the influence of motivation on the behavior of implementing 6 SKP using chi-square obtained a p-value = 0.007, meaning there is an effect of motivation on the behavior of implementing 6 SKP in the inpatient ward. This result is in line with other studies that show a significant influence of the motivation variable on

implementing patient safety programs (Handayani & Kusumapradja, 2018). It can be said that if nurses have high motivation to implement patient safety goals, then the drive to achieve them will come from within them so that nurses consciously implement patient safety goals, even though the hospital environment does not apply a reward and punishment system.

The nurse's tenure refers to the length of time a nurse has worked since being officially appointed as an employee in a hospital or other health facility. The longer the working period, the more likely the nurse is to acquire increased skills and knowledge, as well as more challenging work, recognition, and appreciation (Safitri, 2018). The results of research conducted by Pambudi et al., (2018) showed a significant influence between nurses' tenure and the behavior of implementing the six patient safety goals in the inpatient ward. Nurses who applied patient safety goals in the good category mostly had a tenure of more than five years. If it is associated with the results of research conducted by Putri et al., (2022), where the average length of work for nurses is more than five years, it means that nurse's skills are increasing in implementing six patient safety goals and it has become a habit to apply them.

According to Mukhtar and Iskandar in Nurdia et al., (2017), supervision comes from the word "super", meaning more or above, and "vision" meaning to see or review. Supervision can also be called monitoring. This means that superiors monitor or review the activities being carried out by their subordinates. Supervision or monitoring can encourage nurses to implement patient safety goals. This is supported by the research of Kalsum et al., (2022), which states that there is a relationship between supervision and the implementation of patient safety in hospital inpatient wards. This is in line with the research of Safitri (2018), which states that supervisory support from leaders can encourage nurses to be more compliant up to 21 times compared to nurses who receive less supervisory support from their leaders. Data from Panti Waluya Malang Hospital shows that 50% of supervision is inadequate, resulting in the suboptimal implementation of patient safety goals in the hospital (Pambudi et al., 2018).

CONCLUSION

The implementation of patient safety goals by nurses in several hospitals has been categorized as good, but in some other hospitals, the implementation is still inadequate. This is influenced by several factors related to the nurses, including age, attitude, knowledge, work motivation, workload, length of work, supervision, and organizational culture. Therefore, coordination is needed from the hospital management to strengthen these factors that affect the nurses, such as conducting routine patient safety training to increase their knowledge so that patient safety can be implemented correctly to avoid incidents and increase patient satisfaction.

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