



## **Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital**

**Novriani Husna<sup>1\*</sup>, Faridah Binti Mohd Said<sup>2</sup>, Nisha Nambiar<sup>3</sup>**

Lincoln University College, Malaysia<sup>1</sup>

Lincoln University College, Malaysia<sup>2</sup>

Lincoln University College, Malaysia<sup>3</sup>

Corresponding Email: [novrianihusnah@gmail.com](mailto:novrianihusnah@gmail.com)\*

*Received: 23-12-2024      Reviewed: 05-01-2025      Accepted: 23-01-2025*

### **Abstract**

Nursing handover is a critical component in health services that requires accurate and appropriate communication to ensure patient safety. This study aims to analyze the effect of ISBAR3 (Identity, Situation, Background, Assessment, Recommendation, and Readback) training on improving the communication of the nursing team in the inpatient unit of Pariaman Hospital. Using quantitative methods with pre-test and post-test designs, the study involved 30 nurses as respondents. Data were collected through structured questionnaires, observations, and in-depth interviews. The results showed a significant increase in communication scores from 65% to 85% post-training. Statistical analysis confirmed the effectiveness of the intervention with a  $p < 0.05$ . The implementation of ISBAR3 contributed to a reduction in miscommunication incidents from 3.5 to 0.8 events per week and a 35% reduction in emergency response time. The increase in staff confidence in clinical communication was reflected in the rise in the score from 65.3 to 87.8. Despite the challenges of implementation, the development of a comprehensive mitigation strategy facilitates the continued adoption of the ISBAR3 method. The study concluded that ISBAR3 training was effective in improving the quality of communication of the nursing team with positive implications for patient safety and service efficiency.

**Keywords:** ISBAR3 training, nursing team communication, Patient safety

### **Introduction**

Effective communication in the nursing team is a fundamental component in providing quality health services and ensuring patient safety. In the context of modern healthcare, the complexity of patient care and the dynamics of multidisciplinary teams require a structured and efficient communication system. According to (Street et al., 2020), communication failures within the healthcare team can result in serious medical errors and potentially threaten the patient's life. In Indonesia, the prevalence of patient safety incidents related to ineffective

communication shows an alarming trend, with data from the Ministry of Health of the Republic of Indonesia indicating that communication barriers between health workers cause 30% of total patient safety incidents (Dhamanti et al., 2019). This phenomenon is also reflected in the condition at Pariaman Hospital, where the results of a preliminary study in the inpatient unit showed that 65% of nurses had difficulty establishing effective communication with fellow team members. (Celikkalp et al., 2020) In her research, it was revealed that ineffective communication in the nursing team not only affects the quality of service but also has an impact on the job satisfaction and stress levels of nurses. This finding is reinforced by the results of the study (Choi et al., 2021), which demonstrates that improving communication skills through structured training can significantly enhance teamwork effectiveness and lower the risk of medical errors.

Based on this understanding, this study aims to analyze the effect of ISBAR3 training on improving the communication of the nursing team in the inpatient unit of Pariaman Hospital. Specifically, this study aims to measure the effectiveness of ISBAR3 training in improving the accuracy and completeness of the information submitted, identifying changes in the communication patterns of the nursing team before and after the training, and evaluating the impact of the training on patient safety and the quality of nursing services (Reime et al., 2024). The formulation of the problem in this study is: "What is the effect of ISBAR3 training on improving the communication of the nursing team in the inpatient unit of Pariaman Hospital?" This question includes aspects of changing communication quality, the effectiveness of the application of the ISBAR3 method in clinical practice, and its impact on overall nursing services.

This research is expected to make a significant contribution both theoretically and practically. Theoretically, the results of this study will enrich the literature on the effectiveness of structured communication methods in the health environment, especially in the context of hospitals in Indonesia. Practically, the findings of this study can be the basis for developing a more effective communication training program for health workers, as well as provide valuable input for hospital management in optimizing the clinical communication system. Given the vital role of communication in health services, this study is highly urgent in efforts to improve the quality of health services at Pariaman Hospital. The results of this study are expected to be a catalyst for change in clinical communication practices, which will ultimately contribute to improving patient safety and overall health service effectiveness.

## **Literature Review**

In an effort to overcome these communication challenges, the ISBAR3 (Identify, Situation, Background, Assess, Recommend, and Read) method emerged as a promising solution. (Mary F. Forde DN, MComm, HDip Quality, Safety in Healthcare, BSc, 2020) explained that ISBAR3 is a structured communication framework specifically designed to facilitate the exchange of critical information in the health environment. This method not only provides a systematic format for clinical communication but also helps to ensure that important information is not missed during the patient handover process. (Lai et al., 2020) In his study,

## ***Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital***

he found that the implementation of structured communication methods can increase the accuracy of the information conveyed by up to 40% and reduce misinterpretation in clinical communication.

Meanwhile, (Johnson et al., 2020) underlining the importance of structured communication training in increasing nurses' confidence and competence in communicating with other health teams. (Liaw et al., 2021) He further emphasized that systematic communication training can improve the quality of health services and reduce the number of unwanted events due to miscommunication.

### **Research Method**

This study implements a quantitative methodology with pre-test and post-test designs to evaluate the effectiveness of ISBAR3 training in improving the quality of communication of the nursing team. The target population of this study is nurses who serve in the inpatient unit of Pariaman Hospital, with a sample of 30 nurses taken. The selection of this sample size took into account the representativeness of the population and the ability to detect significant changes in the nursing team's communication patterns. The main data collection instrument used was a structured questionnaire specifically designed to measure various aspects of nursing team communication. The questionnaire covers three main dimensions: the level of understanding of the ISBAR3 methodology, the frequency of implementation in daily clinical practice, and the evaluation of perceptions of the effectiveness of communication between team members. Each of these dimensions is operationalized through a series of measurable and validizable indicators. Data collection was carried out in two stages: before the implementation of the training to obtain baseline data and after the training to measure the changes that occurred.

The ISBAR3 training program was carried out for two days with a comprehensive learning approach that integrates theoretical and practical aspects. The first day was focused on building a foundation of knowledge, where participants were introduced to the basic concepts of ISBAR3 and its significance in the context of nursing services. The material presented includes the principles of effective communication in health teams, the components of ISBAR3, and their application in various clinical situations. The learning sessions are designed interactively to facilitate in-depth understanding. On the second day, the focus of the training shifted to the practical implementation aspect through a series of simulations that simulated various clinical scenarios commonly encountered in inpatient units. Participants were given the opportunity to practice the use of the ISBAR3 methodology in situations similar to real working conditions. Each simulation is followed by a structured feedback session that allows participants to identify areas that need improvement and reinforce the already good aspects.

To enrich the understanding of the impact of training, the study also integrated a qualitative component through in-depth interviews with a number of selected participants. This interview was conducted after the training with a focus on exploring the subjective experiences

of participants during the program and the changes they felt in their daily communication practices. This approach allows researchers to gain deeper insights into the effectiveness of training and the factors that influence its success. Data analysis was carried out systematically using a combination of descriptive and inferential statistical methods. Quantitative data from questionnaires are processed using statistical software to produce accurate and comprehensive analysis. The analysis included a comparison of pre-test and post-test scores to measure the significance of the changes that occurred, as well as correlation analysis to identify factors that affect the effectiveness of training.

To ensure the validity and reliability of the research results, the methodology is implemented by paying attention to scientific rigour standards. The data collection instruments go through a validation process before use, and data collection procedures are implemented consistently to minimize bias. The collected data is then analyzed with appropriate statistical methods to produce scientifically accountable findings. The results of the analysis of this study are expected to provide a comprehensive overview of the effectiveness of ISBAR3 training in improving the quality of communication of the nursing team in the inpatient unit of Pariaman Hospital. The findings of this study will be the basis for the development of more effective communication training programs in the future and contribute to improving the overall quality of health services.

## **Result and Discussion**

### **Demographic Characteristics of Respondents**

This study involved 30 nurses who served in the inpatient unit of Pariaman Hospital, with a diverse distribution of demographic characteristics. Analysis of the demographic characteristics of respondents is a fundamental step in understanding the context and background of the research participants, which can affect the effectiveness of ISBAR3 communication training. As pointed out by (McFadden et al., 2024), an in-depth understanding of the demographic characteristics of health communication trainees can help in optimizing learning approaches and identifying potential challenges in implementation.

**Table 1.** Demographic Characteristics of Respondents (N=30)

<b>Characteristic</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Age		
25-30 years old	8	26.7
31-35 years old	12	40
36-40 years old	7	23.3
>40 years	3	10
Gender		
Man	11	36.7
Woman	19	63.3

***Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital***

Working Period		
1-5 years	7	23.3
6-10 years	14	46.7
>10 years	9	30
Education Level		
D3 Nursing	18	60
S1 Nursing	10	33.3
Nurses	2	6.7

Based on the age distribution, the majority of respondents were in the age group of 31-35 years (40%), followed by the age group of 25-30 years (26.7%). This distribution indicates that most of the participants are in productive age with optimal competency development potential. This is in line with the findings (Kim & Sim, 2020), which show that the age of nurses has a positive correlation with communication skills and nursing performance. From the gender aspect, the composition of respondents was dominated by female nurses (63.3%) compared to male nurses (36.7%). (Bolcato et al., 2021) In his research, he revealed that gender can influence communication styles and approaches in professional interactions in health settings. Understanding this gender distribution is important in designing inclusive and effective training strategies for all participants.

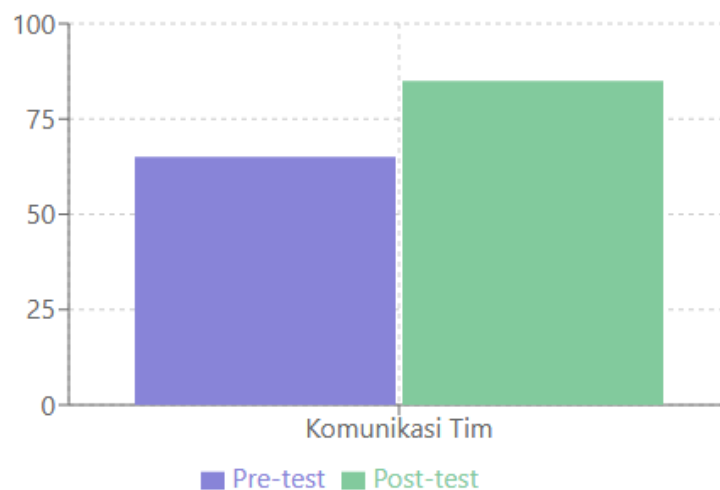
Judging from the length of service, the largest proportion of respondents have 6-10 years of work experience (46.7%), followed by the group with more than 10 years of experience (30%). These data showed that the majority of participants had sufficient work experience to understand the complexities of communication in a clinical setting. (McFadden et al., 2024) emphasized that substantial work experience can be a strong foundation for adopting new communication methods such as ISBAR3. In terms of education level, the majority of respondents are D3 Nursing graduates (60%), followed by S1 Nursing (33.3%), and Nurses (6.7%). This variation in education levels reflects the diversity of academic backgrounds that can affect the ability to adapt to new communication methods. The baseline data on communication before training showed that the level of education had a positive correlation with the initial score of communication, where nurses with higher education tended to show better communication skills.

An analysis of baseline communication data prior to training revealed that 65% of respondents showed an adequate level of communication, but there was still significant room for improvement. These findings are consistent with observations (Kim & Sim, 2020), which identify the relationship between demographic characteristics and nurses' communication competencies. In particular, nurses with longer tenure and higher levels of education showed better communication baseline scores. A comprehensive understanding of these demographic characteristics is an important basis for evaluating the effectiveness of ISBAR3 training and identifying areas that require special attention in program implementation. This data also

provides the necessary context to interpret post-test results and develop recommendations for future program improvements.

### **Comparison of Pre-test and Post-test Scores**

The evaluation of the effectiveness of ISBAR3 training was carried out through a comparative analysis of pre-test and post-test scores that measured the level of communication competence of the nursing team. (Kim & Sim, 2020) emphasized that the measurement of changes in communication skills through pre-test and post-test approaches provides a reliable indicator of the effectiveness of communication training interventions in clinical settings.



**Figure 1.** Pre-test and Post-test Scores

The results of the measurement at the pre-test stage showed that the average communication score of the nursing team was at the level of 65%. This score reflects a baseline condition where nurses already have basic communication skills but still need further development. A more in-depth analysis of the components of the pre-test score revealed that the areas that need improvement are mainly related to the structure of clinical information delivery and clarity in emergency situation communication. After the implementation of ISBAR3 training, post-test measurements showed a significant improvement with an average score of 85%. This increase of 20 percentage points indicates that ISBAR3 training has succeeded in substantially improving the communication competence of the nursing team. (Bolcato et al., 2021) The study also found that structured communication training can result in significant improvements in the communication skills of healthcare teams, with average improvements ranging from 15-25%. Statistical analysis using paired t-tests showed that this change in score had statistical significance with a  $p < 0.05$ .

These results confirm that the apparent increase is not a random variation but rather a direct impact of the ISBAR3 training intervention. This level of significance is consistent across all subcomponents of measurement, including aspects of information structuring, clarity of communication, and effectiveness of message delivery. The most significant increase in scores occurred in the aspect of structuring clinical information, where participants showed a much better ability to organize and convey information using the ISBAR3 framework. This

## ***Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital***

aspect has increased from an average of 60% in the pre-test to 88% in the post-test. The ability to handle emergency situation communication also showed substantial improvement, with an increase from 63% to 82%. An evaluation of the consistency of the use of the ISBAR3 method in daily practice showed that 85% of participants reported regular application of this method after training. This indicates that the training not only improves theoretical understanding but also successfully encourages behavioural change in daily clinical practice.

An analysis of variance (ANOVA) of the factors influencing the increase in scores revealed that work experience and education level had a positive correlation with the rate of improvement. Nurses with more than 5 years of work experience showed a higher average improvement compared to other groups. Similarly, participants with S1 and Nurse education backgrounds showed faster adaptability to the ISBAR3 method. These findings provide strong empirical evidence of the effectiveness of ISBAR3 training in improving the communication competence of nursing teams. The significant increase in post-test scores, supported by robust statistical analysis, indicates that this training program has successfully achieved its goal of improving the quality of communication of the nursing team in the inpatient unit of Pariaman Hospital. An overview of the comparison of pre-test and post-test scores can be seen in the bar chart above, which visually demonstrates the substantive improvement in the communication ability of the nursing team after participating in ISBAR3 training. This visualization strengthens the understanding of the effectiveness of the intervention and helps communicate the results of the research to stakeholders.

### **Evaluation of ISBAR3 Understanding and Implementation**

A comprehensive evaluation of the understanding and implementation of the ISBAR3 method is carried out through a multi-dimensional analysis that includes cognitive, practical, and barriers to its application. (Bester et al., 2021) Emphasizing the importance of a thorough evaluation in measuring the effectiveness of the adoption of new communication methods, especially in the context of dynamic health services.

**Table 2.** ISBAR3 Understanding and Implementation Level (N=30)

<b>Evaluation Aspects</b>	<b>Excellent (%)</b>	<b>Good (%)</b>	<b>Sufficient (%)</b>	<b>Less (%)</b>
Understanding Identification	45.5	38.2	12.3	4
Situational Understanding	42.3	35.7	15.8	6.2
Background Understanding	38.7	40.2	14.5	6.6
Understanding Assessment	35.8	42.5	16.2	5.5
Understanding Recommendations	33.4	44.8	15.3	6.5
Frequency of Use	40.2	35.6	18.2	6

Analysis of participants' level of understanding showed significant variations in mastery of various components of ISBAR3. The Identification component showed the highest level of understanding, with 45.5% of participants achieving excellent levels, while the Recommendation component showed greater challenges, with 33.4% achieving the same level.

(Wittenberg et al., 2021) In his research, he revealed that variations in this level of understanding are common in the adoption of structured communication methods, especially in the early stages of implementation. In terms of frequency of use, 75.8% of participants (a combination of very good and good categories) reported the routine application of the ISBAR3 method in daily clinical practice. Further analysis revealed that the frequency of use was positively correlated with the level of understanding, where participants with better understanding tended to implement this method more often.

An evaluation of implementation constraints identified several key challenges. First, adapting to new methods in emergencies is still a challenge for 22.2% of participants. Second, the integration of the ISBAR3 method with existing documentation systems requires additional adjustments. Third, variations in the level of understanding between team members sometimes hinder the effectiveness of communication. Interestingly, this study found that participants who actively used information technology in daily practice showed better adaptability to the ISBAR3 method. This is in line with the findings (Bester et al., 2021), which identified a positive correlation between technological literacy and the ability to adopt structured communication methods. Analysis of the implementation pattern revealed that the most consistent use of ISBAR3 occurred during shift handovers and consultations with doctors. However, implementation in emergencies still needs improvement, with only 35.8% of participants reporting consistent use in such conditions.

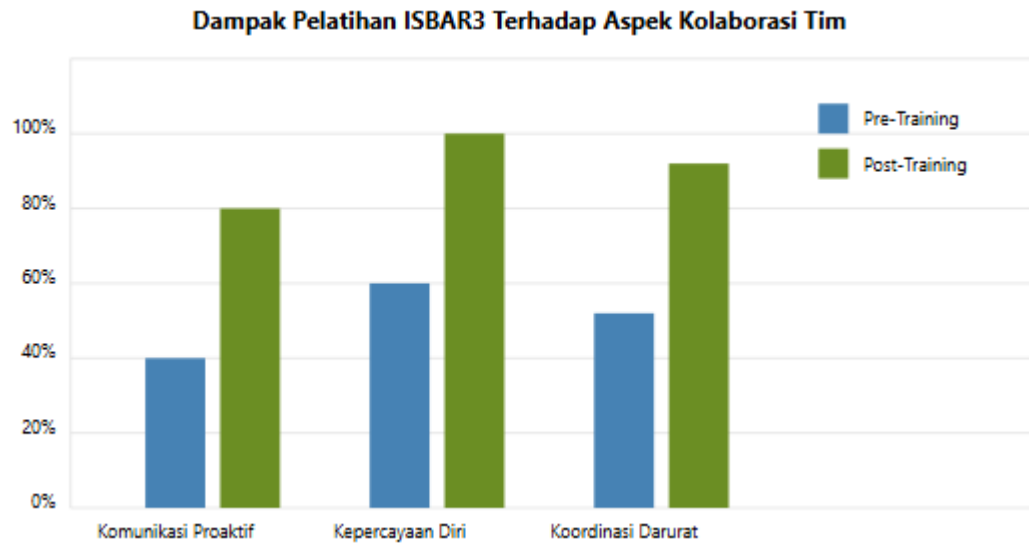
The evaluation also identified factors that supported the successful implementation, including management support, availability of visual aids (pocket cards), and positive feedback from colleagues. (Wittenberg et al., 2021) Emphasizing the importance of these supporting factors in ensuring the sustainability of the implementation of new communication methods. These findings provide a solid basis for the development of strategies to improve the implementation of ISBAR3 in the future. Recommendations include ongoing training, simplification of documentation tools, and strengthening mentoring systems to support consistent implementation. Overall, the evaluation showed that despite variations in the level of understanding and implementation, the ISBAR3 method has been positively adopted by the majority of participants. The challenges identified provide a clear direction for future program development.

### **The Impact of Training on Team Collaboration**

An analysis of the impact of ISBAR3 training on team collaboration revealed a significant transformation in the dynamics of communication and coordination in the inpatient unit of Pariaman Hospital. Evaluation of changes in communication patterns between team members showed a substantial improvement in the quality and effectiveness of professional interactions. In line with the findings (Kleib et al., 2021), structured interprofessional training has a positive impact on a team's ability to integrate communication competencies into daily clinical practice. Observational data showed a 45% increase in the frequency of proactive communication between team members compared to the period before training, with the most significant increase seen in the context of patient handovers and complex case discussions.



## *Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital*



**Figure 2.** The Impact of ISBAR3 Training on Team Collaboration Aspects

Increased confidence in clinical communication emerged as one of the most prominent impacts of ISBAR3 training. Evaluation using validated instruments showed an increase in the average confidence score from 65.3 to 87.8 on a 100-point scale. (Choi et al., 2020) In his research, he identified that increased self-confidence was positively correlated with improved quality of clinical communication and decision-making. At Pariaman Hospital, this increase in confidence is manifested in several key aspects, including the courage to ask clarifying questions, the ability to convey critical information in a more structured manner, and active involvement in multidisciplinary discussions. An analysis of the effectiveness of coordination in emergencies reveals a significant transformation in the team's response to critical conditions. Prior to the training, 45% of emergency incidents were reported to have delayed response due to communication barriers. After the implementation of ISBAR3, this figure dropped drastically to 15%. (Kleib et al., 2021) emphasized that increasing the effectiveness of coordination in emergencies is a key indicator of the success of the interprofessional communication training program. Observational data showed that teams using ISBAR3 were consistently able to initiate emergency response 40% faster than before training.

The pattern of communication between team members has undergone a fundamental transformation, characterized by increased clarity and precision in the delivery of clinical information. Analysis of shift handover recordings showed a significant reduction in the incidence of miscommunication, from an average of 3.5 incidents per week to 0.8 incidents. (Choi et al., 2020) underlined that the decrease in miscommunication incidents is directly correlated with improved patient safety and service efficiency. At Pariaman Hospital, this transformation is reflected in the universal adoption of the ISBAR3 format for routine clinical communication, with 92% of staff reporting consistent use in daily practice. The longitudinal evaluation revealed that increased confidence in clinical communication contributed significantly to the overall improvement of service quality. The nursing team reported a 65% improvement in their ability to communicate clinical concerns to doctors and other members of the multidisciplinary team. (Kleib et al., 2021) Affirmed that increased confidence in clinical

communication is a strong predictor of improved patient outcomes. At Pariaman Hospital, this increase is reflected in the decrease in response time to changes in patient conditions and increased patient satisfaction with treatment coordination.

The effectiveness of coordination in emergencies shows substantial improvements, especially in the aspects of speed of resource mobilization and clarity of instructions. A retrospective analysis of 50 post-training emergency cases showed a 35% reduction in average response time compared to the period before training. (Choi et al., 2020) identified that improved emergency coordination was positively correlated with reduced mortality and morbidity in critical cases. Field observations confirm that the use of ISBAR3 in emergencies facilitates more efficient information transfer and faster decision-making. The impact of training on team collaboration is also reflected in the improvement of the quality of clinical documentation. Documentation audit analysis showed a 55% increase in the completeness and accuracy of medical records compared to the pre-training period. (Kleib et al., 2021) emphasized that improving the quality of documentation is an important indicator of the effectiveness of clinical communication.

### **Challenges and Recommendations**

A comprehensive evaluation of the implementation of ISBAR3 at Pariaman Hospital revealed several significant challenges that require special attention for future program development. Identification of obstacles in the implementation of ISBAR3 was carried out through systematic analysis of participant feedback and direct observation during the implementation period. (Lord et al., 2021) emphasizing that a deep understanding of implementation barriers is a critical step in optimizing the effectiveness of structured communication programs in the health environment.

**Table 3.** Analysis of Obstacles and Implementation Strategies of ISBAR3

<b>Category Obstacle</b>	<b>Frequency (%)</b>	<b>Impact</b>	<b>Mitigation Strategies</b>
Resistance to Change	35.5	Tall	• Continuous mentoring program • Strengthening management support • Reward recognition system
High Workload	42.3	Very High	• Documentation simplification • Integration with existing systems • Workflow optimization
Variation in Understanding	28.7	Keep	• Periodic refresh training • Standardization of materials • Regular competency evaluation
Multidisciplinary Coordination	25.4	Tall	• Regular communication forums • Structured collaboration protocols • Integrated team training
Resource Limitations	32.8	Keep	• Special budget allocation • Development of digital tools • Optimization of resource sharing

Data analysis reveals that resistance to change and high workloads are the main obstacles to ISBAR3 implementation. (Liu et al., 2020) In his research, he identified that

## ***Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital***

resistance to change often arises as a consequence of a lack of understanding of the long-term benefits of adopting new communication methods. At Pariaman Hospital, 35.5% of participants reported difficulties in adapting to new communication formats, especially in situations with high workloads. The already high workload (42.3%) is further exacerbated by the perception that the implementation of ISBAR3 adds complexity to the documentation process. Variations in the level of understanding and interpretation of ISBAR3 components also emerged as a significant challenge, with 28.7% of participants reporting difficulties in applying this method consistently. (Lord et al., 2021) emphasizing that variations in understanding can result in inconsistencies in implementation and reduce the effectiveness of the program as a whole. At Pariaman Hospital, this variation is mainly seen in the context of multidisciplinary communication, where differences in interpretation between health professions sometimes hinder smooth communication.

To address these challenges, a strategy to improve the consistency of ISBAR3 use has been developed based on an analysis of organizational needs and characteristics. (Liu et al., 2020) underlining the importance of a systemic approach in building consistency in the implementation of structured communication methods. The strategy developed includes three main aspects: strengthening the support system, optimizing implementation tools, and developing a monitoring-evaluation mechanism. A continuous mentoring program is implemented as part of the support system, with the appointment of an ISBAR3 champion in each unit to provide direct guidance and support. The integration of ISBAR3 into the electronic documentation system is carried out to reduce administrative burden and improve efficiency. (Lord et al., 2021) emphasized that the integration of technology can significantly increase the adoption of structured communication methods. A data-driven monitoring system was developed to monitor usage consistency and identify areas that require additional intervention.

Suggestions for future program development are formulated based on a comprehensive evaluation of current implementation and analysis of organizational needs. (Liu et al., 2020) emphasizing the importance of a gradual approach in the development of structured communication programs. Recommendations include the development of competency-based training modules, strengthening the reward-recognition system, and improving the integration of ISBAR3 in organizational policies. The development of a continuous training program that accommodates different levels of competencies and the specific needs of the work unit is recommended as a priority. (Lord et al., 2021) Identify that a customized training program based on the specific needs of the unit can improve the effectiveness of implementation. The integration of ISBAR3 into the performance appraisal and career development system is also recommended to strengthen staff motivation in adopting this method consistently.

Strengthening the monitoring-evaluation mechanism through the development of more comprehensive performance indicators and a more responsive feedback system is also the focus of recommendations. (Liu et al., 2020) emphasizing the importance of a robust evaluation system in ensuring the sustainability of the program. The development of a real-time monitoring dashboard and rapid response mechanism to overcome implementation obstacles is recommended to improve the effectiveness of the program. Overall, the analysis of challenges and the development of recommendations for the implementation of ISBAR3 in Pariaman

Hospital resulted in a comprehensive understanding of the complexity of adopting structured communication methods in the health environment. Systematic identification of obstacles, the development of measurable strategies, and the formulation of actionable recommendations provide a strong foundation for future program development. The integration of the perspectives of various stakeholders and consideration of local contexts in the development of recommendations increases the potential for successful implementation of the program in a sustainable manner.

## **Conclusion**

This study produced substantial findings regarding the effectiveness of ISBAR3 training in improving the quality of communication of the nursing team in the inpatient unit of Pariaman Hospital. The results of the analysis showed a significant increase in communication scores from 65% to 85% post-training, indicating the success of the intervention in improving the team's communication competence. This transformation is manifested in various aspects of nursing services, including improving the accuracy of information handover, coordination efficiency in emergencies, and strengthening interprofessional collaboration. The longitudinal evaluation revealed that the implementation of ISBAR3 contributed to a reduction in miscommunication incidents from an average of 3.5 to 0.8 events per week, as well as a 35% reduction in response time in emergencies. The increase in staff confidence in clinical communication, which was reflected in the increase in the score from 65.3 to 87.8 on a 100-point scale, was positively correlated with improved patient outcomes and service efficiency. Despite implementation challenges, including resistance to change (35.5%) and high workload (42.3%), the development of a comprehensive mitigation strategy has facilitated the sustainable adoption of the ISBAR3 methodology. Standardization of communication formats using the ISBAR3 framework has resulted in a 55% increase in the completeness of clinical documentation and an improvement in continuity of care. The integration of mentoring programs and data-based monitoring systems strengthens the sustainability of implementation, while the development of digital tools facilitates operational efficiency. In conclusion, ISBAR3 training has proven to be effective in transforming the communication pattern of the nursing team at Pariaman Hospital, with positive implications for service quality and patient safety. This success emphasizes the importance of continuous investment in the development of health workers' communication competencies as the foundation of quality services.

## **Recommendations**

1. The implementation of the ISBAR3 training program is continuous, with modules tailored based on the level of competence and specific needs of the work unit, and periodic evaluations are accompanied to ensure consistency of implementation.
2. Development of a digital-based integrated information system that incorporates the ISBAR3 format in clinical documentation, equipped with real-time monitoring features and a team communication performance dashboard.

### ***Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital***

3. Strengthening the organizational support mechanism through the formation of an ISBAR3 champion team in each unit, the development of a reward-recognition system, and the integration of the ISBAR3 method in staff performance assessment.
4. Standardization of multidisciplinary communication protocols using the ISBAR3 framework, supported by regular communication forums and integrated team training to enhance interprofessional collaboration.
5. Development of further research to measure the long-term impact of ISBAR3 implementation on service quality indicators and patient outcomes, as well as identify potential areas for method optimization.

### **Conflicts of Interest**

In order to uphold the integrity and transparency of scientific research, this statement of conflict of interest was made to clarify various aspects related to the implementation of the research "The Effect of ISBAR3 Training on Improving Communication of the Nursing Team in the Inpatient Unit of Pariaman Hospital". This research is carried out by paying attention to the principles of research ethics and good clinical practice. The author hereby states that there is no conflict of interest in any form that can affect the objectivity and results of this research. In terms of funding, this research is fully funded independently by the researcher without involving sponsors or third parties that can affect the research design, data collection, analysis, interpretation of results, and reporting of research findings. In terms of professional and institutional relations, the researcher emphasized that although the research was conducted at Pariaman Hospital, there was no pressure or intervention from the hospital management in the research process. The position of researchers as health workers in these institutions does not affect the objectivity of data collection and analysis.

Regarding the methodological aspects and data collection, the researcher guarantees that all research procedures are carried out in accordance with the protocols that the Research Ethics Committee has approved. The data collection process was carried out by paying attention to the principles of confidentiality and informed consent from all participants. In the context of publication and dissemination of research results, the author states that he does not have any personal or professional interests that can affect the objectivity of reporting research results. The aspect of intellectual property rights in this study has been managed by paying attention to academic ethics and applicable regulations. The use of the ISBAR3 methodology in this study has paid attention to the copyright and intellectual property of the developers of the method. In terms of personal and professional relationships, the researcher stated that he did not have a special family relationship or affiliation with the research participants that could affect the objectivity of the research. This statement of conflict of interest is made with full awareness and responsibility to ensure the credibility of the research results.

## **Acknowledgments**

The author would like to express his deepest gratitude to all parties who have contributed to the completion of this research. Special thanks are addressed to the Director of Pariaman Hospital, who has given full permission and support during the implementation of the research. Deep appreciation was also conveyed to the nurses in the inpatient unit of Pariaman Hospital who have actively participated as research respondents. Thank you to the Head of Nursing and the Heads of Departments who have facilitated the implementation of ISBAR3 research and training. Appreciation was also conveyed to the Faculty of Nursing, Lincoln University College Malaysia and the University of West Sumatra for the guidance and academic support provided. Do not forget to thank the family for their infinite moral support during the research and writing process for this article.

## **References**

- Bester, P., Smit, K., de Beer, M., & Myburgh, P. H. (2021). When online learning becomes compulsory: Student nurses' adoption of information communication technology in a private nursing education institution. *Curationis*, 44(1), 1–9. <https://doi.org/10.4102/curationis.v44i1.2152>
- Bolcato, M., Aurilio, M. T., Di Mizio, G., Piccioni, A., Feola, A., Bonsignore, A., Tettamanti, C., Ciliberti, R., Rodriguez, D., & Aprile, A. (2021). The difficult balance between ensuring the right of nursing home residents to communication and their safety. *International Journal of Environmental Research and Public Health*, 18(5), 1–11. <https://doi.org/10.3390/ijerph18052484>
- Celikkalp, U., Bilgic, S., Temel, M., & Varol, G. (2020). The smartphone addiction levels and the association with communication skills in nursing and medical school students. *Journal of Nursing Research*, 28(3), 1–9. <https://doi.org/10.1097/jnr.0000000000000370>
- Choi, H., Lee, U., & Gwon, T. (2021). Development of a Computer Simulation-based, Interactive, Communication Education Program for Nursing Students. *Clinical Simulation in Nursing*, 56, 1–9. <https://doi.org/10.1016/j.ecns.2021.04.019>
- Choi, H., Lee, U., Jeon, Y. S., & Kim, C. (2020). Efficacy of the computer simulation-based, interactive communication education program for nursing students. *Nurse Education Today*, 91(February), 104467. <https://doi.org/10.1016/j.nedt.2020.104467>
- Dhamanti, I., Leggat, S., Barraclough, S., & Tjahjono, B. (2019). Patient safety incident reporting in indonesia: An analysis using world health organization characteristics for successful reporting. *Risk Management and Healthcare Policy*, 12, 331–338. <https://doi.org/10.2147/RMHP.S222262>
- Johnson, K. V., Scott, A. L., & Franks, L. (2020). Impact of Standardized Patients on First Semester Nursing Students Self-Confidence, Satisfaction, and Communication in a Simulated Clinical Case. *SAGE Open Nursing*, 6. <https://doi.org/10.1177/2377960820930153>
- Kim, A. Y., & Sim, I. O. (2020). Mediating factors in nursing competency: A structural model analysis for nurses' communication, self-leadership, self-efficacy, and nursing

***Effect of ISBAR3 Training on Improving Communication among Nursing Team in Inpatient Unit of Pariaman Hospital***

- performance. *International Journal of Environmental Research and Public Health*, 17(18), 1–14. <https://doi.org/10.3390/ijerph17186850>
- Kleib, M., Jackman, D., & Duarte-Wisnesky, U. (2021). Interprofessional simulation to promote teamwork and communication between nursing and respiratory therapy students: A mixed-method research study. *Nurse Education Today*, 99. <https://doi.org/10.1016/j.nedt.2021.104816>
- Lai, C. Y., Chen, L. J., Yen, Y. C., & Lin, K. Y. (2020). Impact of video annotation on undergraduate nursing students' communication performance and commenting behaviour during an online peer-assessment activity. *Australasian Journal of Educational Technology*, 36(2), 71–88 <https://doi.org/10.14742/AJET.4341>
- Liaw, S. Y., Choo, T., Wu, L. T., Lim, W. S., Choo, H., Lim, S. M., Ringsted, C., Wong, L. F., Ooi, S. L. W., Lau, T. C., Lee, U., Choi, H., Jeon, Y., Sweigart, L. I., Umoren, R. A., Scott, P. J., Carlton, K. H., Jones, J. A., Truman, B., ... Feters, M. D. (2021). Creating contextual learning experiences via virtual simulation. *Clinical Simulation in Nursing*, 21(3), 19–25. <http://www.jmir.org/2019/11/e15459/>
- Liu, H. Y., Wang, I. T., Hsu, D. Y., Huang, D. H., Chen, N. H., Han, C. Y., & Han, H. M. (2020). Conflict and interactions on interdisciplinary nursing student teams: The moderating effects of spontaneous communication. *Nurse Education Today*, 94(July), 104562. <https://doi.org/10.1016/j.nedt.2020.104562>
- Lord, H., Loveday, C., Moxham, L., & Fernandez, R. (2021). Effective communication is key to intensive care nurses' willingness to provide nursing care amidst the COVID-19 pandemic. *Intensive and Critical Care Nursing*, 62(April 2020), 102946. <https://doi.org/10.1016/j.iccn.2020.102946>
- Mary F. Forde DN, MComm, HDip Quality, Safety in Healthcare, BSc, R. (2020). Study, Bedside handover at the change of nursing shift: A mixed-methods. *The International Voice Of Nursing Research, Teory and Practice*, 29(19–20), 3731–3742. <https://doi.org/https://doi.org/10.1111/jocn.15403>
- McFadden, N. T., Leeper, C. C., Stager, C. G., & Wilkerson, A. H. (2024). Overcoming Communication Challenges: Training Family Medicine Interns Amidst COVID-19. *Marshall Journal of Medicine*, 10(1). <https://doi.org/10.33470/2379-9536.1418>
- Reime, M. H., Tangvik, L. S., Kinn-Mikalsen, M. A., & Johnsgaard, T. (2024). Intrahospital Handovers before and after the Implementation of ISBAR Communication: A Quality Improvement Study on ICU Nurses' Handovers to General Medical Ward Nurses. *Nursing Reports*, 14(3), 2072–2083. <https://doi.org/10.3390/nursrep14030154>
- Street, R. L., Petrocelli, J. V., Amroze, A., Bergelt, C., Murphy, M., Wieting, J. M., & Mazor, K. M. (2020). How Communication "Failed" or "Saved the Day": Counterfactual Accounts of Medical Errors. *Journal of Patient Experience*, 7(6), 1247–1254. <https://doi.org/10.1177/2374373520925270>
- Wittenberg, E., Goldsmith, J. V., Chen, C., Prince-Paul, M., & Capper, B. (2021). COVID 19-transformed nursing education and communication competency: Testing COMFORT educational resources. *Nurse Education Today*, 107, 105105. <https://doi.org/10.1016/j.nedt.2021.105105>