PATIENT SAFETY CULTURE IN CLINICAL CARE SETTING: A LITERATURE REVIEW

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ABSTRACT

Background: Patient safety is currently the most important global issue where many patient claims are reported for medical errors that occur in patients. Steps to overcome this with a culture of safety in health care. **Methods:** This research is a literature review. This study complies with PRISMA standards. Data sources for the identification of Science Direct, Pubmed, Scopus, and Google Scholar from 2013 to 2023. The keywords used include " safety culture for clinical setting"; "safety culture"; "patients safety culture". **Result:** The results of the study found 10 articles that met the inclusion criteria. The findings show that patient safety culture is influenced by nursing staff support care performance agreements in hospitals, career paths, work environment and perceptions of safety culture, the implementation of patient safety culture in hospitals, types of health service errors, the role of patient and hospital staff safety culture organizations. in supporting patient safety and workload. **Conclusion:** The conclusions obtained from the various articles in the discussion show that safety culture is very important to be implemented in health services. However, before implementing it, it is necessary to examine the factors that influence the implementation of the program so that the program can be implemented and implemented properly.

Kata Kunci: Clinical care, Patient, Safety culture

INTRODUCTION

Patient safety is a process or system in a hospital that provides safer patient care (WHO, 2018; Kemenkes RI, 2020). Patient safety is currently the most important global issue where many patient claims are reported for medical errors that occur in patients. Existing systems in patient safety consist of risk assessment, patient risk identification, and management, incident reporting and analysis, the ability to learn and follow up on incidents, and implement solutions to minimize risks and prevent injuries. (Kurniawan, 2017).

Based on the WHO (World Health Organization) and Institute of Medicine (IOM) reports, in 2020 the United States experienced 98,000 deaths caused by preventable medical errors. Reports from research results at Joint Commission International (JCI) accredited hospitals stated that 52 incidents were found in 11 hospitals in 5 countries. The highest number of cases were in Hong Kong with 31% cases, Australia with 25% cases, India with 23% cases, America with 12% cases, and Canada with 10% cases (Buhari B, Machmud R, 2018; Daud, 2020). Reports of patient safety incidents in Indonesia in

2019 from accredited hospitals totaled 2,877, reporting only 12% of patient safety incidents or as many as 7,465 cases. Case details consist of 171 deaths, 80 serious injuries, 372 moderate injuries, 1,183 minor injuries, and 5,659 no injuries. (Toyo *et al.*, 2023).

Issues regarding patient safety both globally and nationally certainly attract the attention of the government as stated in Health Law Number 36 of 2009 and Hospital Law Number 44 of 2009 concerning hospitals that are required to carry out safe health services of high anti-corrosive quality. discrimination and effectively with the interests of the patient first. And based on the Regulation of the Minister of Health of the Republic of Indonesia Number 11 of 2017 concerning patient safety, it is a system that makes patient care safer. To carry out safe care and pay attention to patient safety, organizational efforts are needed to create a supportive environment, one of which is by cultivating patient safety. (Kemenkes RI, 2017).

Patient safety culture is an important thing because building patient safety is a way to build a patient safety program as a whole if an organization focuses more on patient safety culture it will produce more safety than just focusing on the program. Patient safety culture is a part of health that is latent and related to management, while indicators of safety culture include cooperation, communication, leadership, reporting, and response to non-punitive errors. The process of analyzing patient safety culture is facilitated by the instrument. This instrument is used to assess the culture of patient safety in health services such as hospitals, health centers, clinics, and so on.

Based on the explanation above, the researcher aims to examine in the form of a review related to patient safety culture in health services.

METHODS
Design
The research design used in this study is a literature review.

Eligibility criteria
The inclusion criteria in this research literature review publication include 1) English-language articles; 2) Publication between 2013-2023 (last 10 years); 3) Relates to patient safety culture instruments in hospitals. Exclusion criteria, including publication more than 2013; 3) Research that deviates from the topic under study; and 3) Non-specific research for patient safety culture instruments in hospitals. Each identified article was read in full and assessed for relevance to the review according to the inclusion criteria where the article must provide information about patient safety culture instruments in the hospital.

Sources
A literature search was conducted from January to April 2023 using the following electronic databases: Science Direct, Pubmed, Scopus, and Google Scholar 2013 to 2023.

Search
The keywords used include "safety culture in clinical settings"; "safety culture"; "patients safety culture". Only articles published in English (a universally accepted language) are included in the review. The protocol for the literature review was followed systematically, including citations, theoretical basis, methodology, objectives, and conclusions. The resulting article search was 1,076.

Study selection
The review was carried out through four stages using the Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA) flowchart (Figure 1). In the first stage, the initial search obtained 1,076 which were extracted as follows:

Science direct-32, PubMed-41, Scopus-232, and google schola4-771. The second stage of the abstract was examined according to the inclusion criteria, 1,002 articles based on the topic but not including the theme of the instrument for patient safety culture in hospitals were rejected. In the third stage, from the remaining 74 articles, we selected 20 for review based on the full-text arrangement. The reference list of 10 articles is presented in Table 1.

Data analysis

The selection process used the PRISMA diagram approach in Figure 1. The author analyzed the literature in this review focusing on instruments for patient safety culture which presented in Table 1.
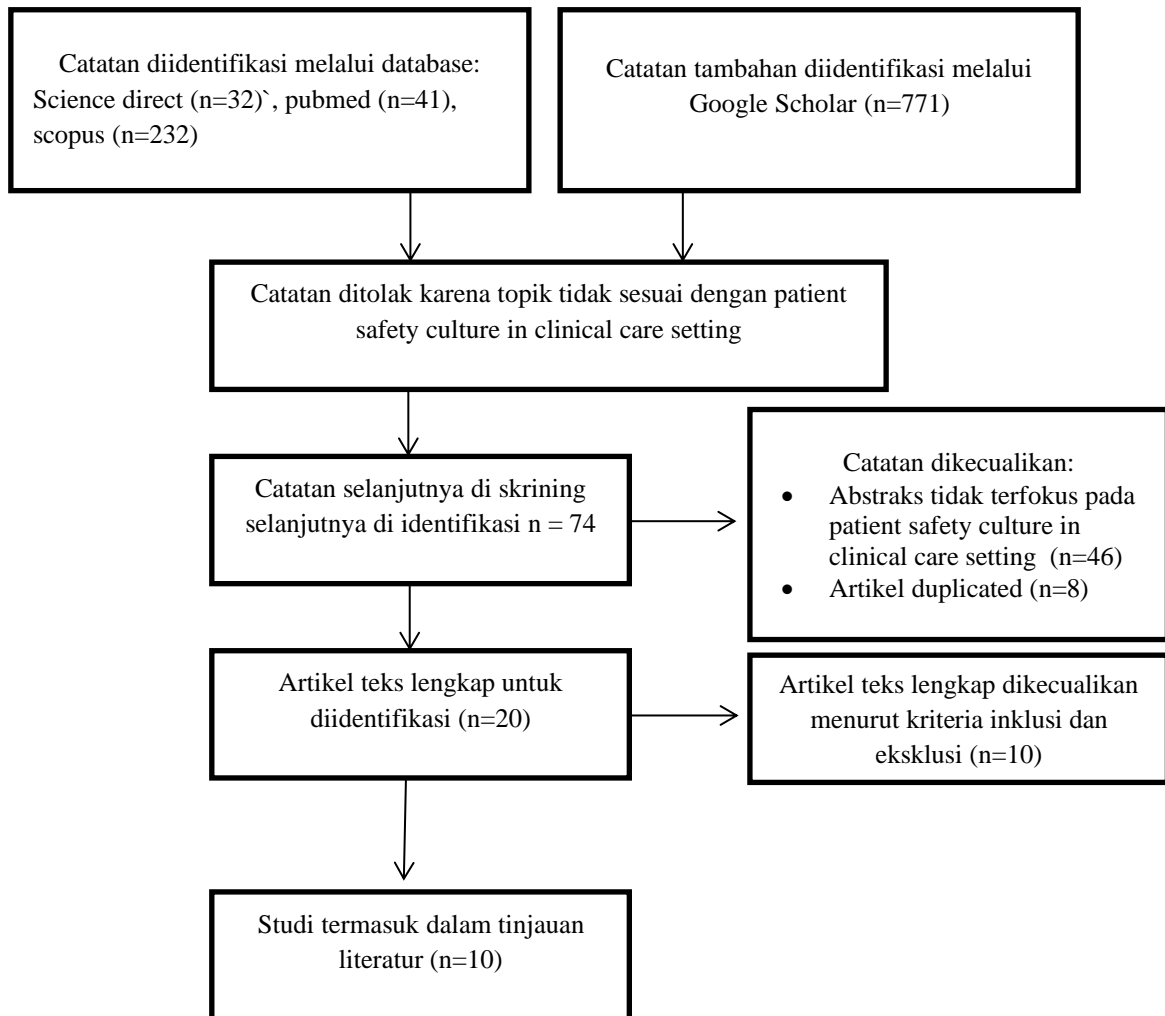

Figure 1. PRISMA flow chart

RESULTS

This literature review identified ten articles according to the inclusion criteria. The results of the identification and screening process for articles will be presented in Table 1 and Figure 1. 9 of the 10 articles used a cross-sectional design to analyze the relationship between the level of nurse engagement, nursing staff management, career path, work environment nursing, nursing care, service quality, patient safety perception, teamwork, patient safety organizational support and workload associated with patient safety culture. 1 article using a qualitative design analyzes the

implementation and integration of patient culture.

Research conducted by Carthon et al., (2019); Kim et al. (2017); Kirwan et al. (2013); Piper et al. (2018); Sexton et al. (2017) analyzed the agreement on nursing staff support performance in hospital, career paths, work environment and perceptions of safety culture. Farokhzadian (2018); Berry et al. (2016) analyzed the implementation of patient safety culture in hospitals. Hessels et al. (2019) identified types of healthcare errors. Robida (2013) identified the role of patient safety culture organizations and hospital staff in supporting patient safety. Ross et al. (2018) identified workload.

DISCUSSION

Safety has become a global issue including in hospitals. Therefore, patient safety is a top priority to be implemented in patient safety incidents. Patient safety has been regulated in Health Law Number 36 of 2009 and Hospital Law Number 44 of 2009 and Regulation of the Minister of Health of the Republic of Indonesia Number 11 of 2017. The first step that must be taken is to create a patient safety program by building and cultivating a culture of patient safety for all staff in the hospital and evaluating its implementation (Kemenkes RI, 2017; Berry et al., 2020).

This is consistent with the findings of research conducted by Carthon et al., (2019); Kim et al. (2017); Kirwan et al. (2013); Piper et al. (2018); Sexton et al. (2017) where one of the variables studied was the support of hospital staff. The hospital consists of several units, so to improve the quality of patient safety services in each unit, it is necessary to change the patient safety culture in all units. Patient safety culture cannot only be carried out by certain professions but by all existing staff in the health service as a form of support so that it can become an investment in patient safety systems in providing safe services. (Kirwan, Matthews and Scott, 2013; Kim, Yoo and Seo, 2018; Piper et al., 2018; Sexton et al., 2018; Carthon et al., 2019).

Another factor is the role of the leader to foster a patient safety culture, this is related to the hospital management system. If patient safety is already entrenched in an institution, even though there is a change in staff, it will still be implemented (Robida, 2013). An evaluation that can be carried out to find out the safety culture in agencies can be done by measuring patient safety perceptions for health workers, especially nurses (Piper et al., 2018). Other factors that affect patient safety culture are the work environment and the workload of nurses in providing care (Kirwan, Matthews, and Scott, 2013; Kim, Yoo, and Seo, 2018; Carthon et al., 2019; Ross, Rogers, and King, 2019) To minimize the occurrence of errors in providing care (Hessels et al., 2019). In addition, the findings need to identify the career path of nurses, this aims to explore the competence of nurses in providing care, so that if the results of the evaluation are found nurses make care mistakes it can be used as material for evaluation and consideration in selecting human resources. (Kirwan, Matthews and Scott, 2013; Kim, Yoo and Seo, 2018; Piper et al., 2018; Sexton et al., 2018; Carthon et al., 2019).

Another finding is that if a safety culture program has been implemented in a hospital, evaluation needs to be carried out as a form of support. This evaluation can be carried out by the safety culture organization or the management in the hospital. So that. Patient safety is considered not only as a form of program but there is no implementation. This provides an advantage for hospital leadership, which will create an image of a safe hospital in providing services (Robida, 2013).

CONCLUSION

The conclusions obtained from the various articles in the discussion show that

safety culture is very important to be implemented in health services. However, before implementing it, it is necessary to examine the factors that influence the implementation of the program so that the program can be implemented and implemented properly.
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REFERENCES

Berry, J.C. *et al.* (2020) 'Improved Safety Culture and Teamwork Climate Are Associated with Decreases in Patient Harm and Hospital Mortality Across a Hospital System', *Journal of Patient Safety*, 16(2), pp. 130–136. https://doi.org/10.1097/PTS.0000000000000251.

Buhari B, Machmud R, D.D. (2018) 'Implementation of patient safety in accredited hospitals and it's determining factors in Jambi City, Indonesia', *Elev Int J Nurs Educ Pract Res*, 1(2), pp. 134–144.

Carthon, J.M.B., *et al.* (2019) 'Association of Nurse Engagement and Nurse Staffing on Patient Safety', *Journal of nursing care quality*, 34(1), pp. 40–46. https://doi.org/10.1097/NCQ.0000000000000334.Association.

Daud, A. (2020) 'Sistem Pelaporan dan Pembelajaran Keselamatan Pasien Nasional (SP2KPN)'. Jakarta: Kementerian Kesehatan Republik Indonesia.

Farokhzadian, J., Dehghan Nayeri, N. and Borhani, F. (2018) 'The long way ahead to achieve an effective patient safety culture: Challenges perceived by nurses', *BMC Health Services Research*, 18(1), pp. 1–13. https://doi.org/10.1186/s12913-018-3467-1.

Hessels, A. *et al.* (2019) 'Impact of Patient Safety Culture on Missed Nursing Care and Adverse Patient Events', *Physiology & Behavior*, 34(4), pp. 287–294. https://doi.org/10.1097/NCQ.0000000000000378.Impact.

Kemenkes RI (2017) 'Peraturan Menteri Kesehatan Republik Indonesia Nomor 11 tahun 2017'. Jakarta: Kementerian Kesehatan Republik Indonesia.

Kemenkes RI (2020) 'anduan Nasional Keselamatan Pasien Rumah Sakit (Patient Safety): Utamakan Keselamatan Pasien'. Jakarta: Kementerian Kesehatan Republik Indonesia. Available at: http://www.rsmatasmec.com/wp-content/uploads/sites/2/2019/04/PEDOMAN-NASIONAL-KESELAMATAN-PASIEN-RS-EDISI-III-2015.pdf.

Kim, K.J., Yoo, M.S. and Seo, E.J. (2018) 'Exploring the Influence of Nursing Work Environment and Patient Safety Culture on Missed Nursing Care in Korea', *Asian Nursing Research*, 12(2), pp. 121–126. https://doi.org/10.1016/j.anr.2018.04.003.

Kirwan, M., Matthews, A. and Scott, P.A. (2013) 'The impact of the work environment of nurses on patient safety outcomes: A multi-level modeling approach', *International Journal of Nursing Studies*, 50(2), pp. 253–263. https://doi.org/10.1016/j.ijnurstu.2012.08.020.

Kurniawan (2017) 'Peratur Menteri Kesehat Republik Indones Nomor 17 Tahun 2017 tentang Keselam pasien', 87(1,2), pp. 149–200.

Piper, D. *et al.* (2018) 'The impact of patient safety culture on handover in rural health facilities', *BMC Health Services Research*, 18(1), pp. 1–13.

https://doi.org/10.1186/s12913-018-3708-3.

Robida, A. (2013) 'Hospital Survey on Patient Safety Culture in Slovenia: a psychometric evaluation', *International Journal for Quality in Health Care*, 25(4), pp. 469–475.

Ross, C., Rogers, C. and King, C. (2019) 'Safety culture and an invisible nursing workload', *Collegian*, 26(1), pp. 1–7. https://doi.org/10.1016/j.colegn.2018.02.002.

Sexton, J.B. *et al.* (2018) 'Providing feedback following Leadership WalkRounds is associated with better patient safety culture, higher employee engagement, and lower burnout', *BMJ Quality and Safety*, 27(4), pp. 261–270. https://doi.org/10.1136/bmjqs-2016-006399.

Toyo, E.M. *et al.* (2023) 'Evaluasi Sistem Pelaporan Insiden Keselamatan Pasien Dengan Metode HMN Di Rumah Sakit', *Majalah Farmasetika*, 8(1), pp. 56–69.

WHO (2018) 'Classification of patient-safety incidents in primary care.' Geneva: World Health Organization. Available at: https://www.who.int/bulletin/volumes/96/7/17-199802/en/.

Table 1. Literature search results

Author (s) (Year)	Purpose of study	Design	Subjects	Measure	Main Finding
Carthon, J.M.B., Davis, L., Dierkes, A., Hatfield, L., Hedgeland, T., Holland, S., Plover, C., Sanders, A.M., Frank, V., *et al.*, (2019)	Analyze the relationship between engagement level, staffing, and patient safety assessment of nurses working in hospitals	Cross-sectional	Nurse	Practice Environmental Scale of the Nursing Working Index (PES-NWI)	The findings show the low level of nurse agreement, and inadequate staff service so that patient safety is low.
Farokhzadian, J., Nayeri, N.D., Borhani, F., (2018)	To explore the experience of nurses in facing the challenges of implementing and integrating a culture of safety in health services	Qualitative	Nurse	Structured questionnaire	The findings indicate the need for practical strategies to create a culture of safety and implementation. Nursing management in hospitals needs to employ modern management methods in addressing the safety culture in hospitals
Berry, J.C., Davis, J.T., Bartman, T., Hafer, C.C., Lieb, L.M., Khan, N., Brilli, R.J., (2016)	Relationship of patient safety culture in the hospital system and Types of Hazards to hospital safety	Cross-sectional	Nurse	Safety attitude questionnaire administration,	Hasil temuan menunjukkan terdapat perbedaan jumllah skor budaya keselamatan pasien di beberapa professional yang berbeda dan mengalami penurunan dari waktu ke waktu
Kim, K., Yoo, M.S., Seo, E.J., (2017)	Mengeksplorasi pengaruh lingkungan kerja perawat dan budaya keselamatan pasien di rumah sakit di Korea	Cross sectional	perawat	Practice Enviromental Scale of Nursing Work Index	Asuhan keperawatan berhubungan dengan jenjang kariri, lingkungan kerja keperawatan dan budaya keselaatan pasien. Faktor yang mempengaruhi asuhan keperawatan

Author (s) (Year)	Purpose of study	Design	Subjects	Measure	Main Finding
					meliputi jumlah staf dan SDM, kemampuan manajer perawat dan dukungan perawat. Jenjang karir dan persepsi terhadap budaya keselamatan pasien.
Hessels, A., Paliwai, M., Weaver, S.H., dan Wurmsr. T.A. (2019)	Mendeskripsikan hubungan antara budaya keselamatan pasien, kesalah pelayanan keperawatan dan 4 jenis kejadian merugikan pasien	Cross sectional	perawat	Agency for Healthcare Research and Quality (AHRQ) Hospital Survey on Patient Safety Culture (HSOPS)	The findings showed occasional missed nursing care in 29 units, 30% missed nursing complaints, 26% service quality, and 15% access to vascular devices.
Kirwan, M., Matthews, A., Scott, P.A.,	Exploring the Relationship between work environment and patient safety culture	Cross-sectional	Nurse	Nurse work environment, organizational safety culture, nurse education level, patient safety training experience	The findings show that the work environment positively affects patient safety,
Piper, D., Lea, J., Woods, C., Parker, V., (2018)	Exploring the effect of patient safety culture perceptions with and dimensions of patient safety in rural settings in Australia	Cross-sectional	Nurse	Types of health care facilities and Perceptions of patient safety	The findings show that health services affect perceptions of patient safety, teamwork, and cultural support management are effective in increasing the delivery of patient information
Robida (2013)	To identify psychopathic traits based on the Hospital Health Research Agency on Patient Safety Culture in the Slovenian Environment	Cross-sectional	Health workers and staff	Patient safety culture	The findings show that the patient safety culture dimension is considered better than the dimensions at the hospital level.
Ross, C., Rogers, C., King, C.,	This study aims to identify the influence of	Cross-sectional	Nurse	Nurse work environment	The findings show that there is no

Author (s) (Year)	Purpose of study	Design	Subjects	Measure	Main Finding
(2018)	culture and climate as a factor in the nursing workload				relationship between culture and nurse workload
Sexton, J.B., Adair, K.C., Leonard, M.W., Frankel, T.C., Proulx, J., Watson, S.R., *et al.,* (2017)	Analyzing the leadership model of WalkRound with patient safety culture, employee involvement, and minimizing fatigue	Cross-sectional	Nurse	Patient safety culture, workforce involvement, and burnout	The findings show that patient safety culture in the hospital is influenced by teamwork, safety, leadership, and decision-making participation and minimizes work fatigue.

Reference: (Kirwan, Matthews, and Scott, 2013; Robida, 2013; Farokhzadian, Dehghan Nayeri and Borhani, 2018; Kim, Yoo, and Seo, 2018; Piper *et al.*, 2018; Sexton *et al.*, 2018; Carthon *et al.*, 2019; Hessels *et al.*, 2019; Ross, Rogers and King, 2019; Berry *et al.*, 2020)