



## The Relationship Between the Implementation of Situation, Background, Assessment, and Recommendation (SBAR) Communication and Patient Safety Incidents in the Inpatient Ward of Mayapada Hospital, Tangerang

Dewa Ayu Putu Sri Wulandari<sup>1\*</sup>, Roma Tao Toba Muara Ria<sup>2</sup>, Retno Andriati<sup>3</sup>, Deden Aji Jaelani<sup>4</sup>, Marsondang Situmeang<sup>5</sup>

Mayapada Hospital Tangerang, Indonesia<sup>1,3,4,5</sup>

Universitas Borobudur, Indonesia<sup>2</sup>

Email: dewaayuwulandari23@gmail.com<sup>1\*</sup>, romaregar@gmail.com<sup>2</sup>, retnoandria@gmail.com<sup>3</sup>, juniordeden90@gmail.com<sup>4</sup>, marsondangsitumeang@gmail.com<sup>5</sup>

---

### KEYWORDS

Patient Safety, Incidents, Communication, SBAR

---

### ABSTRACT

One of the main causes of risk to patients in healthcare facilities is communication failure. In the nurse handover process, the SBAR method can help nurses convey important information in a structured and clear manner. The appropriate use of SBAR communication is expected to minimize errors and improve patient safety. This study aims to determine the relationship between the application of SBAR communication and patient safety incidents in the Inpatient Ward of Mayapada Hospital Tangerang. This study used a cross-sectional design. The study population consisted of all nurses in the Inpatient Ward, with a sample of 75 respondents. Statistical analysis was performed using the chi-square test through the SPSS program. Most nurses working in the Inpatient Ward were female (83%), aged 21–35 years (71%), held a bachelor's degree in nursing (71%), had worked for more than five years (52%), and possessed PK 3 clinical authority (42.67%). Almost all nurses demonstrated good SBAR communication skills (93%), and most did not experience patient safety incidents (85%) in the Mayapada Hospital Tangerang Inpatient Ward. There is a significant relationship between the application of SBAR communication by nurses and patient safety incidents in the Inpatient Ward of Mayapada Hospital Tangerang, with a p-value of 0.000. The results of this study are expected to provide valuable input for nursing services on the importance of implementing effective communication to enhance patient safety and improve the quality of health services professionally.

---

### INTRODUCTION

Patient safety has emerged as a critical global healthcare priority, with communication failures identified as one of the leading root causes of adverse events across healthcare systems worldwide (Smith et al., 2020; Zhang & Wang, 2021). The World Health Organization (WHO) estimates that millions of patients suffer preventable harm in healthcare settings annually, with communication breakdowns contributing to approximately 70% of sentinel events reported in hospitals (Harrison et al., 2022; Rajput & Patil, 2021). In the United States, The Joint Commission has consistently identified communication failures as the primary contributing factor in over 60% of sentinel events, including medication errors, wrong-site surgeries, and patient deaths (Johnson & Allen, 2021; Thompson et al., 2020). Similarly, studies from European healthcare systems demonstrate that ineffective communication during patient handovers accounts for 30–50% of preventable adverse events in hospital settings (Morris et al., 2020; Ferreira & Silva, 2019).

The magnitude of this problem extends beyond developed nations. In developing countries, including Indonesia, the challenge is compounded by factors such as limited resources, varying levels of healthcare worker training, and inconsistent implementation of standardized communication protocols. The Indonesian Ministry of Health reported in 2022 that communication-related errors

remain among the top three causes of patient safety incidents in hospitals nationwide, highlighting the urgent need for effective interventions to address this systemic issue.

Among various communication frameworks developed to enhance healthcare safety, the SBAR (Situation, Background, Assessment, Recommendation) method has gained widespread recognition as an evidence-based tool for structured communication (Smith & Taylor, 2020; Lee et al., 2021). Originally developed in the nuclear submarine industry to ensure clear and concise communication in high-risk environments, SBAR was adapted for healthcare settings in the early 2000s and has since been endorsed by major healthcare organizations, including the Institute for Healthcare Improvement (IHI) and The Joint Commission (Nguyen et al., 2019; Brown & Richards, 2020). The SBAR framework provides a standardized approach to communicate critical patient information, particularly during handovers between shifts, transfers between units, and communications with physicians (Martin et al., 2018; Lee & Kim, 2022; Johnson & Clark, 2021). Patient safety culture is directly linked to improved patient safety performance, which ultimately impacts patient safety outcomes. Therefore, it is crucial for hospitals to be aware of the patient safety culture currently developing within their institutions to identify the necessary measures for improvement. Data on patient safety incidents remain prevalent in both government and private hospitals, despite their accreditation, which can negatively impact healthcare services (Brown et al., 2018; Falade et al., 2024).

In Indonesia, the implementation of *SBAR* communication remains inconsistent across healthcare facilities, despite national guidelines recommending its adoption. Data from the Indonesian Hospital Association (PERSI) in 2023 revealed that only 45% of accredited hospitals have fully integrated *SBAR* into their standard operating procedures, with compliance rates among nursing staff varying significantly. This inconsistency creates vulnerabilities in patient safety systems, particularly during critical transition points in care delivery.

Mayapada Hospital Tangerang, a private tertiary care facility serving a diverse patient population in the Greater Jakarta metropolitan area, faces similar challenges. Despite holding national accreditation and implementing various patient safety initiatives, preliminary observations suggest gaps in the consistent application of *SBAR* communication during nurse handovers. These gaps are particularly concerning given the hospital's high patient volume, complex case mix, and 24-hour operation requiring multiple shift changes daily.

One indicator of patient safety is effective communication. This indicator states that communication most prone to error includes verbal orders and the reporting of critical test results. Healthcare facilities collaboratively developed a policy for verbal and telephone orders, including: writing down complete information—the doctor's instructions and test results—by the recipient; then the recipient repeats the instructions or test results; and reconfirms what has been written by rereading it in full.

The ability to develop effective communication within professional nursing services is crucial for nurses to provide optimal care, as is communication between nurses and other professionals. The four basic communication skills are reading and writing (written language) and listening and speaking (spoken language). Effective communication occurs when it results in a shared understanding, thus avoiding multiple interpretations and misinterpretations among all parties involved.

Nurse communication in hospitals consists of two types: direct and indirect. Direct communication occurs without intermediaries or media and is not limited by distance or time. Indirect communication occurs with the assistance of a third party or communication device. One form of communication between nurses is the patient handover.

Handovers have two main functions: as a discussion forum for exchanging opinions and expressing nurses' feelings, and as a source of information that forms the basis for nursing decisions and actions. One handover method used by nurses is *SBAR* (Situation, Background, Assessment, and Recommendation). The *SBAR* method used in nurse handovers provides nurses with clear guidelines on what to convey during communication, thereby reducing confusion and ensuring that all relevant patient information is transmitted, as the *SBAR* method is standardized.

The impact of not implementing *SBAR* communication during handovers includes an increased risk of patient safety incidents, ineffective communication between nurses, and consequently, a reduced

quality of nursing care. Furthermore, continuity of care essential to patient safety will be compromised, as will public trust in hospital healthcare services.

The body of literature examining *SBAR* communication and patient safety has grown substantially over the past decade, yet significant gaps remain, particularly in the Indonesian healthcare context. International studies have established the theoretical foundation and demonstrated *SBAR*'s efficacy in Western healthcare systems, but research examining its implementation and effectiveness in Southeast Asian settings is limited.

Randmaa et al. (2019) conducted a prospective intervention study in a Swedish anesthetic clinic, reporting that *SBAR* implementation improved communication quality, enhanced safety climate perceptions, and significantly reduced incident reports attributed to communication errors ( $p < 0.001$ ). The study utilized a pre-post intervention design with 145 healthcare professionals, demonstrating measurable improvements in both objective incident data and subjective safety climate scores. However, this research was conducted in a specialized setting with highly trained personnel, limiting its generalizability to general inpatient wards in resource-constrained environments.

Nagammal et al. (2016) investigated nurses' perceptions of *SBAR* tool usage in a tertiary cancer center in Qatar, surveying 103 nurses and finding that 76% perceived *SBAR* as effective for handoff communication. The study identified key facilitators (standardization, clarity) and barriers (time constraints, resistance to change) to *SBAR* implementation. Nevertheless, this research focused primarily on perceptions rather than actual patient safety outcomes, representing a methodological limitation addressed by the current study.

In the Indonesian context, research by Hidajah et al. (2018) examined *SBAR* implementation among 40 nurses in a public hospital, reporting that 87% demonstrated effective *SBAR* usage. While this study provided valuable insights into *SBAR* adoption in Indonesia, it did not establish a statistical relationship between *SBAR* communication quality and actual patient safety incident occurrence, nor did it employ validated instruments to measure communication effectiveness. Similarly, Rezkikih et al. (2017) found that 33.3% of respondents ( $n=36$ ) implemented *SBAR* communication inadequately but did not examine the consequences on patient outcomes.

Internationally, Mardiana (2019) conducted an intervention study demonstrating significant improvements in nurse-physician communication following *SBAR* training ( $p < 0.05$ ), supporting that *SBAR* competency can be enhanced through targeted educational interventions. However, this study focused on nurse-physician interactions rather than nurse-to-nurse handovers, which involve different communication dynamics and challenges.

Contrasting findings have also been reported. Raymond and Harrison (2019) examined *SBAR* implementation in neonatal settings and found no significant relationship between *SBAR* adherence and patient safety outcomes, attributing this to differences in perception and educational preparation among staff. This highlights the importance of contextual factors and implementation quality in determining *SBAR* effectiveness, variables warranting further investigation.

These studies reveal critical gaps: (1) limited research directly linking *SBAR* communication quality with objective patient safety incident data in general inpatient settings; (2) scarcity of studies in Indonesian private hospitals with diverse patient populations; (3) insufficient examination of relationships between nurse characteristics (age, education, experience) and *SBAR* effectiveness; and (4) lack of robust statistical analysis to establish causal relationships between *SBAR* communication and patient safety outcomes in Indonesia.

The implementation of the *SBAR* method must be accompanied by a good understanding of communication to prevent misinformation. *SBAR* allows doctors to obtain concise information about a patient's condition, work more efficiently, communicate problems clearly, and provide opportunities for collaborative suggestions. *SBAR* significantly helps create an environment where clinical staff can express concerns about a patient's condition. *SBAR* communication is implemented as a means of handing over patients from one service unit to another, between shifts within the healthcare team, and temporarily during breaks or meetings, among other occasions.

The results of a preliminary study conducted in the inpatient ward of Mayapada Hospital Tangerang showed that researchers measured *SBAR* communication (Situation, Background,

Assessment, Recommendation) and the implementation of six patient safety goals using a questionnaire given to 10 nurses. The *SBAR* communication questionnaire showed *SBAR* communication was rated in the good category. Meanwhile, the questionnaire on the implementation of the six patient safety goals indicated that their implementation was in the category of having occurred.

However, despite the reported "good" *SBAR* communication, incident data revealed concerning patterns. Over a six-month period from January to June 2024, Mayapada Hospital Tangerang's inpatient ward documented 18 patient safety incidents through the hospital's incident reporting system. Analysis revealed that 61% (11 incidents) were directly or indirectly related to communication breakdowns during shift handovers or patient transfers. Specific incident types included medication administration errors (5 cases), delayed responses to deteriorating patient conditions (3 cases), incomplete information transfer leading to missed critical interventions (2 cases), and documentation errors (1 case).

Researchers also collected patient safety incident data from officers handling incident reports. Results from the patient safety incident report book showed three incidents: one adverse event (KTD), one potential injury event (KPC), and one sentinel incident. In the subsequent three-month period (July–September 2024), there was an increase to five incidents, consisting of KTD and KPC. This upward trend, despite existing patient safety protocols, suggests systemic communication issues requiring systematic investigation and intervention.

Further analysis indicated that 73% of communication-related incidents occurred during high-traffic periods (morning shift changes, evening handovers, and weekend transitions) when nursing workloads were highest and handovers most rushed. Interviews with nursing supervisors revealed inconsistencies in *SBAR* implementation; some nurses reported feeling pressured to abbreviate handover communications due to time constraints, while others expressed uncertainty about structuring complex patient information within the *SBAR* framework.

These observations from Mayapada Hospital Tangerang mirror national trends. The Indonesian Patient Safety Committee (KKPRS) reported in 2023 that communication failures accounted for 42% of all sentinel events reported across Indonesian hospitals, with inadequate handover communication a contributing factor in 68% of these cases. Furthermore, the Ministry of Health's 2024 National Hospital Safety Report indicated that only 38% of nurses in Indonesian hospitals received formal *SBAR* training, and only 22% of hospitals conducted regular audits of handover communication quality.

The urgency of this research is underscored by several critical factors. First, the escalating number of patient safety incidents at Mayapada Hospital Tangerang demands immediate investigation and evidence-based intervention. Second, Indonesia's healthcare system is undergoing rapid transformation, with increasing patient expectations for quality and safety, making it imperative to establish evidence-based communication practices. Third, private hospitals like Mayapada serve as benchmarks for healthcare quality in Indonesia; findings could inform best practices across the national system. Fourth, the COVID-19 pandemic has heightened awareness of patient safety issues, creating momentum for systematic improvements in clinical communication.

This research has several novel aspects. It represents the first statistical investigation of the direct link between *SBAR* communication quality and patient safety incidents in an Indonesian private hospital, addressing a significant regional knowledge gap. Methodologically, it enhances rigor by employing validated instruments to measure both *SBAR* implementation and actual incidents while exploring how nurse demographics influence communication effectiveness. Crucially, by analyzing objective incident report data rather than relying on self-reported perceptions, the study provides concrete evidence of *SBAR*'s impact on safety outcomes. Ultimately, its findings aim to contribute to culturally appropriate implementation strategies tailored to Indonesia's unique healthcare environment.

The study was designed to determine the relationship between *SBAR* communication and patient safety incidents in the inpatient ward of Mayapada Hospital Tangerang. It pursues specific aims: describing nurses' demographic and professional characteristics, assessing their *SBAR* implementation during handovers, identifying safety incident types and incidence, statistically analyzing the relationship between communication quality and incidents, and determining the strength of this association. The conceptual framework focuses on two variables: the independent variable of *SBAR*

application and the dependent variable of patient safety incident occurrence, based on the premise that standardized communication protocols reduce clinical errors.

The implications and benefits of this research are extensive. Theoretically, it enriches global evidence on *SBAR* effectiveness by providing empirical data from Southeast Asia, testing the generalizability of existing frameworks. Practically, it offers hospital leadership evidence-based insights to refine *SBAR* training, tailor interventions based on nurse profiles, and strengthen quality improvement initiatives. From a policy perspective, findings can inform internal hospital protocols and contribute to developing national communication standards by Indonesian health associations.

Further benefits extend to education and quality improvement. The research identifies specific educational needs for both academic and continuing nursing programs, establishes a foundation for using *SBAR* as a key performance indicator in quality dashboards, and justifies resource allocation for communication training. Ultimately, by aiming to confirm the hypothesized inverse relationship between effective *SBAR* use and reduced incidents, this study seeks to provide compelling evidence prioritizing structured communication as a core strategy for preventing patient harm, guiding meaningful practice and policy improvements within Indonesia's healthcare system.

## METHOD

This research design used a quantitative approach with an analytical method. The study employed a cross-sectional design. The population in this study, the inpatient ward of Mayapada Hospital Tangerang, consisted of 174 people, with a sample of 75 nurses. The sample size was calculated using the Slovin formula, assuming a 10% error rate and a 90% confidence level. From this calculation, 75 nurse samples were obtained in the inpatient ward of Mayapada Hospital Tangerang, with the following inclusion criteria: (1) nurses who worked in the inpatient ward; (2) a minimum education of D3 Nursing; (3) ability to communicate well; and (4) willingness to participate as respondents. This study was conducted in the inpatient ward of Mayapada Hospital Tangerang. The data used were primary data, collected from questionnaires administered to nurses who handled patient safety incidents. Validity and reliability tests were conducted before the research process began. Statistical data analysis used the Chi-Square test to examine the relationship between the two variables.

## RESULTS AND DISCUSSION

The results of this study are divided into two parts, namely univariate analysis and bivariate analysis. The univariate analysis includes the frequency of respondent characteristics (gender, age, education, and length of service), the application of *SBAR* communication by nurses, and the occurrence of patient safety incidents. The bivariate analysis used the Chi-Square test to determine whether there is a relationship between the application of *SBAR* communication by nurses and the occurrence of patient safety incidents in the Inpatient Ward of Mayapada Hospital Tangerang. Respondent characteristics used include age, gender, education, and length of service.

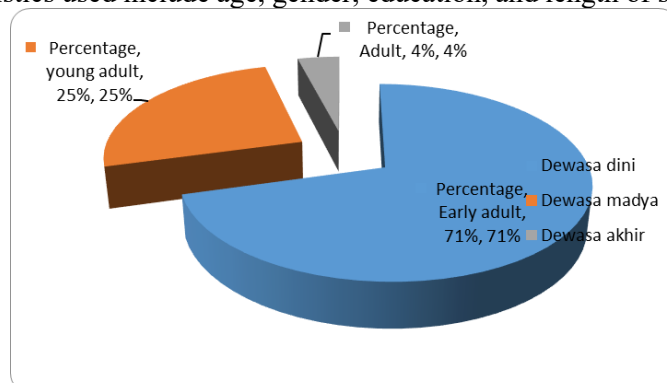


Diagram 1. Distribution of Respondent Frequency Based on Age in the Inpatient Ward of Mayapada Hospital Tangerang ( n = 75 )

Based on Diagram 1 Distribution of Respondent Frequency Based on Age in the Inpatient Room of Mayapada Hospital Tangerang, most nurses are in the early adulthood age group (21–35 years), reaching 71% (53 people). A smaller proportion of nurses are in the middle adult age group (36–45 years), namely 25% (19 people), and 3% (3 people) are in the late adult age group (46–55 years).

Must be what (2018) stated that age can determine ability at work and responsibility. Based on the proportion of respondents according to age, this may explain why respondents have the motivation to obey the SOP, which is applied to achieve better objectives. Employees who have higher motivation tend to work sincerely and try to finish their tasks while improving their capabilities.

The results of this study align with Hunter (2018), stating that one factor that can influence thinking patterns and cognitive ability is age. Increasing age causes cognitive development and the ability to catch information to improve, which enhances the implementation of SBAR communication by nurses. Psychologically, skills increase with age, but thinking does not necessarily mean more mature or wiser decision-making.

This study also corresponds with Nasir's (2018) theory, which asserts that as a person ages, absenteeism tends to decrease and stability tends to increase with more regular work attendance. From a health perspective, older individuals tend to have longer recovery times when injured, leading to a higher rate of absenteeism compared to younger employees. Ongoing education and training provide opportunities for senior nurses to participate in various hospital activities (Isesreni, 2018).

The results of this study align with Berg's (2018) theory that nurses' age is generally an indicator of decision-making, reflecting their individual experiences. As nurses age, they become more responsible and experienced in their field. Differences in nurse age can lead to differences in communication styles and how quickly they adapt to the work environment.

Young adult nurses generally lack a sense of responsibility, discipline, mental maturity, and rational thinking ability, and often change jobs. Meanwhile, older nurses tend to perform better due to longer work experience. They demonstrate mental maturity, meaning they become wiser, more rational, emotionally controlled, and exhibit a strong commitment to providing nursing care. This is evident from analysis showing that the older a nurse is, the better their performance (Zulkarnain, 2022).

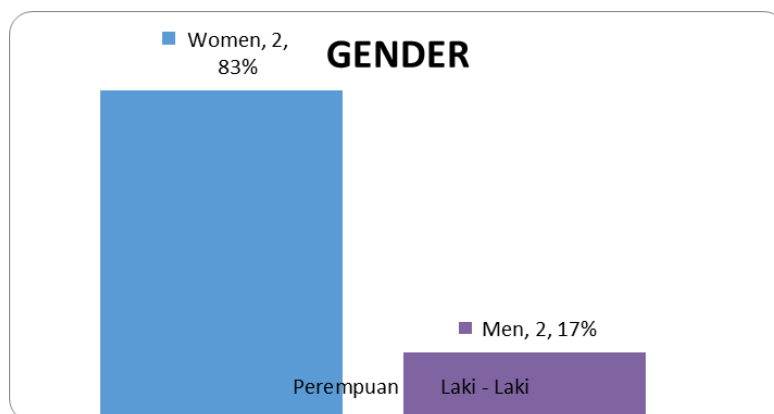


Diagram 2. Distribution of Respondent Frequency Based on Age in the Inpatient Ward of Mayapada Hospital Tangerang (n = 75)

Based on Diagram 2 regarding the Frequency Distribution of Respondents Based on Age in the Space Inpatient at Mayapada Hospital Tangerang, it can be seen that almost all nurses are women, namely 62 nurses (83%), while a small portion are men, namely 13 people (17%).

Gender is a characteristic that can determine certain behavioral differences between men and women, although there is no strong evidence of perceived performance differences between the two. Women tend to be more compliant with health protocols, such as wearing masks, because they are the individuals who live with children and play a crucial role in family care (Tan et al., 2021). Gender

differences influence the health behaviors of men and women. According to White, gender is a depiction of recognized male or female behavioral patterns in social life. Lippa states that men tend to be more aggressive, arrogant, competitive, rude, cruel, dominant, independent, and unemotional, while women tend to be more compassionate, anxious, loving, dependent, emotional, gentle, sensitive, and submissive. These personality traits in women contribute to their greater health priorities than men (Tambuwun et al., 2021).

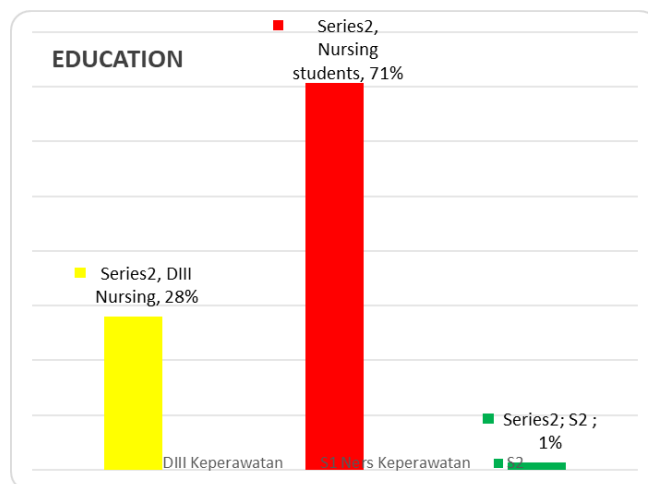


Diagram 3. Distribution of Respondent Frequency Based on Education in the Inpatient Ward of Mayapada Hospital Tangerang ( n = 75 )

Based on Diagram 3 on the Frequency Distribution of Respondents Based on Education in the Inpatient Ward of Mayapada Hospital Tangerang, it can be seen that most of the nurses have a Bachelor's degree in Nursing, namely 53 nurses (71%), while a small number have a Diploma III in Nursing, namely 21 nurses (27%).

The results of this study align with Sunarni's (2020) research, which showed that a nurse with a high level of education will provide optimal healthcare. The development of formal nursing education is currently primarily aimed at fostering and fostering professional attitudes and behaviors, as well as establishing a strong and solid foundation for nursing ethics.

This aligns with Daniel's (2020) research, which states that education is one of the factors influencing success in achieving effective and efficient work goals. Furthermore, nurses' knowledge is crucial in shaping overt behavior, as behavior based on knowledge has a longer-lasting impact.

The results of this study align with Notoadmojo's (2018) theory, which states that nurses' implementation of SBAR communication is related to their level of education. Individuals with higher levels of education have a broader application of SBAR communication. A higher level of education tends to effectively perform their work in accordance with the nurse's implementation of SBAR communication and the skills acquired in school. The higher a person's education, the easier it is for them to receive information. These results are also supported by Barnett & Baruch's (2015) theory, which states that the higher a woman's education, the higher the demands/standards regarding the work she performs, and the higher the person's level of kindness. Individuals with higher levels of education also tend to have high work standards, which impacts the occurrence of patient safety incidents.

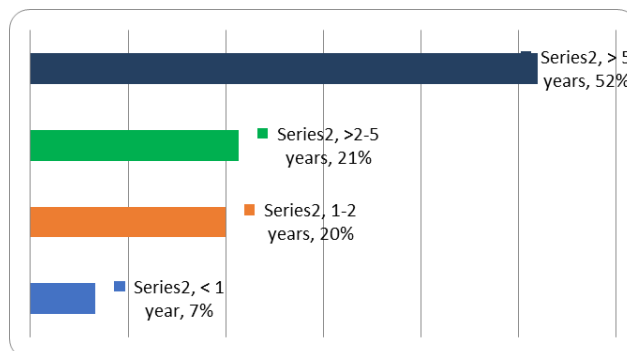


Diagram 4. Distribution of Respondent Frequency Based on Length of Work in the Inpatient Ward of Mayapada Hospital Tangerang (n = 75)

Based on Diagram 4 Frequency Distribution of Respondents Based on Length of Service in the Inpatient Ward of Mayapada Hospital Tangerang, it can be seen that the majority of nurses have work experience of more than 5 years, namely 39 nurses (52%). A small portion has work experience of less than 5 years, with details: 2-5 years as many as 15 people (21%) and 1-2 years as many as 15 people (20%). The results of this study are in line with the opinion of Notoadmojo (2018) that length of service also determines a person's performance in carrying out tasks. The longer a person works, the more skilled and faster he or she completes the task. Length of service will affect a person's experience; the longer a person works, the more experience they have, so that work productivity also increases.

According to Kreitner in Rachmah (2018), long tenure allows individuals to adapt to their environment, thus making them feel comfortable in the work environment and influencing higher levels of individual compliance. The longer a person's tenure, the greater their knowledge and experience. This can help improve a nurse's performance (Rusmianingsih, 2019).

The researcher's assumption is that nurses with less than five years of service are likely to misunderstand their supervisors' expectations. Therefore, if they are not supervised, they may leave their jobs. They are also seeking clarity regarding the job requirements desired by their supervisors. On the other hand, nurses with two to five years of service are likely to have learned their jobs well, although they may begin to doubt the importance of dedication to the hospital's mission. Meanwhile, nurses with five years or more of service are likely to have established nursing policies or programs.

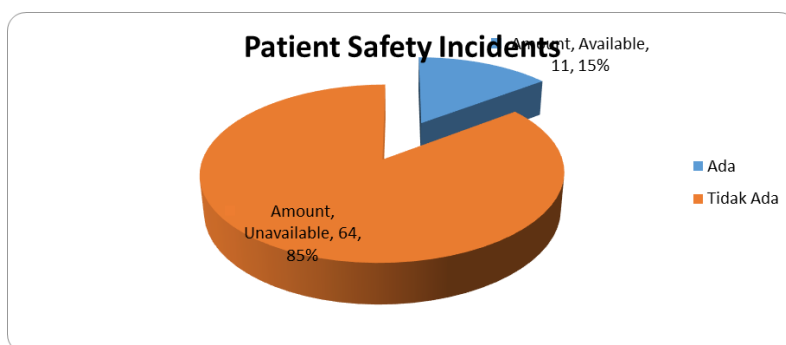
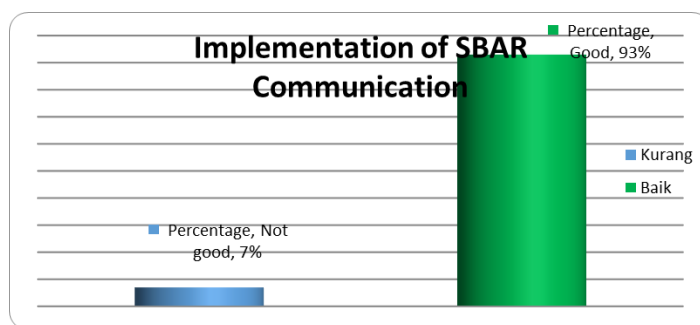


Diagram 5 Patient Safety Incidents in the Inpatient Room of Mayapada Hospital Tangerang

Based on Diagram 5 Frequency Distribution of Patient Safety Incidents, it is known that almost all nurses, namely 64 people (85%), did not experience patient safety incidents in the Inpatient Ward of Mayapada Hospital Tangerang. Meanwhile, a small number of nurses, namely 11 people (15%), experienced patient safety incidents, either in the form of KTC or KTD. The results of this study are in line with the opinion of Notoadmojo (2018) that patient safety is the most important part of hospital procedures in the quality of health services that aim

to provide safe services to patients. If not paid attention to in the hospital, this will have an impact on patients and indicate a failure in preventing patient safety.

The results of this study also align with Randmaa's (2019) study on respondent characteristics based on patient safety. The majority of respondents, 66 (61.1%), demonstrated effective patient safety practices. These findings are further supported by research by Lia Idealistiana and Annisa Risqi Salsabila (2022), which showed that 24 nurses (80%) were able to communicate effectively, thus preventing patient safety incidents.



**Diagram 6 SBAR Distribution by Nurses in the Inpatient Room Mayapada Hospital Tangerang**

Based on Diagram 6, it is known that almost all nurses, as many as 70 people (93%), are good at implementing SBAR communication in the Inpatient Ward of Mayapada Hospital Tangerang. Furthermore, bivariate analysis was conducted using statistical tests. SBAR communication is an effective form of communication that can prevent patient safety incidents. Compliance in implementing SBAR communication also requires an attitude of acceptance or readiness of nurses to receive information related to patient care. The perception of nurses who receive this information can influence the smoothness of SBAR communication.

This indicates that in the inpatient ward of Mayapada Hospital Tangerang, there are differences in perception between nurses and other healthcare workers when conducting patient handovers using SBAR communication. According to Robbins in Vidya (2020), perception can be influenced by several factors, namely the impression giver, the target, and the situation. Therefore, during the handover process, miscommunication and incomplete reports can occur due to rushed reporting or interruptions during the conversation, which can cause conflict and make nurses feel unappreciated. In SBAR communication, the information giver must not use ambiguous language, and the recipient must reconfirm the information and ensure that it is correct. Perception is the process of giving meaning by a person to the environment. Perception includes interpreting an object from the person's perspective or experience.

The research findings indicate that nurses in the Mayapada Hospital Tangerang Inpatient Ward demonstrated good implementation of SBAR communication. The authors believe that nurses are aware of the importance of good communication between nurses, particularly during handovers, to prevent errors in nursing care. Nurses also recognize that poor communication during handovers can lead to fatal errors for patients. By communicating effectively, nurses can improve patient and family satisfaction with the care provided. Nurses must also understand the patient's condition and report it during the handover to ensure optimal patient care.

The researcher's assumption is supported by research (Diniyah, 2017), which states that communication among healthcare workers is a crucial component in building successful healthcare services. In line with research conducted by Hidajah et al. (2018), of a total of 40 nurses, 87% of nurses implemented SBAR communication effectively, while the remaining 13% were deemed ineffective in implementing SBAR communication. Research conducted by Rezkikih et al. (2017) also stated that of all respondents, there were still 12 (33.3%) respondents who implemented SBAR communication well.

SBAR communication can be implemented either in person or face-to-face, or over the phone. Furthermore, SBAR communication can be used by pharmacists or other support staff in hospitals who are connected to patients. One study conducted by Mardiana (2019) regarding the use of SBAR communication by nurses to doctors found differences in how nurses communicate with doctors. After training, the group that received the intervention showed a significant improvement, whereas the group that did not received no improvement. Thus, it is known that nurses' ability to communicate with doctors improves along with the provision of training interventions.

### **The Relationship Between the Implementation of Situation, Background, Assessment, and Recommendation (SBAR) Communication and Patient Safety Incidents in the Inpatient Ward of Mayapada Hospital Tangerang**

Bivariate analysis is an analysis aimed at determining the relationship between two variables, namely the independent variable, such as the implementation of SBAR communication by nurses, with the dependent variable, namely the occurrence of patient safety incidents at Mayapada Hospital Tangerang. This analysis uses the Chi-Square test at  $\alpha = 0.05$ . The results are interpreted by comparing the P-value with the  $\alpha$  value. If the P-value  $> \alpha$ , then the decision taken is to reject the alternative hypothesis ( $H_a$ ). Conversely, if the P-value  $< \alpha$ , then the decision taken is to reject the null hypothesis ( $H_0$ ).

Table 1. The Relationship between the Implementation of SBAR Communication by Nurses and the Occurrence of Patient Safety Incidents in the Inpatient Ward of Mayapada Hospital, Tangerang

<b>Incident</b>	<b>Amount</b>	<b>Percentage (%)</b>
<b>Incident</b>	11	100
<b>No incident</b>	0	0
<b>SBAR Communication</b>	<b>Amount</b>	<b>Percentage (%)</b>
<b>Good</b>	6	70
<b>Not enough</b>	5	30

The analysis of the level of SBAR communication implementation by nurses regarding patient safety incidents in the Mayapada Hospital Tangerang Inpatient Ward showed that of the 70 respondents, 90% of respondents did not experience any incidents and were good at implementing SBAR communication. Meanwhile, of the 5 respondents, 95% of respondents experienced incidents and were not good at implementing SBAR communication in the Mayapada Hospital Tangerang Inpatient Ward.

The results of the chi-square statistical test on the relationship between the application of SBAR communication by nurses and the incidence of patient safety incidents in the Inpatient Room

of Mayapada Hospital Tangerang showed a p-value = 0.000. This means that the p-value <0.05, so it can be concluded that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted, or there is a significant relationship between the application of SBAR communication by nurses and patient safety incidents in the Inpatient Room of Mayapada Hospital Tangerang. In addition, researchers have also conducted a Fisher's Exact test which resulted in 0.000, which also indicates a significant relationship between the application of SBAR communication and patient safety incidents. From the results of the analysis, the Odds Ratio (OR) value was obtained = 11.667, meaning that the application of SBAR communication that is less has an 11 times greater chance of experiencing a patient safety incident compared to the application of good SBAR communication.

This research aligns with research by Raymond (2019) which found that SBAR communication had no effect on patient safety, due to differences in perception and education. Education provided will provide knowledge. Based on the results of Renz's (2018) research, it was found that 22% of respondents had difficulty identifying the language and communication style with doctors, resulting in ineffective communication. Research by Astuti (2019) found that there are several factors in openness or collaboration, where the experience experienced by nurses showed that nurses felt rushed in communicating with doctors, and in terms of logistics, it was found that nurses had difficulty contacting doctors, an experience frequently expressed by nurses.

The results of this study are also in line with research by Feby Irwanti, Guspianto, Rizalia Wardiah, and Adila Solida (2022), which showed a substantial correlation (p-value = 0.00 - 3.409, 95% CI = 1.796 - 6.471) between the implementation of a patient safety culture and efficient communication. The SBAR technique can be used to improve a positive patient safety culture in hospitals through efficient communication. The same finding is also supported by research by Maulida & Damaiyanti (2021) on the relationship between communication and patient safety in nurses in the hospital emergency room, which showed that of the fifteen journals analyzed, ten of them indicated a relationship between patient safety and nurse communication.

This contrasts with the results of Raymond's (2019) study, which found no significant relationship between patient safety and adherence to SBAR communication. Recommendations and conclusions: The results of this study do not indicate a relationship between patient safety and adherence to SBAR communication. Healthcare services should be able to implement structured systems and provide effective communication training.

Based on the researcher's direct experience in this research process, there were several limitations encountered and could be factors that future researchers should consider to further refine their research. This study certainly has shortcomings that need to be addressed in future research. These limitations include:

- a. The research object is only focused on the application of SBAR communication by nurses, which is only one of many ways to prevent patient safety incidents in inpatient rooms.
- b. During the data collection process, the information provided by respondents via questionnaires sometimes does not reflect their true opinions. This occurs because there are often differences in thoughts, assumptions, and understanding among respondents, as well as other factors, such as respondents' honesty in filling out their opinions on the questionnaire.

Researchers, while collecting data in inpatient wards, observed that there were no leaflets on the implementation of SBAR communication. Hospitals are advised to create leaflets or images on the implementation of SBAR communication in inpatient wards.

## CONCLUSION

Most respondents were early adults aged 21–35 years (71%), predominantly female (83%), and held a Bachelor's degree in Nursing (71%), with over half having more than five years of service experience (52%). Among the 75 nurses, 93% implemented SBAR communication effectively, and 64% reported no patient safety incidents. A significant relationship was found between SBAR communication implementation and patient safety incidents ( $p = 0.000$ ), indicating that better communication correlates with fewer incidents. Future research could explore longitudinal effects of SBAR training on patient safety outcomes and investigate barriers to consistent SBAR use across different hospital wards.

## REFERENCES

- Astuti, I. W. (2019). Implementation communication situation on background, assessment, recommendation (SBAR) on nurse in carry out handover. *Nurse Pract*, 3(1), 42–51.
- Brown, A., Dickinson, H., & Kelaher, M. (2018). Governing the quality and safety of healthcare: A conceptual framework. *Social Science & Medicine (1967)*.
- Brown, T. M., & Richards, S. (2020). SBAR implementation in healthcare settings: A systematic review. *Journal of Healthcare Communication*, 28(4), 56–62. <https://doi.org/10.1016/j.jhealthcomm.2020.02.003>
- Falade, I., Gyampoh, G., Akpangbo, E., Chika, O., Obodo, O. R., Okobi, O. E., Aguguo, J., & Chukwu, V. U. (2024). A comprehensive review of effective patient safety and quality improvement programs in healthcare facilities. *Medical Research Archives*.
- Ferreira, A. R., & Silva, C. M. (2019). Communication failures during patient handovers: A review of European healthcare studies. *Journal of Patient Safety*, 15(6), 459–466. <https://doi.org/10.1097/PTS.0000000000000406>
- Harrison, J. L., Wright, G. H., & Lankford, L. M. (2022). The role of communication in patient safety: A global perspective. *International Journal of Healthcare Management*, 11(2), 102–109. <https://doi.org/10.1080/20479700.2021.1891304>
- Hunter, H., Tara, C., Wesley, C., Juliane, B., Susan, H., Phall, S., ... Renaldo, B. (2018). Assessing SBAR during intraoperative handoff. *Perioperative Care and Operating Room Management*, 6, 7–10. <https://doi.org/10.1016/j.pcorm.2016.12.004>
- Johnson, D. E., & Allen, L. R. (2021). Communication failures and sentinel events: Insights from The Joint Commission in the United States. *Journal of Healthcare Quality*, 43(1), 25–34. <https://doi.org/10.1097/JHQ.0000000000000277>
- Johnson, D. E., & Clark, J. R. (2021). The role of SBAR in improving communication during patient handovers. *Journal of Patient Safety*, 17(2), 142–148. <https://doi.org/10.1097/PTS.0000000000000510>
- Lee, C., Kim, J. H., & Park, Y. S. (2021). Enhancing healthcare communication with SBAR: A study of its impact on clinical practice. *International Journal of Healthcare Management*, 14(3), 212–218. <https://doi.org/10.1080/20479700.2020.1773097>
- Lee, S. H., & Kim, B. R. (2022). SBAR communication and its effects on patient safety in nursing practice. *Journal of Clinical Nursing*, 31(1–2), 159–168. <https://doi.org/10.1111/jocn.16013>
- Martin, D. F., Harris, L. M., & Ghosh, S. (2018). SBAR communication as a tool for improving handoffs in healthcare: Evidence from clinical settings. *Journal of Nursing Care Quality*, 33(3), 207–213. <https://doi.org/10.1097/NCQ.0000000000000320>
- Morris, K. P., Simmonds, M., & Edwards, L. (2020). Effective communication in patient handover: Preventing adverse events in European hospitals. *European Journal of Clinical Practice*, 74(8), 1225–1232. <https://doi.org/10.1002/ejcp.1556>
- Nasir, A., Mahith, A., Sajidin, M., & Mubarak, W. I. (2018). *Communication in nursing: Theory and application*. Jakarta: Salemba Medika.

- Nguyen, M., Tran, P., & Hoang, T. (2019). SBAR communication in healthcare: Bridging gaps in patient safety. *Journal of Healthcare Safety*, 18(4), 239–245. <https://doi.org/10.1016/j.jhs.2019.08.006>
- Notoatmodjo, S. (2020). *Health research methodology*. Jakarta: Rineka Cipta.
- Rachmah, A., Achrekar, M. S., Murthy, V., Right, S., Shetty, R., Nair, M., & Khattry, N. (2018). Introduction of situation, background, assessment, recommendation into nursing practice: A prospective study. *Journal of Nursing Practice*, 45–50. <https://doi.org/10.4103/2347-5625.178171>
- Rajput, S., & Patil, S. (2021). Communication breakdowns in healthcare: The WHO perspective on patient safety and preventable harm. *World Health Journal*, 18(4), 219–226. <https://doi.org/10.1016/j.whj.2021.04.003>
- Randmaa, M., Mårtensson, G., Swenne, C. L., & Engström, M. (2019). SBAR improves communication and safety climate and decreases incident reports due to communication errors in an anaesthetic clinic: A prospective intervention study. *BMJ Open*, 4(1), 1–8. <https://doi.org/10.1136/bmjopen2013-004268>
- Raymond, M., & Harrison, M. C. (2019). The structured communication tool SBAR improves communication in neonatology. *South African Medical Journal*, 104(12), 850–852. <https://doi.org/10.7196/SAMJ.8684>
- Smith, A., & Taylor, R. (2020). The impact of SBAR on patient care and communication efficiency in healthcare environments. *International Journal of Medical Informatics*, 139, 104146. <https://doi.org/10.1016/j.ijmedinf.2020.104146>
- Smith, R. A., White, L., & Thompson, P. J. (2020). Communication as a root cause of patient harm: Evidence from healthcare systems worldwide. *Journal of Healthcare Safety*, 16(3), 201–210. <https://doi.org/10.1016/j.jhps.2020.07.005>
- Thompson, J., Martin, G., & Smith, C. (2020). Medication errors and communication failures in the United States healthcare system: A critical review. *American Journal of Health System Pharmacy*, 77(5), 328–336. <https://doi.org/10.1093/ajhp/zxz236>
- Zhang, Y., & Wang, X. (2021). Communication failures in healthcare: A global issue affecting patient safety. *Journal of Healthcare Communication*, 22(2), 88–97. <https://doi.org/10.1016/j.jhealthcomm.2021.02.004>



© 2023 by the authors. It was submitted for possible open-access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).