# Relationship of Knowledge to SBAR Communication Attitude During Patient Handover in Recovery Room in Anesthesiology Nursing Students of Aisyiyah University Yogyakarta

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## ABSTRACT

Communication failure can lead to malpractice, misunderstanding, delayed diagnosis, service, additional costs, incomplete information, patient and family dissatisfaction and can even cause death, so effective communication with the SBAR method is needed during patient handover in the recovery room. This study aims to determine the relationship between the level of knowledge and the attitude of SBAR communication during patient handover in the recovery room in Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta. This research method uses quantitative correlation with a cross-sectional design. Sampling with random sampling totaling 67 respondents. Data were collected using a questionnaire with Spearman rank analysis. The results of the Spearman Rank correlation test obtained a p-value of 0.000 <0.005 and a correlation value of 0.758 (strong), meaning that there is a relationship between knowledge and the attitude of SBAR communication during patient handover in the recovery room in Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta. The majority of respondents had good knowledge of 35 respondents (52.5%) and good attitudes of 37 respondents (55.2%).

Keywords : Knowledge, Attitude, SBAR Communication

#### INTRODUCTION

Surgical procedures are a treatment method that is carried out invasively by making incisions in certain parts of the body to remove abnormal organs or tissues.(Fadlilah et al., 2021). This procedure aims to identify and cure diseases or damage to the body. After the surgical procedure, the incision is closed by suturing the wound.(Zakia et al., 2024). In practice, anesthesia is used to prevent pain and discomfort for patients. There are two main types of anesthesia, namely General Anesthesia, which causes a complete loss of consciousness and pain, and Regional Anesthesia which maintains patient consciousness but eliminates pain in certain areas.(Pramono, 2020).

In anesthesia care there are several stages, namely pre-anesthesia, intra-anesthesia, and post-anesthesia.(Millizia et al., 2022). The recovery room is a place for post-anesthesia patient recovery to carry out monitoring until the effects of the anesthesia wear off and

the patient's condition is stable.(Rachmawati, 2021). Accurate and precise patient assessment to avoid serious problems that will affect the patient. Aldrete score as a measuring tool that is often used to determine the condition of patients who are ready to move rooms (Ray et al., 2024).

*Handover* is to convey information during shift changes, patient transfers between rooms and reporting patient conditions to ensure patient safety.(Sri Krisnawati et al., 2023). Handover includes the delivery of information regarding the patient's condition and management, as well as the transfer of responsibility between health workers, both between nurses, doctors, and between service units.(Mardhiah et al., 2021). Therefore, effective communication is key in the handover process to prevent medical errors.

Communication is the process of conveying ideas, information and feelings through speech, writing and body gestures.(Wartiningsih et al., 2023). Effective communication skills are essential to improving patient safety, quality of care, and are an essential element in patient safety.(Yelvita, 2022). Ineffective communication can have serious consequences, including delayed diagnosis, inappropriate care, and malpractice.(Oxyandi et al., 2020). According toWHO (2020), communication failures contribute to an estimated 25,000–30,000 cases of permanent disability in Australia. In Indonesia, reports of patient safety incidents have increased from 3% (2017) to 12% (2019), with the highest incidents reported from Bali, Yogyakarta, and Central Java.(Handayani et al., 2024).

One of the recommended communication methods to reduce failures in clinical communication is SBAR (Situation, Background, Assessment, Recommendation). This method is designed to convey information systematically, concisely, and accurately between health professionals.(Martsayanez et al., 2022). The use of SBAR has been shown to increase communication effectiveness, build confidence, and encourage collaboration in health care.(Farzaneh et al., 2023).

Previous research has shown a relationship between SBAR communication in handover with nurse performance and the effectiveness of interprofessional communication.(Sulistyawati et al., 2020). Adequate knowledge is one of the important factors that influence the effectiveness of SBAR implementation. Knowledge is obtained through the sensing process and plays a role in forming individual attitudes.(Notoatmodjo, 2018). A positive attitude is very important in determining the success of implementing patient handover.(Kesrianti and Rantisari 2022).

Anesthesiology Nursing students as prospective anesthesiologists have a role in all stages of anesthesia, including post-anesthesia in the recovery room. In accordance with the Regulation of the Minister of Health of the Republic of Indonesia No. HK.01.07/MENKES/722/2020, anesthesiologists are responsible for monitoring patient conditions, managing pain, and assessing readiness before patient handover.(Ministry of Health Regulation, 2020). Therefore, Anesthesiology Nursing students need to have good knowledge and attitude in implementing SBAR communication during patient handover. However, based on the researcher's experience during clinical practice at the Central Surgical Installation (IBS), there are still students who do not understand the application of SBAR communication optimally. A preliminary study through questions and answers with 16 students showed that 50% of respondents admitted that they did not understand SBAR communication well. In addition, students tend not to be involved in the postanesthesia handover process in the recovery room. Based on this background, the researcher formulated the problem of whether the relationship between knowledge and SBAR communication attitudes during patient handover in the recovery room in Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta.

#### Method

This study is a quantitative correlation study with a cross-sectional design. The population in this study were 154 Anesthesiology Nursing students of Universitas 'Aisyiyah Yogyakarta class of 2022. The sampling technique used in this study was probability sampling with random sampling totaling 67 students. The type of data used in this study is primary data. Primary data obtained by conducting research directly by researchers to respondents.

The data collection tool in this study used a knowledge and attitude questionnaire that had been tested for validity and reliability. Validity and reliability tests were carried out on 30 respondents who were different from the research respondents using Pearson product moment with the results of the questionnaire declared valid, then the reliability test with Cronbach alpha and was declared reliable. The study was conducted via Zoom by sending Google from to request respondent approval (informed consent) and continued by answering the knowledge and attitude research questionnaire. The research data obtained will then be analyzed using a non-parametric statistical test, namely the sperm rank and will be presented in the following table.

## **RESEARCH RESULT**

Respondent Characteristics	Frequency	Percentage %		
Age		-		
Age 20 years	41	61.2		
Age 21 years	18	26.9		
Age 22 years	5	7.5		
Age 23 years	2	3.0		
Age 25 years	1	1.5		
Total	67	100		
Gender				
Man	13	19.4		
Woman	54	80.6		
Total	67	100		
Practical Experience				
Have you ever practiced IBS	67	100		
clinic?				
Never practiced IBS clinic	0	0		
Total	67	100		

**Table 1. Frequency Distribution of Respondent Characteristics** 

Data Source: Primary 2025

Frequency distribution of the characteristics of the majority of respondents' ages, namely 20 years old as many as 41 respondents (61.2%), 21 years old 18 respondents (26.9%), 22 years old 5 respondents (7.5%), 23 years old 2 respondents (3.0%), and 25 years old 1 respondent (1.5%). In terms of gender, there were 67 respondents, 13 male respondents (19.4%), and 54 female respondents (80.6%), the majority of female research respondents. In terms of experience, respondents who have practiced clinically in the central surgical installation numbered 67 respondents (100%).

<b>Table 2. Distribution of Respondents</b>	<b>Based on Knowledge</b>
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Amount	Percentage(%)
35	52.2
32	47.8
0	0
67	100
	Amount 35 32 0 67

Data Source: Primary 2025

The distribution of respondents based on student knowledge shows that 35 respondents (52.2%) have good knowledge, 32 respondents (47.8%) have sufficient knowledge, and 0 respondents (0%) have poor knowledge.

Student Knowledge	Amount	Percentage(%)		
Good	37	55.2		
Enough	28	41.8		
Not enough	2	3.0		
Not good	0	0		
Total	67	100		
and Primary 2025				

Data Source: Primary 2025

The distribution of respondents based on student attitudes shows that 37 respondents (55.2%) have a good attitude, 28 respondents (41.8%) have a fair attitude, 2 respondents (3.0%) have a poor attitude, and 0 respondents (0%) have a bad attitude.

					Att	itude					Р	Ν
Level of											(Value)	
Knowledge	G	ood	Eı	nough	]	Not	]	Not	]	「otal		
					en	ough	g	ood				
	f	%	f	%	f	%	f	%	f	%		
Good	32	91.4	3	8.6	0	0.0	0	0.0	35	100.0	0,000	0.758
Enough	5	15.6	2	78.1	2	6.3	0	0.0	32	100.0		
			5									
Not enough	0	0.0	0	0.0	2	0.0	0	0.0	0	100.0		
Total	37	55.2	2	41.8	2	3	0	0.0	67	100.0		
			8									

Table 4. Correlation Results Sperm Rank Knowledge and Attitudes

Data Source: Primary 2025

From the table shows the significant value between the variables of knowledge and SBAR communication attitudes during patient handover in the recovery room in Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta is P (value) 0.000 <0.05, so it can be concluded that there is a significant (real) relationship between the variables of knowledge and SBAR communication attitudes during patient handover in the recovery room in Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta.

## DISCUSSION

The results of the SBAR communication knowledge questionnaire for Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta in table 2. There are differences in knowledge results, namely good knowledge and sufficient knowledge. The researcher assumes that the differences in knowledge measurement results are due to differences in the sources of knowledge they have. Respondents with good knowledge are due to having received material on SBAR communication not only at the institution but also through mass media, journals, and experience during clinical practice at IBS, respondents really follow patients and participate in patient handovers with ward nurses, in contrast to respondents with sufficient knowledge who only know part of the material and also lack application. In line withAmanatillah et al., (2024), limited student knowledge is caused by minimal information received. Meanwhile, good knowledge is influenced by wider access to information from various sources. Supported by researchWatulangkow et al., (2020), respondents who have high knowledge because they have participated in SBAR communication from colleagues and from educational institutions.

The results of the SBAR communication attitude questionnaire on Anesthesiology Nursing students of 'Aisyiyah Yogyakarta in table 3. There are differences, namely good, sufficient, and less attitudes with the majority of respondents' attitudes being good. When handing over patients in the recovery room, anesthesiologists need to ensure clarity in communicating and delivering information related to the patient's condition and further interventions in full. In line withPane et al., (2023), 142 respondents have implemented SBAR communication with nurses, the majority of respondents have implemented it well, namely 119 people (83.8%), and the minority of respondents have implemented it quite well, namely 23 people (16.2%).

From table 4. shows the results of non-parametric statistical bivariate analysis with Spearman rank there is a relationship between the knowledge variable and the SBAR communication attitude during patient handover in the recovery room in Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta, with a correlation value of 0.758 which means there is a strong relationship between the variables with a positive correlation direction, where the higher the SBAR communication knowledge possessed by the respondents, the SBAR communication attitude of the respondents also increases.

The results of this study explain that respondents with in-depth knowledge of SBAR communication during patient handover in the recovery room tend to have a more positive attitude in implementing SBAR communication. Respondents are more confident and able to receive and organize information systematically, and are aware of the importance of conveying information completely and accurately. In line with the researchSulistyawati et al., (2020), there is a relationship between SBAR communication in handover and nurse performance in implementing nursing care in the Hospital Inpatient Room. This study is similar toManalu et al., (2023), there is a relationship between knowledge and the implementation of SBAR communication during handover.

In this study, it was found that respondents' knowledge of SBAR communication during patient handover in the recovery room had an influence on their attitude towards implementing SBAR communication during patient handover in the recovery room. Students who understand the function, purpose, steps and principles of SBAR communication to ensure patient safety, and the awareness that communication errors have a very serious impact on post-surgical patients.

Good knowledge of SBAR communication is essential because it will be the basis for implementing effective communication, especially during post-surgical patient handover. SBAR communication has been designed to simplify and be able to organize communication flows in complex clinical situations, so that students are required not only to know and memorize the theory but also to be able to understand and apply SBAR communication, especially in critical environments such as post-surgical patient handovers that require completeness, accuracy and high accuracy in conveying information about patients.

#### CONCLUSION

There is a relationship between knowledge and SBAR communication attitudes during patient handover in the recovery room of Anesthesiology Nursing students at 'Aisyiyah University of Yogyakarta with a significant value of 0.000<0.05 and a correlation coefficient value of 0.758 is obtained, meaning that there is a strong relationship that is positive and unidirectional, where the higher the level of knowledge, the better the attitude of Anesthesiology Nursing students.

## LIMITATIONS

The limitation of this study is that the researcher cannot directly control the filling of the questionnaires filled out by the respondents, because there was no time contract with the respondents for offline research. At the time of the study, the respondents were on vacation from college so the study was conducted online via Google Form but the researcher conducted supervision via Zoom with the research respondents.

## References

- Aida Sri Rachmawati. 2021. "Description of the Implementation of Aldrete Score Assessment in Postoperative Patients in the Recovery Room of the Regional General Hospital." Journal of Nursing & Midwifery, Mitra Kencana Health College, Tasikmalaya 2(November): 2013–15.
- Amanatillah, Aurora Aisha, and Ratih Kusema Dewi. 2024. "The Relationship between Anesthesiology Nursing Students' Knowledge and Attitudes in Prov." 2(September): 28–35.
- Anam, Ach Syaiful et al. 2022. "Nursing Communication as a Patient Safety Culture in Civil Malpractice Prevention Efforts." JISIP (Journal of Social Sciences and Education) 6(3): 10368–73.
- Nengah et al. 2020. "The Relationship Between Age and Knowledge and Behavior of Supplement Use in Students of the Sepuluh Nopember Institute of Technology." Journal of Community Pharmacy 7(1): 1.
- Dr. Ardi Pramono, Sp.An., M.Kes. Anesthesia Lecture Book. ed. Dr. Deriyan Sukma Widjaja. EGC Medical Book 2014.
- Dr. Minarni Wartiningsih, dr., M.Kes., FISPH., FISCM et al. 2023. Effective Communication in Health Services.
- Fadlilah, Siti, Adi Sucipto, Sumarni Sumarni, and Yusup Dwiyanto. 2021. "Family Social Support Increases Mobility in Post-Laparatomy Patients at Dr. Soeradji Tirtonegoro General Hospital." Muhammadiyah Nursing Journal 6(3): 69–75.
- Farzaneh, Mehran, Vahid Saidkhani, Kambiz Ahmadi Angali, and Masoumeh Albooghobeish. 2023. "Effectiveness of the SBAR-Based Training Program in Self-Efficacy and Clinical Decision-Making of Undergraduate Anesthesiology Nursing Students: A Quasi-Experimental Study." BMC Nursing 22(1): 1–9.
- Handayani, Tuti, Nur Hasanah, and Wargiah Wargiah. 2024. "The Relationship Between SBAR Handover Communication and Nurse Job Satisfaction at the Regional Public Hospital." Journal of Health Discourse 9(1): 37.
- I fart Swarjana, S, K, M., MPH, Dr. P.. 2022. Concept of Knowledge Attitude Behavior Perception Stress Anxiety Pain Social Support Compliance Motivation Satisfaction Covid-19 Pandemic Access to Health Services. ed. Andi Radhitya

Indra, 1st ed.

- Kesrianti, Andi Maya, and Andi Meinar Dwi Rantisari. 2022. "Factors Influencing Communication During Handover in the Inpatient Room of Hasanuddin University Hospital." J-HEST Journal of Health Education Economics Science and Technology 3(2): 114–20.
- Manalu, Titileviana, Siti Anisah, Intan Pertiwi, and Farida Murtiani. 2023. "Nurses' Knowledge in Implementing SBAR Communication During Handover." 18(02): 121–29.
- Mardhiah, Elvi et al. 2021. "Factors Related to Nurses' Proactive Behavior in Implementing Handover in the Intensive Care Room of the Hospital." Journal of Telenursing (JOTING) 3(2): 555–64.
- 2021. Health Promotion and Health Behavior. ed. Ronal Watrianthos. Our Writing Foundation. https://repositori.uin-alauddin.ac.id/19791/1/2021\_Book Chapter Health Promotion and Health Behavior.pdf.
- Martsayanez-fernitundez, Lautsayake Cristina et al. 2022. "SBAR Method to Improve Well-Being in an Internal Medicine Unit: A Quasi-Experimental Study."
- Notoatmojdo, Seoekidjo. 2018. Health Research Methodology.
- Nurhayati & Zakia. 2024. "Application of Deep Breathing Relaxation Techniques on Preoperative Anxiety Levels of Patients at General Ahmad Yani Metro Hospital." Cendikia Journal 4: 658–65.
- Oxyandi, Miming Et Al. 2020. "THE EFFECT OF EFFECTIVE COMMUNICATION METHOD SBAR ON THE IMPLEMENTATION OF WEIGHING AND ACCEPTANCE." 5: 162–72.
- Pane, Jagentar, Lindawati Tampubolon, and Monika Lasniwati Nadeak. 2023. "Implementation of Sbar Communication (Situation, Background, Assessment, Recommendation) by Nurses During Handover." Journal of Nursing Companions 5(02): 92–102.
- Minister of Health Regulation. 2020. "Decree of the Minister of Health of the Republic of Indonesia Number Hk.01.07/Menkes/722/2020
- Putra, Aji Prima, Anna Millizia, and Muhammad Khalilul Akbar. 2022. "Perioperative Anesthesia Management." GALENICAL: Malikussaleh Student Journal of Medicine and Health 1(2): 82.
- Sri Krisnawati, Komang Menik, Ni Putu Emy Darma Yanti, and Indah Mei Rahajeng. 2023. "Implementation of Situation, Background, Assessment, and Recommendation (SBAR) Format During Handover in the Udayana University Hospital." Nursing and Health Sciences Journal (NHSJ) 3(2): 155–59.
- Ulfa, Nadya, Erianti Erianti, and Ennimay Ennimay. 2021. "The Relationship between Nurses' Knowledge of Effective Communication and the Quality of Handover Implementation." Abdurrab Nursing Journal 5(2): 20–29.
- Watulangkow, Meilandy et al. 2020. "Nurses' Knowledge of SBAR Communication Techniques in One Hospital in West Indonesia." Raflesia Nursing Journal 2(2): 81–88.

WHO. 2020. "Permanent Disability Data in Patients."

- Wiwin Sulistyawati, Kun Ika Nur Rahayu, and Adelia Yogi Pratiwi Rama Dhanti. 2020. "The Relationship between Patient Communication During Handover and Nurse Performance in Implementing Nursing Care in Inpatient Rooms." 9(1): 1–23.
- Yelvita, Feby Sri. 2022. "Optimizing the Implementation of SBAR Communication During Patient Handover Between Nursing Shifts." Journal 6(8.5.2017): 2003–5.
- Yun, Jungmi, Yun Ji Lee, Kyoungrim Kang, and Jongmin Park. 2023. "Effectiveness of SBAR-Based Simulation Programs for Nursing Students: A Systematic Review." BMC Medical Education 23(1): 1–10.