Indonesian Journal of Global Health Research
Volume 7 Number 5, October 2025
e-ISSN 2715-1972; p-ISSN 2714-9749
http://jurnal.globalhealthsciencegroup.com/index.php/IJGHR

COMPARISON OF THE EFFECTIVENESS OF SBAR AND I-PASS COMMUNICATION METHODS IN NURSE HANDOVER: LITERATURE REVIEW

Khotijah*, Wastu Adi Mulyono
Master of Nursing Study Program, Faculty of Health Sciences, Universitas Jenderal Soedirman, Jl. Profesor DR. HR Boenyamin No.708, Dukuhbandong, Grendeng, Purwokerto Utara, Banyumas, Central Java 53122, Indonesia
*khotijahkhokho@gmail.com

ABSTRACT
Communication is a critical component in providing safe and high-quality nursing care. Various adverse events that occur in hospitals are mostly caused by communication errors between health workers. This literature review aims to analyze a systematic comparison of the effectiveness of the SBAR and I-PASS communication methods. Literature search methodology includes major electronic databases such as PubMed, Google Scholar with a publication time range of 2013-2023. A total of 1,008 articles were obtained from the initial search, after the screening process using the PRISMA flow diagram, 10 journals were obtained that met the criteria. Research results: Both SBAR and I-PASS methods were proven to be effective in increasing patient safety, with I-PASS showing slightly superior performance in reducing the risk of medical errors. Although both methods have a structural framework for information transfer, I-PASS shows better consistency and depth of information than SBAR. I-PASS shows superiority in handover process efficiency, with a more significant time reduction and increased communication completeness compared to SBAR. Conclusion: The I-PASS communication method is more recommended than SBAR in nursing handover practice because it has higher effectiveness in reducing the risk of medical errors and improving the quality of information transfer.

Keywords: handover; I-PASS; SBAR

How to cite (in APA style)
Khotijah, K., & Mulyono, W. A. (2025). Comparison of the Effectiveness of Sbar and I-PASS Communication Methods in Nurse Handover: Literature Review. Indonesian Journal of Global Health Research, 7(5), 175-180. https://doi.org/10.37287/ijghr.v7i5.6437.

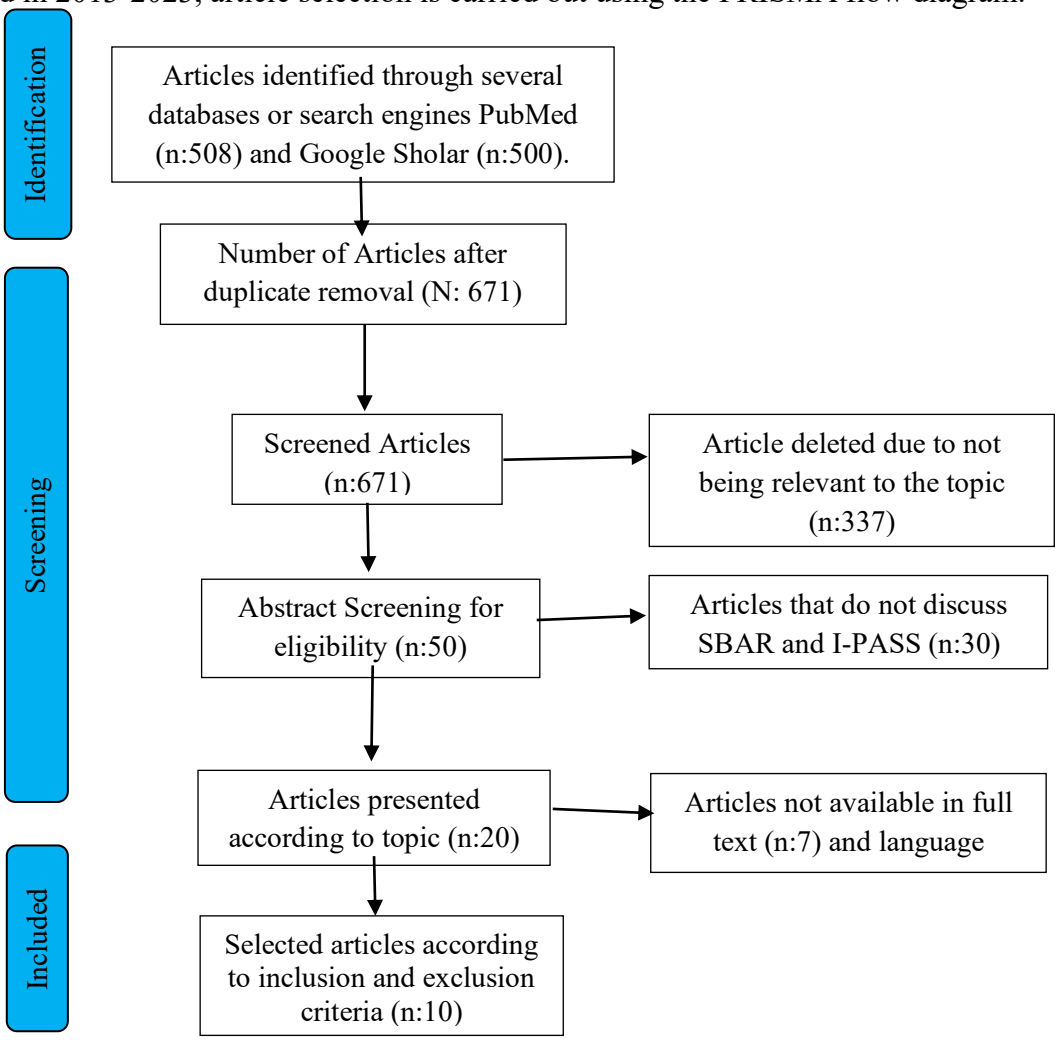
INTRODUCTION

Effective communication is a critical component of patient safety and quality of health care, especially during the patient transfer or handover process between health care providers (Riesenberg et al., 2020). Inappropriate handover processes can result in medical errors, patient safety risks, and potentially serious complications (Joint Commission International, 2017).Statistics show that communication errors in hospitals cause around 250,000 deaths per year in the United States, making it the third leading cause of death after heart disease and cancer (Makary & Daniel, 2020). In Southeast Asia, including Indonesia, the incidence of communication errors in hospitals ranges from 45-65% of total patient safety incidents (KARS Indonesia, 2022). Communication in the healthcare environment shows that standard communication methods that have been used so far are often ineffective in transferring information accurately and comprehensively (Leonard et al., 2022). A series of incidents that occurred in various hospitals indicate that unstructured communication can lead to misdiagnosis, delayed treatment, and even fatal never events (Baker et al., 2021). Previous studies have identified that structured communication methods such as SBAR (Situation-Background-Assessment-Recommendation) and I-PASS (Illness-Severity-Patient-Action-Situation-Synthesis) can significantly reduce the risk of communication errors (Thomas et al., 2020).

The SBAR and I-PASS methods have been shown to be effective in various clinical settings, but there has been no comprehensive study comparing the two directly, especially in the Indonesian context (Haig et al., 2021). Previous studies have shown that both methods have the potential to improve patient safety, reduce medical errors, and optimize health team coordination (Singh et al., 2019). However, the relative effectiveness of each method still requires further investigation in the specific context of intensive care units. The purpose of this literature review is to compare the effectiveness of the SBAR and I-PASS communication methods in implementing nurse handover based on published research results.

METHOD

The method used is a literature review conducted by analyzing related articles. Article searches using online databases, namely PUBMED, Google Scholar, keywords ("SBAR" OR "Situation-Background-Assessment-Recommendation") AND ("I-PASS" OR "Illness severity-Patient summary-Action list-Situation awareness-Synthesis") AND ("Nursing handover" OR "Patient handoff" OR "Care transition") time span 2013-2023.Inclusion and exclusion criteria using the PICO framework (population, intervention, comparison, outcome). Inclusion criteria are articles that are relevant to the research objectives, both in title and content, in English, full text. Exclusion criteria are articles where the title, content and structure do not match the research objectives. This literature review uses 10 journals published in 2013-2023, article selection is carried out using the PRISMA flow diagram.



Picture 1. Flow Diagam PRISMA

RESULT

Identification Stage: Initial search was conducted through two main databases - PubMed which produced 508 articles and Google Scholar which produced 500 articles, so the total articles found were 1,008. After removing duplicate articles, 671 articles remained. Screening Stage: Of the 671 articles screened, 337 articles were removed because they were not relevant to the research topic. Then, abstract screening was carried out for eligibility on 50 articles. Of these, 30 articles were removed because they did not discuss SBAR and I-PASS.Inclusion Stage: From the remaining articles, 20 articles fit the research topic. 10 articles had to be excluded because: 7 articles were not available in full text, 3 articles had language constraints. The remaining 10 articles met all inclusion and exclusion criteria to be used in this study.

Table 1.
Review Results

No	Judul/ Penulis	Desain Penelitian	Hasil Penelitian
1	Improving the quality of handover: implementing SBAR. Zeinab Ruhomauly, Kathryn Betts, Katherine Jayne-Coupe, Lucine Karanfilian, Megan Szekely, Anu Relwani, Joel McCay, Zahra Jaffry. (2019)	This study used a quality improvement approach involving initial audits, structured interviews, ward-based training, and implementation of visual aids.	1. Exclusive use of the SBAR method in handovers increased by 54.4%. 2. 100% of nursing staff were familiar with SBAR, up from 87.5% previously. 3. There was a 44% increase in the effectiveness of telephone handovers based on subjective reports.
2	Evaluation of a Nursing Handoff Educational Bundle to Improve Nursing Student Handoff Communications: A Pilot Study Margaret A. Avallone, Yvonne L. Weideman (2015	A pilot study with a pretest-posttest design using the Nursing Handoff Educational Bundle (NHEB) intervention on the intervention group compared to the control group.	SBAR-based workshops and simulation exercises improve participants' communication skills.
3	Postoperative Handoff Communication in Practice: An Observational Study Based on an SBAR. Abraraw Lehuluante (2013)	Non-participant observational study using SBAR-based checklist method on postoperative handoff communication in post-anesthesia intensive care unit (PAICU). Data were analyzed quantitatively and supplemented with field notes..	Handoff communication was performed in 41% of cases from 22 observations. Information conveyed was on average only 24% of the total recommended SBAR items, with an average of 76% of information missing. The average handoff duration was 60.8 seconds. There was a significant mismatch between the actual handoff communication structure and the adapted SBAR format.
4	Transferring patient information using the SBAR communication tool for interpretation Tůmová, Pavlína & Bártlová, Sylva (2023)	Secondary analysis of sources related to the use of SBAR communication tools.	SBAR has been shown to improve patient safety and quality of care when healthcare workers are well trained. However, communication in information transfer is still considered poor in healthcare facilities.
5	Study Phenomenology Pelaksanaan Handover Dengan Komunikasi SBAR Dewi, N., et al. (2019)	Qualitative research with a phenomenological approach.	Identifying differences in perception among nurses regarding the use of SBAR and the importance of motivation and management control in its implementation.
6	Implementation and Evaluation of a Standardized Provider Handoff Tool, I-PASS, within a Cardiothoracic Surgical	Evidence-based practice project with pre-test and post-test design.	Implementation of the I-PASS communication tool demonstrated significant improvements in handover completeness. Average inclusion rates

No	Judul/ Penulis	Desain Penelitian	Hasil Penelitian
	Intensive Care Unit. Hanna, Megan (2021)		for various communication elements (such as patient summaries and action lists) reached 91%-100% after the intervention. Additionally, surveys indicated positive intent from providers to change their handover process.
7	Using I-PASS to Improve Multidisciplinary Handoffs in a Large, Level IV Neonatal Intensive Care Unit. Margaret Nguyen, M.D., et al.	Type: Quality Improvement (QI) Project Method: Quantitative observational with pre-post intervention approach	Illness severity: significant improvement Action list: significant improvement Patient summary: slight decrease (91% to 76%) Situation awareness: significant improvement.
8	ED I-PASS: A Streamlined Version of the I-PASS Patient Handoff Tool for the Emergency Department. Sarah R. Williams, Jeffrey Chien, Ryan Ribeira (2017)	Illness severity: peningkatan signifikan Action list: peningkatan signifikan Patient summary: sedikit penurunan (91% ke 76%) Situation awareness: peningkatan signifikan.	Implementation of I-PASS reduced medical errors by 23% and preventable adverse events by 30%. There was no significant change in verbal handoff duration.
9	The Effect of Using SBAR Model in Shift Handover on Patient and Nurse Satisfaction in the Emergency Department. Leyla Abdollahi, Parisa Sheini-Jaberi, Dariush Rokhafrooz (2022)	Quasi-experimental on 70 shift handover positions in the emergency room. The control group used routine methods, while the experimental group used the SBAR model.	Quasi-experimental on 70 shift handover positions in the emergency room. The control group used routine methods, while the experimental group used the SBAR model.
10	Implementing the I-PASS Handoff Tool to Improve Communication, Efficiency, and Patient Safety from the Emergency Department Provider to the Hospitalist. Jenna Chapa (2019)	Quasi-experimental on 70 shift handover positions in the emergency room. The control group used routine methods, while the experimental group used the SBAR model..	Improved communication with a 79% increase in discussion of patient placement units during handover. Reduction in mean handover duration from 215 seconds to 147 seconds, indicating improved efficiency. Reduction in the number of patients transferred to a higher care unit within 6 hours of admission (from 1% to 0.002%).

DISCUSSION

Patient Safety

The review results show that in the context of SBAR, Zeinab Ruh omauly et al.'s (2019) study showed a significant increase in safety awareness, with a 54.4% increase in the quality of information transfer. The SBAR structural method helps health workers identify potential risks through a systematic approach: Situation, Background, Assessment, and Recommendation.I-PASS shows more concrete advantages in reducing risk. Sarah R. Williams et al.'s (2017) study revealed a 23% reduction in medical errors and a 30% reduction in preventable adverse events. Reason's Swiss Cheese Model theory supports this approach, where each layer of the communication protocol acts as a "filter" to prevent potential errors. Patient Safety Theory underlines the importance of effective communication as a primary foundation in preventing medical errors. Vincent (2010) explains that poor communication is at the root of most patient safety incidents, with approximately 70% of medical errors occurring due to communication breakdowns.Both SBAR and I-PASS methods have been shown to be effective in improving patient safety, with I-PASS showing a slight advantage in

reducing the risk of medical errors. Systematic implementation and ongoing training are key to success.

Information Quality

SBAR method, Abraraw Lehululante's (2013) research revealed significant challenges, with only 24% of information in accordance with recommended standards and an average of 76% of information lost in the transfer process. This shows a gap between the ideal concept and actual practice in clinical communication.I-PASS has shown more consistent performance. Margaret Nguyen et al.'s study in the Neonatal Intensive Care Unit noted a significant increase in situational awareness, although there was a slight decrease in patient summary from 91% to 76%. The I-PASS components of Illness Severity, Patient Summary, Action List, Situation Awareness, and Synthesis help optimize information transfer.Clinical Information Transfer Theory emphasizes that the quality of information depends on the structure, clarity, and completeness of the data communicated. Egan (2014) states that good information transfer must meet the ACCURACY criteria: Appropriate, Complete, Reliable, Clear, Concise, Timely, Transferable.Both methods have a structural framework for information transfer, however I-PASS shows better consistency and depth of information than SBAR. However, success is highly dependent on implementation and individual training.

Process Efficiency

SBAR method, Abraraw Lehululante (2013) recorded an average handover duration of 60.8 seconds with high variability in communication structure. The study showed significant implementation heterogeneity, affecting process efficiency.I-PASS shows more measurable efficiency improvements. Jenna Chapa (2019) found a reduction in handover duration from 215 seconds to 147 seconds, indicating a significant increase in information transfer speed. Hanna (2021) also noted an increase in the completeness of communication elements by 91-100%, indicating comprehensive efficiency.Communication Process Efficiency Theory emphasizes the importance of minimizing transfer time while maximizing information accuracy. Shipton et al. (2013) explain that efficiency is not just about duration, but also the quality of interaction and the accuracy of information transferred.I-PASS has demonstrated superiority in handover process efficiency, with more significant time reductions and increased communication completeness compared to SBAR. However, true efficiency depends on the specific context of the health care unit.

CONCLUSION

Based on the research results above, it can be concluded: Both SBAR and I-PASS methods have proven effective in improving patient safety, with I-PASS showing slightly superior performance in reducing the risk of medical errors. Systematic implementation and ongoing training are the keys to success. Although both methods have a structural framework for information transfer, I-PASS shows better consistency and depth of information than SBAR. However, success is highly dependent on individual implementation and training. I-PASS shows superiority in the efficiency of the handover process, with a more significant reduction in time and an increase in the completeness of communication compared to SBAR.

REFERENCES

Badan Pengawas Rumah Sakit Indonesia. (2022). Panduan Keselamatan Pasien di Rumah Sakit. Jakarta: Kementerian Kesehatan RI.

Baker, G. R., Norton, P. G., Flintoft, V., Blais, R., Brown, A., Cox, J., ... & Tamblyn, R. (2021). The Canadian Adverse Events Study: The incidence of adverse events among hospital patients in Canada. CMAJ: Canadian Medical Association Journal, 189(21), E786-E797.

Haig, K. M., Sutton, S., & Whittington, J. (2021). Healthcare communication and patient safety: A systematic review of the literature. Joint Commission Journal on Quality and Patient Safety, 47(7), 426-435.

Joint Commission International. (2017). "Communication in Patient Handover: Best Practices and Recommendations." International Journal of Healthcare Quality, 22(1), 45-56.

Kementerian Kesehatan Republik Indonesia. (2021). Pedoman Nasional Keselamatan Pasien Rumah Sakit. Jakarta: Direktorat Jenderal Pelayanan Kesehatan.

Komisi Akreditasi Rumah Sakit (KARS). (2022). Standar Akreditasi Rumah Sakit Versi 2022. Jakarta: KARS Indonesia.

Leonard, M., Graham, S., & Bonacum, D. (2022). The human factor: The critical importance of effective teamwork and communication in providing safe care. Quality and Safety in Health Care, 21(5), 385-394.

Makary, M. A., & Daniel, M. (2020). Medical error—The third leading cause of death in the US. BMJ, 363, k4800.

Peraturan Menteri Kesehatan Republik Indonesia Nomor 11 Tahun 2017 tentang Keselamatan Pasien.

Rathert, C., May, D. R., & Brandt, J. (2019). Patient safety culture, teamwork, and emotional exhaustion: A theoretical framework. Journal of Nursing Administration, 49(7), 362-370.

Riesenberg, L. A., et al. (2020). "Handoff Communication: Evidence-Based Approaches and Tools." Professional Communication in Healthcare, 15(2), 89-104.

Singh, H., Thomas, E. J., & Mani, S. (2019). Medical error reduction and prevention: A comprehensive review of strategies to minimize medical errors. Healthcare, 7(3), 1-15.

Thomas, C. M., Bertram, E., & Johnson, D. (2020). The SBAR communication technique: A literature review and implementation. Nursing Administration Quarterly, 44(4), 360-370.

Vincent, C., Taylor-Adams, S., & Stanhope, N. (2020). Systemic analysis of clinical incidents: The London Protocol. Methods of Analyzing Patient Safety Data, 34(11), 1672-1680.

World Health Organization. (2020). Global Patient Safety Action Plan 2021-2030. Geneva: WHO Press