

Implementation of SBAR Communication During Nurse Handover in an Internal Medicine Ward: A Case Study

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Abstract

Background: Patient handover is a critical process for conveying and receiving information related to patients' conditions. Effective communication using the SBAR (Situation, Background, Assessment, Recommendation) framework is essential to prevent errors in nursing care and to support patient safety in inpatient settings.

Aims: This study aimed to describe the application of SBAR communication during patient handover in the internal medicine ward of dr. Abdoer Rahem Situbondo Regional General Hospital.

Methods: This study employed a case study design. Data were collected through direct observation conducted in the Dieng Ward of dr. Abdoer Rahem Situbondo Regional General Hospital.

Results: The findings indicated that the implementation of SBAR communication during patient handover was not yet effective and had not been optimally applied in the internal medicine ward.

Conclusion: The implementation of SBAR communication through role-play interventions contributed to improving effective communication during patient handover among nurses in the internal medicine ward of dr. Abdoer Rahem Situbondo Regional General Hospital.

Keywords: SBAR communication; Patient handover; Nursing communication; Patient safety; Inpatient care

INTRODUCTION

Effective communication during patient handover is widely recognised as a fundamental component of patient safety and quality nursing care in inpatient settings. Handover represents a critical moment when responsibility and accountability for patient care are transferred between healthcare providers, and failures in this process have been consistently associated with adverse events, medication errors, and discontinuity of care (Starmer et al., 2014; Müller et al., 2018).

To reduce communication-related risks, structured communication tools have been introduced in clinical practice. The SBAR (Situation, Background, Assessment, Recommendation) framework is one of the most adopted handover tools due to its simplicity, clarity, and ability to standardise information exchange among healthcare

professionals (Müller et al., 2018). SBAR supports nurses in organising patient information systematically and promotes shared understanding during shift changes, particularly in high-acuity inpatient environments.

Despite its widespread endorsement, evidence indicates that the implementation of SBAR in routine nursing practice remains inconsistent. Several studies report that while SBAR is formally introduced or included in hospital policies, its application is often partial, with certain components particularly assessment and recommendation frequently omitted during handover (Yeti et al., 2021; Ghosh et al., 2021). Such incomplete implementation undermines the effectiveness of SBAR and may perpetuate communication gaps rather than resolve them.

Barriers to effective SBAR implementation have been documented at both individual and organisational levels. High workload, time constraints, interruptions during handover, limited documentation support, and variations in nurses' knowledge and communication skills are among the most frequently reported challenges (Ghosh et al., 2021; Farzaneh et al., 2023). In internal medicine wards, where patients often present with complex and unstable conditions, these barriers may further increase the risk of information loss during shift transitions.

Educational interventions have been proposed as a key strategy to strengthen SBAR communication. Recent evidence suggests that active learning approaches, such as simulation and role-play, are effective in improving nurses' communication competence, confidence, and adherence to SBAR principles (Yun et al., 2023; Ghonem & El-Husany, 2023). Compared with didactic teaching alone, role-play allows nurses to practise realistic handover scenarios, receive feedback, and develop shared mental models for safe communication.

However, most existing studies have focused on training outcomes in educational or controlled settings, with limited attention to real-world implementation within routine clinical practice, particularly in regional or district hospitals. Context-specific evaluations are therefore needed to understand how SBAR is applied in daily nursing workflows and how practical interventions may improve its implementation.

Accordingly, this study aims to describe the application of SBAR communication during patient handover in the internal medicine ward of dr. Abdoer Rahem Situbondo Regional General Hospital and to evaluate the effect of a role-play-based SBAR intervention on the quality of handover communication. The findings are

expected to contribute practical insights for strengthening handover processes and enhancing patient safety in inpatient nursing care.

METHOD

Study Design

This study employed a descriptive case study design with an embedded practice improvement intervention. The design was chosen to allow an in-depth examination of SBAR communication practices during nurse handover within a real clinical context, followed by a targeted educational intervention to address identified gaps. Case study approaches are appropriate for exploring complex processes such as communication and patient safety practices within specific organizational settings (Müller et al., 2018; Ghosh et al., 2021).

Setting

The study was conducted in the Internal Medicine Ward (Dieng Ward) of dr. Abdoer Rahem Situbondo Regional General Hospital, Indonesia. This ward provides inpatient care for adult patients with diverse and often complex medical conditions, requiring continuous and accurate information exchange between nursing shifts.

Participants

Participants included registered nurses assigned to the internal medicine ward who were actively involved in shift handover during the study period. Inclusion criteria were: (1) Active duty in the internal medicine ward, (2) Participation in routine nurse handover activities, and (3) Willingness to take part in observation and role-play activities (Yetti et al., 2021).

Nurses who were on leave or not involved in handover during the observation period were excluded. All eligible nurses in the

ward were included to capture a comprehensive overview of handover practices.

Data Collection Procedures

Data collection was conducted over a three-week period and consisted of three sequential phases: (1) Baseline Observation. Non-participant observations were conducted to assess existing handover practices. Observations focused on the completeness and structure of communication using SBAR components (Situation, Background, Assessment, Recommendation), nurse participation, adherence to handover procedures, and documentation practices (Müller et al., 2018; Ghosh et al., 2021), (2) Problem Analysis. Findings from observations were analyzed descriptively to identify gaps in SBAR implementation, such as incomplete information transfer, inconsistent structure, lack of documentation, and limited nurse engagement during handover (Yetti et al., 2021), (3) Intervention (Role-Play-Based SBAR Training). Based on identified gaps, a role-play intervention was implemented. Nurses participated in structured role-play sessions simulating handover scenarios using the SBAR framework. The sessions emphasized clear information structuring, assertive communication, and shared understanding among team members (Ghonem & El-Husany, 2023; Yun et al., 2023).

Instrument

An SBAR observation checklist was used to guide data collection. The checklist assessed the presence and clarity of each SBAR component, nurse engagement, and continuity of information transfer. The checklist was adapted from established SBAR communication frameworks reported in the literature (Müller et al., 2018; Farzaneh et al., 2023).

Data Analysis

Data were analysed using descriptive qualitative analysis. Observational findings before and after the intervention were compared narratively to identify changes in SBAR use, communication structure, and handover effectiveness. This analytic approach is consistent with prior case study and observational research on nursing handover communication (Yetti et al., 2021; Ghosh et al., 2021).

Ethical Considerations

This study was conducted in accordance with established ethical principles for health research involving human participants. Institutional permission to conduct the study was granted under the Memorandum of Understanding (MoU) between Universitas dr. Soebandi and dr. Abdoer Rahem Situbondo Regional General Hospital, which regulates collaboration in education, research, and clinical practice within the nursing profession program.

Participation was entirely voluntary. Verbal informed consent was obtained from all participants prior to data collection after they had received a clear explanation of the study objectives and procedures. Confidentiality and anonymity were strictly maintained; no personal identifiers were recorded, and all observational data were reported in aggregate form to prevent individual identification.

RESULTS

Baseline Assessment of SBAR Communication During Handover

Observational findings demonstrated that SBAR communication during nurse handover was partially implemented. Although the Situation component was generally communicated, the Background and Assessment components were

inconsistently reported, and the Recommendation component was frequently omitted. This pattern reflects findings reported in previous observational and systematic review studies, which indicate that incomplete SBAR implementation is common in routine clinical practice despite formal adoption of the framework (Müller et al., 2018; Yetti et al., 2021).

During baseline handovers, communication tended to focus on medical diagnoses and general patient conditions rather than comprehensive nursing assessments or anticipatory care plans. Similar tendencies have been described in hospital-based handover studies, where task-oriented communication predominates over structured clinical reasoning when standardized tools are not fully integrated into workflows (Ghosh et al., 2021; Forde et al., 2020).

Table 1. Baseline Implementation of SBAR Components During Nurse Handover

SBAR Component	Observed Consistently	Observed Inconsistently	Not Observed
Situation	✓		
Background		✓	
Assessment		✓	
Recommendation			✓

The *Situation* component was generally communicated, while *Background* and *Assessment* were inconsistently delivered. The *Recommendation* component was frequently omitted during baseline handovers.

Identified Barriers Affecting SBAR Communication

Multiple barriers influencing SBAR implementation were identified. These included high workload, limited time allocation for handover, interruptions during communication, incomplete nurse attendance, and lack of standardized

documentation. Such barriers have been consistently reported in both local and international studies examining nursing handover processes (Yetti et al., 2021; Müller et al., 2018).

In addition, variations in nurses' understanding of SBAR principles were observed. Some nurses demonstrated adequate structuring of information, while others conveyed information in a fragmented or unstructured manner. Previous studies similarly report that uneven SBAR knowledge and skills contribute to inconsistent handover quality, particularly in settings without routine refresher training (Farzaneh et al., 2023; Noh & Kim, 2021).

Table 2. Identified Barriers to Effective SBAR Communication During Handover

Category	Description
Knowledge-related factors	Variation in nurses' understanding of SBAR principles and communication structure
Workload and time constraints	High patient load and limited time during shift changes
Attendance and participation	Incomplete nurse attendance and late arrivals during handover
Process interruptions	Frequent interruptions during handover sessions
Documentation practices	Lack of standardized written documentation to support verbal handover
Organizational factors	Limited supervision and inconsistent enforcement of handover SOPs

Barriers were identified through direct observation and informal interviews conducted during routine nurse handover in the internal medicine ward.

Implementation of Role-Play Based SBAR Intervention

Following the baseline assessment, a role-play based SBAR intervention was implemented to address identified gaps. Post-intervention observations indicated improved adherence to SBAR structure, with clearer sequencing of information and

increased inclusion of assessment and recommendation components.

Nurses demonstrated greater confidence in articulating patient assessments and specifying follow-up actions for the incoming shift. These observations are consistent with evidence showing that simulation and role-play approaches enhance communication clarity, shared understanding, and professional confidence during handover (Yun et al., 2023; Ghonem & El-Husany, 2023).

Notably, the Recommendation component previously the weakest element was more frequently communicated after the intervention. Similar improvements have been reported in quasi-experimental studies where SBAR training emphasized active learning and scenario-based practice (Farzaneh et al., 2023).

Table 3. Comparison of SBAR Communication Before and After Role-Play Intervention

Aspect	Before Intervention	After Intervention
Use of SBAR sequence	Inconsistent and incomplete	More consistent and structured
Clarity of patient information	General and task-oriented	Clearer, focused, and prioritized
Assessment reporting	Often vague or omitted	More explicit nursing assessments
Recommendation delivery	Rarely communicated	More frequently articulated
Nurse participation	Variable	Improved engagement
Documentation support	Minimal or absent	Improved recording of key information

The comparison presented in this table is based on descriptive observations conducted before and after the role-play based SBAR intervention. The findings reflect qualitative improvements in the structure and clarity of handover communication and do not represent statistical comparisons or causal inferences.

Documentation and Continuity of Care

At baseline, handover communication relied predominantly on verbal exchange, with minimal written documentation. Following the intervention, nurses demonstrated increased awareness of the importance of documenting key handover information, although documentation practices remained variable.

Previous studies emphasize that the absence of structured documentation increases the risk of information loss and compromises continuity of care (Ghosh et al., 2021; Forde et al., 2020). The observed post-intervention improvement in documentation awareness aligns with findings from SBAR implementation studies that combine communication training with documentation reinforcement (De Meester et al., 2013; Ghonem & El-Husany, 2023).

DISCUSSION

SBAR implementation as a safety-critical nursing process

The findings of this study reinforce the view that SBAR is not merely a communication tool but a safety-critical nursing process. The observed omission of assessment and recommendation components during baseline handovers reflects a pattern reported in multiple international studies, where SBAR is used superficially rather than as a complete cognitive and communicative framework (Müller et al., 2018; Forde et al., 2020). Incomplete SBAR use limits nurses' ability to convey clinical reasoning, anticipate patient needs, and support continuity of care, thereby increasing the risk of adverse events.

Importantly, the dominance of diagnosis-focused information observed at baseline suggests that handover communication may be influenced by medical-centered

reporting traditions rather than nursing clinical judgment. Similar findings have been documented in inpatient wards, where nursing assessments and care priorities are under-communicated during shift transitions (Yetti et al., 2021). This underscores the need to reframe SBAR not only as a reporting structure but also as a tool for articulating nursing autonomy and accountability in patient care.

Role-play intervention and behavioural change

The observed improvements following the role-play-based intervention suggest that behavioural rehearsal plays a critical role in translating SBAR knowledge into practice. Role-play allows nurses to practise sequencing information, articulating recommendations, and responding to questions in a psychologically safe learning environment. Evidence from simulation-based education supports this mechanism, demonstrating that active engagement enhances skill retention and confidence compared with passive learning methods (Yun et al., 2023; Noh & Kim, 2021).

Notably, the improvement in the Recommendation component after the intervention indicates a shift toward more proactive and anticipatory communication. This finding aligns with previous quasi-experimental studies reporting that SBAR training improves nurses' willingness and ability to propose follow-up actions and care priorities during handover (Ghonem & El-Husany, 2023; Farzaneh et al., 2023). Such changes are clinically meaningful, as clear recommendations are essential for preventing missed care and ensuring timely interventions.

Documentation as an enabler of communication reliability

Although improvements in documentation awareness were noted post-intervention, documentation practices remained

inconsistent. This finding reflects a broader challenge in handover improvement initiatives: training alone is insufficient without structural supports. Studies have shown that structured handover forms or electronic SBAR templates significantly reduce information omissions and enhance continuity of care, particularly in high-turnover inpatient environments (Ghosh et al., 2021; De Meester et al., 2013).

From an implementation perspective, documentation serves as both a cognitive aid and a safety net, reinforcing verbal communication and enabling cross-checking. The continued variability observed in this study suggests that future interventions should integrate role-play training with standardized documentation tools and managerial monitoring to achieve sustained improvement.

Organisational context and sustainability of change

The persistence of variability in SBAR practice, even after the intervention, highlights the influence of organisational context on communication behaviours. High workload, interruptions, and inconsistent nurse attendance during handover were recurring issues that constrained optimal SBAR use. Similar organisational barriers have been identified in diverse healthcare settings, emphasizing that communication failures are often systemic rather than individual shortcomings (Ghosh et al., 2021; Müller et al., 2018).

Sustainable improvement therefore requires a systems-oriented approach, including protected handover time, clear SOPs, leadership support, and routine audits. Evidence from large-scale handover improvement programmes demonstrates that sustained reductions in communication-related errors occur when training is embedded within organisational policy and culture, rather than delivered as

a standalone intervention (Starmer et al., 2014).

Contribution to nursing practice and research

This study contributes to the growing body of evidence highlighting the gap between SBAR policy adoption and real-world practice, particularly in regional hospital settings. By demonstrating that a relatively simple role-play intervention can produce observable improvements, the findings offer a pragmatic and context-appropriate strategy for strengthening handover communication in similar inpatient wards.

At the same time, the study highlights important directions for future research. Longitudinal studies are needed to assess the durability of role-play-based interventions and their impact on objective patient safety outcomes, such as medication errors, missed care, and adverse events. Multi-site studies and mixed-methods designs would further enhance generalisability and deepen understanding of contextual influences on SBAR implementation.

Conflict of Interest

The authors declare that there is no conflict of interest associated with the conduct, authorship, and publication of this study.

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