Pancasakti Journal of Public Health Science and Research



Vol. 5 No. 1 January 2025: Hal. 01–13 Doi: 10.47650/pjphsr.v5i1.1622 ISSN (Online): 2777-1296 OJS: http://journal.unpacti.ac.id/index.php/pjphsr

Implementation of Patient Safety Goals in Hospitals: A Systematic Literature Review

Nur Inayah Rauf*, Andi Mu'tiah Sari, Muhajrin

Hospital Administration Department, Tri Tunas Nasional Technology and Health Institute, Indonesia

*Correspondence Address: nir@tritunas.ac.id

Article Info	ABSTRACT
Article History Received: Dec 03, 2024 Revised: Jan 02, 2025 Accepted: Jan 10, 2025	The provision of healthcare services to patients in hospitals carries the potential for incidents and injuries. Implementing the six patient safety goals serves as an organized framework to establish a culture, processes, behaviors, and environment that ensure safety for patients, healthcare providers, and the surrounding community. The aim of this study was to evaluate the implementation of the six patient safety goals in hospitals. This research employed a systematic literature review using the PRISMA technique (Preferred Reporting Items for Systematic Reviews and Meta-Analysis). Literature searches were conducted using Google Scholar, with
Keywords: Patient Safety Goals; Implementation; Hospital	criteria for articles published between 2019 and 2024. The search terms included "Patient Safety Goals" AND "Hospitals." Articles considered were original research discussing the six patient safety goals in full. A total of 2,250 articles were identified through Google Scholar, but only 12 articles met the inclusion criteria. Five articles specifically described the implementation of the six patient safety goals, while seven articles linked the goals to education, gender, work tenure, age, leadership, knowledge, work experience, and communication. In general, the implementation of patient safety goals adheres to the standards set by the Ministry of Health. However, improvements are needed in areas such as staff compliance and consistency, adequacy of facilities and infrastructure, as well as leadership support.

INTRODUCTION

Unsafe care is a major public health issue affecting millions of patients worldwide. According to a recent systematic review, 12% of patients experience harm in various medical services, meaning that more than one out of ten patients suffer adverse effects due to unsafe care. Based on the severity levels, half of the patients endure injuries that are more severe than mild or temporary harm. Furthermore, 12% of incidents result in permanent disability or death. Approximately half of all harm caused by unsafe care is considered preventable. Unsafe care is estimated to contribute to more than 3 million deaths annually. Patients also face substantial economic losses, the misallocation of healthcare resources that could be used more productively, and diminished trust in healthcare services, which tarnishes their reputation (WHO, 2024).

According to Aştı and Acaroğlu (2000), the fundamental principle of healthcare services is patient safety. The most basic elements of patient care require awareness of responsibility

and up-to-date knowledge to provide accurate services. Issues arising in patient-centered care processes or systems can lead to patient harm. Patient safety is a complex system encompassing performance improvement, safe environments, risk management, enhanced services, infection control, safe use of medications and medical devices, clinical practices, and care environments (Girginer et al., 2020).

Every year, a significant number of patients are harmed or die due to unsafe healthcare services, creating a high burden of mortality and disability worldwide, particularly in low- and middle-income countries. On average, one in ten patients experiences adverse events while receiving hospital care in high-income countries. In Indonesia, patient safety incidents (PSIs) were reported to total 7,465 cases in 2019, including 171 deaths, 80 severe injuries, 372 moderate injuries, 1,183 minor injuries, and 5,659 cases without injuries (PERSI, 2023).

Considering that patient safety is a pressing issue that requires immediate attention in Indonesia's healthcare facilities, it is essential to establish patient safety standards for healthcare facilities. These standards serve as guidelines for healthcare facilities in Indonesia to carry out their activities (Ministry of Health, 2017).

Patient safety goals are integral to hospital accreditation standards and hospital priority quality indicators (IMP-RS). These efforts aim to improve hospital service quality and patient safety, achieve good hospital and clinical governance, and support the implementation of national health development programs (Ministry of Health, 2022). Based on the above discussion, the purpose of this study is to examine the implementation of patient safety goals in hospitals through a literature review approach.

METHODS

This literature review was conducted using the PRISMA technique (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The process involved the stages of identification, screening, eligibility, and inclusion.

The search for research articles was conducted on October 20, 2024, addressing the research question: "How is the implementation of patient safety goals in hospitals?" The keywords were formulated using Boolean operators, specifically "Patient Safety Goals" AND "Hospital," within the Google Scholar database.

The inclusion criteria applied by the researchers were as follows: original research articles published between 2019 and 2024, full and open access, and studies discussing the six patient safety goals in hospitals. Articles were required to be written in Indonesian. Exclusion criteria included literature reviews, case reports, and articles not relevant to the topic.

The PRISMA flow diagram detailing the stages of the search for scientific articles is shown in Figure 1.

RESULTS

Based on the selection of research articles, 12 articles met the inclusion criteria. Among these 12 articles, it was found that six hospitals successfully implemented the six patient safety goals, namely Karanganyar District General Hospital, Assyifa Islamic Hospital, Wonosari General Hospital Yogyakarta, Palembang City Hospital, Banjar Baru City Hospital, and Bandar Lampung Military Hospital.



Figure 1. PRISMA Diagram

Title	Research Instrument	Research Variables	Research Method	Research Results
Analysis of the Implementation of Patient Safety Goals in the Emergency Department of X Hospital, North Sulawesi Province (Sendoh et al., 2023)	Instrument The researcher (human instrument) utilizes the ability to ask questions, analyze, capture, and construct the situations being studied.	VariablesAccuracy ofPatientIdentification,Improvement ofEffectiveCommunication,Improvement ofMedication Safetyto Be Aware Of,Ensuring CorrectSite, CorrectProcedure,Correct Patientfor Surgery,Reduction ofHealthcare-AssociatedInfection Risks,Reduction ofPatient Fall Risks.	Method Qualitative Research Sampling technique using purposive sampling Data analysis using Miles and Huberman model Testing data validity and reliability through data credibility, data transferability, data dependability, and data confirmability tests.	 Use of identification bracelets and stickers according to risk. A minimum of two identifiers should be used, and this should be done before administering any procedures. Effective communication is carried out using the SBAR method and TBaK during communication via phone and handover. A designated high-alert medication rack is available in the medicine cabinet, but there is no dedicated high-alert medication
				cabinet yet. Labeling for

			1		
			Doctors and Nurses.	4. 5.	alike) and high-alert medications is in place, and medications requiring low- temperature storage are properly stored. SKP 4 has not been implemented yet. Hand hygiene facilities are available. However, staff have not been consistent in applying hand hygiene during all handwashing moments, particularly when the number of patients increases, or when soap or hand rub is unavailable. Initial assessment, education, marking patients at risk of falls, preventive actions, and reassessment are conducted.
Description of Patient Safety Targets Implementation by Nurses Based on Hospital Accreditation Standards in the Inpatient Unit of Karanganyar District General Hospital (Saputra et al., 2023)	The questionnaire is based on the 2022 Hospital Accreditation Standard Instrument	Accuracy in Patient Identification, Improvement of Effective Communication, Enhancement of Medication Safety to be Aware of, Assurance of Correct Site, Procedure, and Surgical Patient, Reduction of Infection Risks, Reduction of Patient Fall Risks.	This is a descriptive quantitative study. The research population consists of nurses in the inpatient unit. The sampling technique used is simple random sampling. The analysis conducted is univariate analysis. The sample consists of 80 nurses.	 1. 2. 3. 4. 5. 6. 	Patient identification was performed well in 88.8% of cases, but less optimally when asking for the room number. Effective communication using SBAR during handover. Double-checking, observation, labeling of the location, and storage of high-risk medications were conducted. The surgical site marking was performed by the operator, along with informed consent and double-checking. 87.5% of respondents performed handwashing properly. Initial fall risk assessment for patients, reassessment for at-risk patients, implementation, and evaluation of intorvontions

The Relationship Between Nurse Characteristics and the Implementation of Patient Safety Goals Post- Accreditation at Hospital "X" in Palembang City in 2018 (Surahmat et al., 2019)	Questionnaire	Patient safety targets, education, gender, length of service, age.	A quantitative research study with a descriptive- analytic method using a cross- sectional design. The sample consisted of 96 nurses.	The implementation of the Patient Safety Goals (PSG) was carried out effectively, with PSG 1 at 70.8%, PSG II at 94.80%, PSG III at 76%, PSG IV at 87.5%, PSG V at 50%, and PSG VI at 51%. The successful implementation was observed among nurses with vocational education. No significant relationship was found between education level, gender, work experience, and age with nurses' compliance in implementing patient safety goals.
The relationship between leadership and the implementation of patient safety goals by nurses at Awal Bros Hospital Pekanbaru in 2017 (Salim et al., 2020).	Questionnaire and Observation	Leadership, Patient Safety Goals	Survey Method The data collection technique used was cluster random sampling. The sample consisted of 91 nurses.	There is no relationship between leadership and the implementation of the six patient safety goals.
The Relationship Between Nurses' Knowledge of Patient Safety Goals Implementation and Compliance Levels in Infection Prevention at Prikasih Hospital (Supratiningsih et al., 2024)	Questionnaire and Observation	Nurses' knowledge about the implementation of patient safety goals and their level of compliance in infection prevention.	This is an analytical study with a correlational design, specifically cross- sectional. The sampling technique used was purposive sampling with a total of 62 participants. Data analysis techniques included univariate analysis and bivariate analysis with the Kolmogorov- Smirnov normality test and Spearman's	There is a relationship between a person's knowledge and their compliance with infection control and prevention measures. The better the knowledge about patient safety goals, the more compliant they will be in implementing infection prevention and control practices.

			rank correlation test.	
The relationship between the level of knowledge of operating room nurses about patient safety goals and the implementation of the six patient safety goals in the operating room at RSI Assyifa (Hamzah et al., 2024).	Questionnaire and Observation	The Knowledge of the Six Patient Safety Goals	The quantitative descriptive method was used, with a cross- sectional approach and total sampling technique. The sample consisted of 14 individuals.	A relationship was found between the level of knowledge of operating room nurses regarding the 6 patient safety goals and the implementation of these 6 patient safety goals in the operating room at RSI Assyifa. The nurses had a fairly good understanding of the 6 patient safety goals. Goals 2, 3, 5, and 6 were implemented well, with 100% compliance, while goals 1 and 4 were implemented with 85.7% compliance.
Implementation of Patient Safety Indicators Based on Hospital Accreditation Commission (KARS) Standards at Wonosari Public Hospital, Yogyakarta (Wahid et al., 2022)	The researcher (human instrument)	The six patient safety goals.	The study used a qualitative method with a descriptive research design and a case study approach. The sampling technique was purposive sampling. Data analysis was performed through data reduction, data presentation, and conclusion drawing. The sample consisted of 5 individuals.	 The use of identity bracelets containing the name, date of birth, and medical record number. Identification is performed before administering medication, blood, blood products, procedures, and after blood draws or specimen collection. The use of SBAR (Situation, Background, Assessment, Recommendation) and TBaK (Transfer Before Knowledge) methods. The separate storage of high-alert medications, monitoring, double- checking, and labeling. Marking the surgical site, verification procedure. Hand hygiene performed using the 6- step method and 5 moments, along with the use of personal protective equipment (PPE). Initial assessment, placing fall-risk

				stickers/bracelets for patients, education, and bedside rail use.
The implementation of patient safety targets in hospital services (Muliyadi et al., 2022).	Questionnaire	Characteristics: age, gender, education, and work experience Six Patient Safety Goals	Descriptive analytical research. Purposive sampling. Univariate and bivariate analysis with independent t-test and linear regression.	There is no relationship between the characteristics of age, gender, education, and work experience with the implementation of patient safety.
The Impact of Teamwork, Communication, and Patient Safety Culture on Achieving Patient Safety Goals (A Survey in the Inpatient Unit of Hospital X) (Hastuti et al., 2020)	Questionnaire	Teamwork, Communication, and Safety Culture in Achieving Patient Safety Goals	The descriptive survey method with a quantitative research approach and a cross-sectional study design. Path analysis.	There is a positive relationship between teamwork, communication, and patient safety culture. The influence of teamwork, communication, and patient safety culture, both partially and simultaneously, has an impact on achieving patient safety goals.
Nurses' knowledge of stroke patient safety goals in Banjarbaru City Hospital (Assa et al., 2023)	Questionnaire	Knowledge of the Six Patient Safety Goals	A descriptive quantitative study using a total sampling technique.	All respondents were categorized as having good knowledge regarding the six patient safety goals for stroke.
Descriptive Study on the Implementation of Patient Safety Goals According to the 2012 KARS Instructions in the Emergency Department of TNI AD Hospital IV 02.07.04 Bandar Lampung (Helsanewa et al., 2019)	The researcher (human instrument)	Six Patient Safety Goals	Qualitative method using in- depth interviews and observation. Data analysis was conducted by reading the transcripts repeatedly and thoroughly.	The implementation of SKP 1, 2, 3, 4, and 5 has been in accordance with the 2012 KARS instrument, while the implementation of fall risk for patients has not yet aligned with the 2012 KARS instrument.
Study on the Implementation of Patient Safety Goals at Dewi Sartika General Hospital, Kendari City, in 2022	The researcher (human instrument)	Six Patient Safety Goals	Descriptive qualitative research with an in-depth interview approach.	The implementation of goals 1, 2, 3, 4, and 6 has been carried out effectively, while the implementation of goal 5 remains very low.

(Wastuti et al.,		
2024)		

Source: Secondary Data, 2024

DISCUSSION

The objective of patient safety goals is to promote specific improvements in patient safety. These goals highlight problematic areas in healthcare, providing evidence-based and solution-oriented outcomes (Ministry of Health, 2017). A study in Palembang revealed that effective implementation of patient safety goals was carried out by nurses with vocational education qualifications, and no relationship was found between gender, work duration, or age and nurses' compliance in implementing these goals (Surahmat et al., 2019). Education and work experience were significantly associated with adherence to patient safety guidelines, while leadership was not related to the application of patient safety goals (Salim et al., 2020).

According to the Health Action Model introduced by Tones, knowledge and skills influence a person's behavior (Swarjana, 2017). Research conducted at RSI Assyifa indicated a relationship between the level of operating room nurses' knowledge of the six patient safety goals and their application in the operating room (Hamzah et al., 2024).

Implementation of Patient Safety Goal 1: Identifying Patients Correctly

Patient identification errors occur when patients are mistakenly identified as someone else. Such errors remain a risk to patient safety and can lead to significant harm (Health Services Safety Investigations Body, 2024). Patient identification activities require using at least two identifiers and must not rely on room numbers or patient locations (Ministry of Health, 2023). Patients should be identified using not only two identifiers but also by verifying their medical record number or address. Identification involves checking patient ID bracelets and matching them with medical records (Wahid et al., 2022).

ID bracelets include patient identity details, with pink bracelets for females and blue for males. Specific risks are indicated by stickers: red for allergy history, yellow for fall risk, and purple for Do Not Resuscitate (DNR) status (Sendoh et al., 2023). At Karanganyar District Hospital, suboptimal patient identification practices were observed, where nurses only asked for names and room numbers when administering medications (Saputra et al., 2023).

Patient identification should be performed before administering medications, blood, or blood products, collecting blood or other clinical specimens, and providing treatments or procedures (Ministry of Health, 2017). This aligns with research in the emergency department of TNI Bandar Lampung Hospital, where patient identification procedures adhered to KARS 2012 instructions (Helsanewa et al., 2019). Barriers to identification processes include reduced patient consciousness, necessitating both verbal and visual identification methods (Assa et al., 2023).

Implementation of Patient Safety Goal 2: Improving Effective Communication

The International Patient Safety Goals emphasize the importance of effective communication when conveying verbal care orders, reporting critical diagnostic results, and handing over patient care. Ensuring that patient data is accurately communicated and understood by recipients is vital to reducing errors and enhancing patient safety (HCI, 2023). Effective communication between care professionals involves the SBAR (Situation,

Background, Assessment, Recommendation) method during patient handovers (Saputra & Rizky, 2023). The TBaK (Write, Read, Confirm Back) method is used for receiving orders or diagnostic results (Wahid et al., 2022).

When receiving instructions, documentation is made in the CPPT (Patient Progress Notes) with completed dates, times, and signatures. Verification by the instructor must occur within 24 hours (Sendoh et al., 2023). A study in Palembang reported that 94.8% of effective communication implementations were well-executed, making it the highest achievement among the six patient safety goals (Surahmat et al., 2019).

Implementation of Patient Safety Goal 3: Enhancing the Safety of High-Alert Medications

High-alert medications are drugs with a high risk of causing significant harm to patients if used improperly. These include high-risk drugs (e.g., insulin, heparin, cytostatics), look-alike sound-alike (LASA) medications, and concentrated electrolytes. Hospitals must create a list of high-alert medications and establish strategies to reduce risks, such as proper storage arrangements, clear labeling, double-checking protocols, restricted access, and usage guidelines for high-alert medications (Ministry of Health, 2022).

Research at Karanganyar District Hospital showed that nurses managed high-alert medications through double-checking, labeling, and proper storage per policies and procedures (Saputra et al., 2023). High-alert medications are stored separately, not in patient care units except for emergency drugs, which are supervised directly by staff. Double-checking, labeling, and prescription verification are mandatory for unreadable prescriptions (Wahid et al., 2022). At Bandar Lampung Hospital, a list of high-alert drugs and a dedicated cabinet for these medications were available, with double-checking as part of the safety implementation (Helsanewa et al., 2019). However, at Hospital X, the management of high-alert drugs remained low, especially in the dispensing process of parenteral drugs in patient care units (Hastuti et al., 2020).

Proper high-alert medication management begins with adequate staff knowledge. Wellinformed nurses about high-alert medication safety implement proper storage protocols for LASA drugs, and patients are provided with individual medication lockers to prevent errors (Assa et al., 2023). At Kendari City General Hospital, high-alert medication supervision is carried out by pharmacy staff, including the dilution of concentrated electrolytes, adherence to the five rights of medication administration, and storing high-alert drugs in operating room and emergency department emergency trolleys (Wastuti et al., 2024).

Implementation of Patient Safety Goal 4: Ensuring Correct Surgical Site, Procedure, and Patient

The implementation of Patient Safety Goal (PSG) 4 aims to ensure the correct surgical site, correct procedure, and surgery on the correct patient. A universal protocol to prevent wrong-site, wrong-procedure, and wrong-patient surgeries includes a preoperative verification process, surgical site marking, a time-out conducted immediately before the procedure, and sign-out (Ministry of Health, 2022). This protocol applies to all invasive surgical and non-surgical procedures. Hospitals enhance safety by correctly identifying patients, ensuring the appropriate procedure, and verifying the correct site (The Joint Commission, 2023).

A study at Karanganyar General Hospital revealed that surgical site marking was conducted by the operator in the ward, followed by nurse-provided education and informed consent, with double-checking before the procedure (Saputra et al., 2023). In contrast, Assyifa Islamic Hospital achieved an 85.7% compliance rate with PSG 4, but observations found some patients lacked surgical site markings (Hamzah et al., 2024). Evaluation elements state that "Hospitals must use clear and understandable markings for surgical site identification and involve patients in the marking process." Similarly, research in Yogyakarta found that markings were made using permanent markers with checkmarks by operators or delegated physicians, but consistency in marking was lacking. Verification and time-out processes were also conducted (Wahid et al., 2022). Research in Bandar Lampung showed that clear and understandable markings involving patients were performed before suturing procedures (Helsanewa et al., 2019).

The World Health Organization (WHO) developed the Surgical Safety Checklist (SSC) to reduce errors and adverse events while improving teamwork and communication during surgery. The 19-item checklist has demonstrated significant reductions in morbidity and mortality and is now widely used in surgical services globally (WHO, 2009). A study at Kendari City General Hospital found that staff used the SSC and conducted re-verification during patient handovers between inpatient units and the operating room (Wastuti et al., 2024).

Implementation of Patient Safety Goal 5: Reducing the Risk of Healthcare-Associated Infections (HAIs)

Healthcare-associated infections (HAIs) pose a significant health challenge globally, including in Indonesia. HAIs are preventable if healthcare facilities consistently implement Infection Prevention and Control (IPC) programs. IPC is carried out through the application of standard precautions, transmission-based precautions, judicious antimicrobial use, bundles, surveillance, education, and IPC training (Ministry of Health, 2017). Strategies to reduce HAIs include hand hygiene, environmental cleanliness, leadership, personal protective equipment (PPE) use, evidence-based decision-making, antimicrobial resistance campaigns, respiratory hygiene and cough etiquette, and evaluations (Collins, 2008).

Research at Prikasih Hospital found a significant relationship between nurses' knowledge of patient safety goals and the implementation of IPC. A total of 97.3% of nurses demonstrated good knowledge of reducing infection risks for stroke patients through hand hygiene steps and moments and infection risk prevention education. However, nearly half of the respondents lacked proper understanding of decontamination, pre-cleaning, cleaning, disinfection, and sterilization activities (Assa et al., 2023). In hospitals in Wonosari, Yogyakarta, and Bandar Lampung, infection risk prevention is driven by IPC committees, applying the six steps and five moments of hand hygiene, and using PPE and complete handwashing facilities (Helsanewa et al., 2019; Wahid et al., 2022). Hand hygiene compliance among staff is also linked to the availability of hand hygiene facilities, with challenges such as soap and handrub shortages affecting adherence, especially when patient loads are high (Sendoh et al., 2023).

Implementation of Patient Safety Goal 6: Reducing Patient Injury Risk Due to Falls

The risk of patient injury due to falls can be minimized through universal fall precautions applied across all hospital areas, protecting not only patients but also visitors and staff. Maintaining a safe and comfortable environment is the hospital's responsibility (Ganz et al., 2013). Hospitals assess fall risk during initial patient evaluations and re-assess if conditions or treatments change. Specific measures are implemented to mitigate fall risks for identified highrisk patients (Ministry of Health, 2017).

Fall risk assessments use the Morse Fall Scale for adults and the Humpty Dumpty Scale for children (Saputra et al., 2023). In hospitals in Kendari City and Bandar Lampung, nurses and doctors assess patients at risk of falls following standards, with closer monitoring of high-risk patients (Helsanewa et al., 2019; Wastuti et al., 2024). Fall risk prevention includes initial assessments, education, patient marking, preventive measures, and reassessments, but these are inconsistently applied, particularly during high patient volumes and staff shortages (Sendoh et al., 2023).

In Yogyakarta, fall prevention includes initial assessments, reassessments, wristbands, stickers, patient education, and bedside rails. However, implementation remains suboptimal due to inadequate planning and management and facility discrepancies (Wahid et al., 2022). Research in Bandar Lampung found that while bedside rails were available, they were not present on all patient beds, grab bars were absent in toilets, floors lacked non-slip surfaces, and wheelchairs were consistently available (Helsanewa et al., 2019). Meanwhile, hospitals in Banjarbaru marked high-risk patient beds and conducted monitoring, but staff awareness of fall prevention education remained low (Assa et al., 2023).

CONCLUSION

Based on a review of several journals, it was found that the implementation of the first patient safety goal involves ensuring at least two patient identifiers, performed prior to administering medication, blood, or blood products, and before collecting blood or other specimens. The implementation of the second goal is achieved through the SBAR method for providing verbal orders and TBaK for receiving verbal orders. The third goal is implemented by creating a high-alert medication list, ensuring proper storage, labeling, double-checking by two different healthcare providers before administration, and restricting access to high-alert medications. The fourth goal is implemented through surgical site marking by the operator, verification of the correct site, procedure, and patient, conducting time-outs, and utilizing a surgical safety checklist. The fifth goal is implemented by adhering to proper hand hygiene practices according to the appropriate moments and steps, as well as implementing infection prevention and control programs. The sixth goal is implemented through initial and repeated assessments (for patients at risk of falling), patient education, the use of wristbands or bed markers, and arranging hospital facilities and infrastructure to ensure a safe environment for patients, staff, and visitors to minimize the risk of falls.

The recommendation of this study emphasizes the importance of consistently implementing patient safety goals in all hospital service units and highlights the role of hospital management in monitoring the availability of facilities and infrastructure as well as improving staff knowledge about patient safety goals.

REFERENCES

Assa, H. et al. (2023) 'Pengetahuan Perawat Tentang Sasaran Keselamatan Pasien Stroke Di Rumah Sakit Kota Banjarbaru', Jurnal Vokasi Kesehatan [Preprint]. Available at: http://ejournal.poltekkes-pontianak.ac.id/index.php/JVK.

- Collins, A.S. (2008) 'Preventing Health Care-Associated Infections', in Patient Safety and Quality: An Evidence-Based Handbook for Nurses., pp. 547–575. Available at: https://www.ncbi.nlm.nih.gov/books/NBK2683/pdf/Bookshelf_NBK2683.pdf (Accessed: 24 October 2024).
- Ganz, D.A. et al. (2013) 'What are universal fall precautions and how should they be implemented?', in Preventing Falls in Hospitals. Boston: RAND Corporation, Boston University School of Public Health, ECRI Institute. Available at: https://www.ahrq.gov/patient-safety/settings/hospital/fallprevention/toolkit/practices.html#3-2 (Accessed: 30 October 2024).
- Girginer, N. and İskenderoğlu, M. (2020) 'Sigma Levels Analysis of International Patient Safety
 Goals for a Private Hospital', Journal of International Health Sciences and Management,
 6(10), pp. 65–73. Available at:
 https://dergipark.org.tr/en/pub/jihsam/issue/53910/626453.
- Hamzah, A. et al. (2024) 'Hubungan Tingkat Pengetahuan Perawat Kamar Bedah Tentang Sasaran Keselamatan Pasien Dengan Pelaksanaan 6 (Enam) Sasaran Keselamatan Pasien Rumah Sakit di Kamar Bedah RSI Assyifa', Journal of Public Health Innovation (JPHI), 4(02), pp. 469–475. Available at: https://doi.org/doi.org/10.34305/jphi.v4i02.1142.
- Hastuti, I. and Siregar, A. (2020) 'Pengaruh Kerja Tim, Komunikasi dan Budaya Keselamatan Pasien Terhadap Capaian Sasaran Keselamatan Pasien', Universitas Pasudan Institutional Repositories & Scientific Journals, pp. 1–22. Available at: http://repository.unpas.ac.id/49090/ (Accessed: 19 October 2024).
- HCI (2023) Focusing on the International Patient Safety Goals, https://hci.care/focusing-onthe-international-patient-safety-goals/.
- Health Services Safety Investigations Body (2024) Positive patient identification, https://www.hssib.org.uk/patient-safety-investigations/positive-patientidentification/.
- Helsanewa, A., Rifai, A. and Jamaluddin, J. (2019) 'Studi Deskriptif Pelaksanaan Sasaran Keselamatan Pasien Sesuai Instruksi Kars Versi 2012 di IGD Rumah Sakit TNI AD Tk IV 02.07.04 Bandar Lampung', Jurnal Ilmu Kesehatan Masyarakat, 8(03), pp. 100–108. Available at: https://doi.org/10.33221/jikm.v8i03.300.
- Kementerian Kesehatan (2017) Peraturan Menteri Kesehatan Republik Indonesia Nomor 11 Tahun 2017 Tentang Keselamatan Pasien, Kementerian Hukum dan Hak Asasi Manusia. Indonesia. Available at: https://jdih.baliprov.go.id/uploads/produkhukum/peraturan/2017/PERMENKES/permenkes-11-2017.pdf (Accessed: 23 September 2024).
- Kementerian Kesehatan (2022) Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/MENKES/1128/2022 Tentang Standar Akreditasi Rumah Sakit. Indonesia. Available https://yankes.kemkes.go.id/unduh/fileunduhan_1654499045_682777.pdf/59 (Accessed: 24 September 2024).
- Kementerian Kesehatan (2023) Identitas Pasien untuk Mendukung Identifikasi Pasien yang Akurat, https://yankes.kemkes.go.id/view_artikel/2246/identitas-pasien-untukmendukung-identifikasi-pasien-yang-akurat.

- Muliyadi and Yulia, S. (2022) 'Penerapan Sasaran Keselamatan Pasien di Pelayanan Rumah Sakit', Aisyiyah Medika, 7(2), pp. 109–119. Available at: https://doi.org/https://doi.org/10.36729.
- PERSI (2023) Quality and Patient Safety. Jakarta. Available at: https://www.persi.or.id/wpcontent/uploads/2023/11/13.-K7_RS.-Islam-Jakarta-Cempaka-Putih_Peningkatan-Budaya-Pelaporan-Ikp-Melalui-Kanal-We-Care_DR.-Rochimiah-MARS_08176032560kmmr-rsijcp.pdf (Accessed: 22 September 2024).
- Salim, A., Rosniati and Eliawati, U. (2020) 'Hubungan Kepemimpinan dengan Penerapan Sasaran Keselamatan Pasien oleh perawat di Rumah Sakit Awal Bros Pekanbaru', Journal of STIKes Awal Bros Pekanbaru, pp. 18–28. Available at: https://journal.univawalbros.ac.id/index.php/jsabp/article/view/26 (Accessed: 19 October 2024).
- Saputra, R.A. and Rizky, W. (2023) 'Gambaran Pelaksanaan Sasaran Keselamatan Pasien oleh Perawat Berdasarkan Standar Akreditasi Rumah Sakit di Instalasi Rawat Inap RSUD Kabupaten Karanganyar', Indonesian Journal of Hospital Administration, 6, pp. 53–62. Available at: https://doi.org/10.21297ijhaa.2023.6(2).53-62.
- Sendoh, A.C.P., Pertiwi, J.M. and Manoppo, J.I.Ch. (2023) 'Analisis Penerapan Sasaran Keselamatan Pasien di Instalasi Gawat Darurat Rumah Sakit X Provinsi Sulawesi Utara', Medical Scope Journal, 5(1), pp. 50–56. Available at: https://doi.org/10.35790/msj.v5i1.4.
- Supratiningsih, T., Mintasih, S. and Kamilah, S. (2024) 'Hubungan Pengetahuan Perawat tentang Penerapan Sasaran Keselamatan Pasien dengan Tingkat Kepatuhan dalam Pencegahan Infeksi di Rumah Sakit Prikasih', Open Access Jakarta Journal of Health Sciences, 3(1), pp. 1058–1064. Available at: https://doi.org/10.53801/oajjhs.v3i1.221.
- Surahmat, R., Neherta, M. and Nurariati, N. (2019) 'Hubungan Karakteristik Perawat terhadap Pelaksanaan Sasaran Keselamatan Pasien Pasca Akreditasi Rumah Sakit "X" di Kota Palembang Tahun 2018', Jurnal Ilmiah Universitas Batanghari Jambi, 19(1), pp. 1–10. Available at: https://doi.org/10.33087/jiubj.v19i1.493.
- Swarjana, I.K. (2017) Ilmu Kesehatan Masyarakat Konsep, Strategi, dan Praktik. I. Edited by A. Ari C. Yogyakarta: Andi.
- The Joint Commission (2023) National Patient Safety Goals Effective January 2024 for the Hospital Program. Available at: https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safetygoals/2024/npsg_chapter_hap_jan2024.pdf (Accessed: 24 October 2024).
- Wahid, N.A. and Mudayana, A.A. (2022) 'Implementation of Patient Safety Indicators Based on Hospital Accreditation Commisions (KARS) Standars at Public Hospital Wonosari, Yogyakarta', International Journal of Healthcare Research, 5(2), pp. 30–43. Available at: https://doi.org/10.12928/ijhr.v5i2.10138.
- Wastuti, F., Suhadi and Zainuddin, A. (2024) 'Studi Implementasi Sasaran Keselamatan Pasien Di Rumah Sakit Umum Dewi Sartika Kota Kendari', Jurnal Administrasi dan Kebijakan Kesehatan, 5, pp. 46–54. Available at: https://jakk.uho.ac.id/index.php/journal/article/view/11 (Accessed: 19 October 2024).
- WHO (2009) WHO Surgical Safety Checklist, https://www.who.int/teams/integrated-healthservices/patient-safety/research/safe-surgery/tool-and-resources.
- WHO (2024) Global Patient Safety Report 2024. Geneva. Available at: https://iris.who.int/.