



# Effectiveness of Self Instructional Module on Knowledge regarding ISBAR Clinical Handover Communication among ICU Staff nurse in PESIMSR Hospital, at Andhra Pradesh

Dr. Metilda

[metildavin02@gmail.com](mailto:metildavin02@gmail.com)

P.E.S. Institute of Medical Sciences and Research,  
Kuppam, Andhra Pradesh

Dr. Jaganath

[drjaganath.icu@pesimsr.pes.edu](mailto:drjaganath.icu@pesimsr.pes.edu)

P.E.S. Institute of Medical Sciences and Research,  
Kuppam, Andhra Pradesh

## ABSTRACT

*Communication has been praised as the foundation of all nursing care. Inaccurate shift handover and communication overload can be directly related to the patient's adverse outcomes. Continuity of patient care is achieved through clear and concise transfer of patient clinical information from one healthcare provider to another during handoff by ISBAR communication strategies. Quantitative evaluative approach of one group pretest posttest design was used to test SIM performance in ISBAR techniques. Staff Nurse were selected by convenience sampling technique and sample consists of 60 staff nurses, working in ICU PESIMSR hospital, Andhra pradesh. Semi structured questionnaire was used for data collection. Descriptive and Inferential statistics were used to investigate data collected in terms of policies. The analysis shows that, there was significant difference in mean percentage knowledge score of the ISBAR clinical communication between pretest (35%) and posttest (92%). the estimated value of paried't' value was 27.675 greater than the table value, which is known to have made significant progress in the total knowledge score. ISBAR clinical handover Communication tool was effective on nursing shift handovers and help for holistic care of ICU patient.*

**Keywords:** ISBAR, Communication Tool, Self Instructional Module (SIM), Nurses

## 1. INTRODUCTION

Nursing shift handover is a important part of the clinical care where communication of relevant patient information takes place accurately and directly, ensuring continuous care and promoting patient safety (WHO, 2007). The Joint Commission reported that poor communication was a contributing factor to more than 60% of all negative hospital events they reviewed. Improper communication and lack of structured format have been identified as a contributing factor to adverse events where patient care is put at risk. There are many challenges and obstacles that can hinder the effectiveness of good handover. Effective communication is therefore central to safe and effective patient care. There are various tools used for handover, like checklists and mnemonics, which were designed to improve and facilitate the handover process. However ISBAR ensures a standard approach in handover.

ISBAR (Identify, Situation, Background, Assessment and Recommendation) is a memorization method designed to improve safety in the transmission of critical information. It derived from SBAR; the most widely used mnemonic can improve the quality of information exchange among health team members. The ISBAR (Identify -Situation-Background-Assessment-Recommendation) method is an easy way to plan and build communication. This tool ensures that communication error is minimized and important details are not missed.

In the ICU and in the operative room, clear and accurate communication between members of the health team is essential. Training module such as SIM in ISBR clinical communication tool is a way to achieve the best performance of staff nurses in health care organizations. By using this method, accurate transfer of medical data during shift change is possible for nurses and identifying of any error in data transfer process is easily possible. The compilation of research findings found that 96% of training can improve individual performance and 87% of training can improve organizational performance (kabar, & Wilson, 2015).

### 1.1 Need For The Study

Even today, unsuccessful communication is often the leading cause of safety in a patient. "Ineffective hand-off communication is considered as a critical issue for patient safety in health care; in fact, approximately 80% of medical errors include inconsistencies between caregivers during patient referral. ISBARR will help clarify the handover shift report expectations and increase patient safety through effective communication

**1.2 Objectives of the study**

- To assess the prior knowledge about ISBAR clinical handover communication among staff nurses working in the ICU.
- To evaluate the effectiveness of self instructional modules for ICU nurses' on knowledge regarding ISBAR clinical handover communication.
- To find out the association between selected socio demographic variables with their post-test knowledge of nurses on ISBAR clinical hand over communication.

**2. MATRIALS AND METHODOLOGY**

Quantitative evaluative approach of one group pretest posttest design was used for the study to determine the effectiveness of Self instructional module in relation to ISBAR clinical handover communication. The study was conducted in the ICU of PES Institute of Medical Science and research in Kuppam, at Andhra Pradesh after obtaining the necessary permits and ethics. Participants who completed the sample criteria were selected from a sample of 60 staff nurses, who work at the ICU PESIMSR hospital by convenience sampling technique.

- **Tool Selection and Development:** Semi structured Knowledge questionnaire was used to collect the data. Tool consists of three sections.
- **Section A:** Contains an interview schedule for collecting Demographic Variables which includes variables like age, gender, religion, marital status, professional qualification, working experience etc
- **Section B:** Consist of information on structured questionnaire knowledge regarding ISBAR clinical handover communication. Includes 20 knowledge questions related to ISBAR clinical hand over communication. Each correct answer was given one mark and the incorrect answer was given in zero. In preparation for these systematic information questions I have received various book reviews, online.
- **Section C:** Inserted SIM with ISBAR techniques with various descriptive features of definition, communication tool regarding Introduction, situation, background, assessment, Recommendation, Read back/Repeat, ISBAR format.

**Table 1: Measuring the level of knowledge on ISBAR clinical handover communication.**

Score	Level of airway Interpretation
0-6	Poor
7-13	Average
14-20	Good

The final draft of Semi structured Knowledge questionnaire at ISBAR clinical handover communication were used after evaluation of reliability and validity.

**Data collection Procedure:**

Pre-test testing of staff nurses knowledge was assessed using a structured questionnaire, before that the demographic data was obtained. After the simulation, the experimental team received a self-study module with the ISBAR Clinical hand over communication. A week later the post-test test was performed using the same tool. The data collected was analyzed using descriptive (frequency distribution, mean deviation and standard) and inferential statistics (chi square test, pairing test).

**3. RESULTS/DISCUSSION**

With regard to demographic profile, depending on age, the maximum number of 36 staff nurses (60%) were 20-25 years old and a minimum of 1 (1.66%) were between 36-40 years old. gender most of the respondents 20 (33.33%) were male and 40 (66.66%) were female and religious details the highest number of respondents (81.66%) were Hindus and at least 7 (11.66%) were Christians religiously. In terms of marital status a maximum of 38 (63.33%) were unmarried and at least 20 respondents (33.33%) were married. In narrating the education a maximum number of respondents 30(50%) were GNM and a minimum of 1(1.66%) were PBBSC degrees. Over a year of experience most 48 respondents (80%) were between 1-5 years of experience and only 2 (3.3%) were 11 -20 years and over 20 years of experience.

**Table 2: Frequency and Percentage of the level of knowledge in ISBAR clinical handover communication among staff**

Knowledge Score	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage
Poor	36	60%	0	0
Average	22	37%	7	12%
Good	2	3%	53	88%

The table represents the mean pre-test knowledge, where the majority of 36 (60%) staff nurses had poor experience, 22 (37%) staff nurses had limited knowledge, and 2 (3%) had good knowledge regarding the provision of ISBAR clinical hand over communication. ; and in the post-test majority 53 (88%) were good and 7 (12%) nurses were average, none of them had poor knowledge about ISBAR clinical hand over communication.

**Table 3: Mean and standard deviation of knowledge score regarding ISBAR clinical hand over communication.**

S. no	Test	Mean	Mean difference%	SD	't' value	'P' value
1	Pre test	39.7	63.1%	5.34	30.64**	0.0413
2	Post test	96.6		4.93		

The table above reveals that the pre test means that the percentage knowledge score of ISBAR was 39.7, which increased from the post-test test to 96.6. The calculated “t” value was 30.64 greater than the table value, it is known that there was a significant difference between pre- and post-test scores. It shows great, improved knowledge about ISBAR clinical communication.

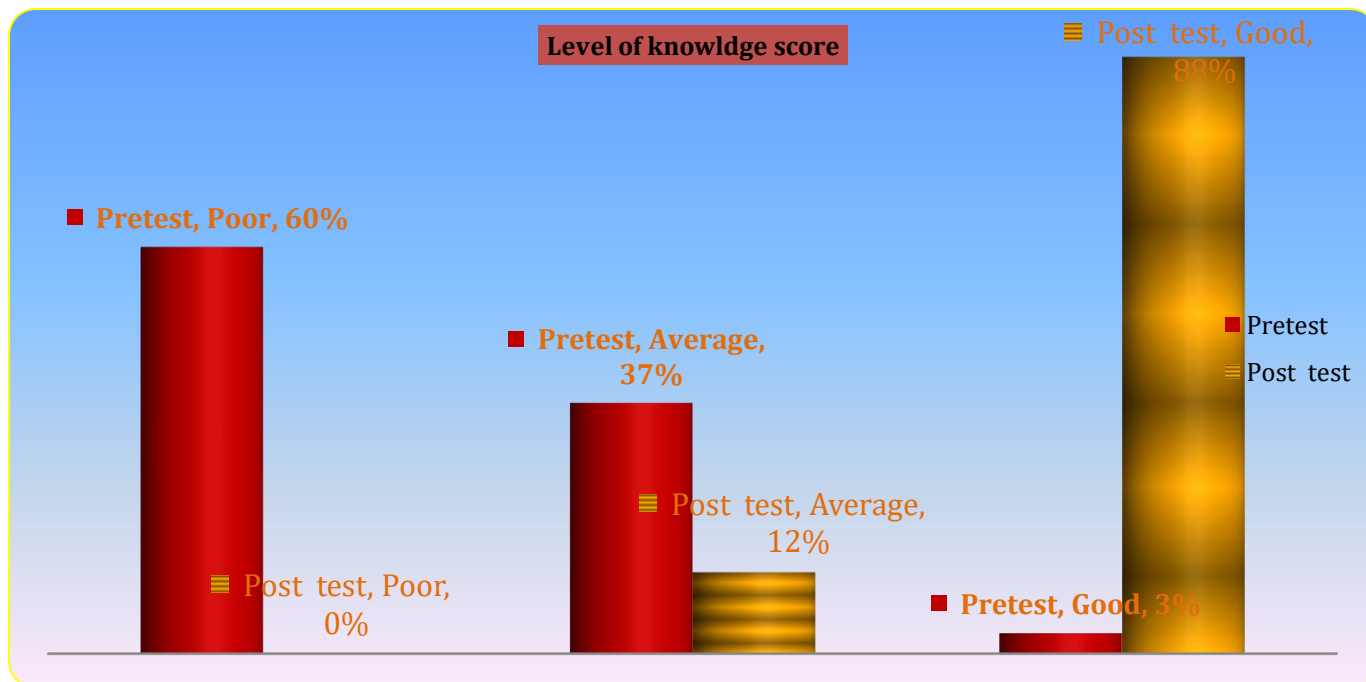


Table 4: Association between pre test knowledge score on ISBAR Clinical communication among staff nurses with selected socio-demographic variables, N=60

Socio demographic variables		Pre-test knowledge			chi- square	p-value	
Sr. No		Poor	Average	Good			
1.	<b>Age</b>					7.923	0.787
1.1	20-25yrs	15	12	0			
1.2	26-30yrs	10	7	1			
1.3	31-35yrs	8	2	0			
1.4	36-40yrs	2	1	1			
1.5	above 40yrs	1	0	0			
2	<b>Gender</b>					3.213	0.356
2.1	Male(a)	10	11	1			
2.2	Female(b)	26	11	1			
3	<b>Religion</b>					0.614	0.8322
3.1	Hindu(a)	24	18	1			
3.2	Christian(b)	6	3	0			
3.3	Muslim (c)	6	1	1			
4	<b>Marital Status</b>					4.120	0.0987
4.1	Married	20	9	1			
4.2	Unmarried	16	13	1			

There was no huge affiliation found between the discoveries and segment factors.

5	<b>Qualification</b>				6.821	0.1335
5.1	GNM	18	11	1		
5.2	B.BSC	9	10	0		
5.3	P.BSC	9	1	1		
6	<b>Experience In Year</b>				11.724	0.187
5.1	1-5 YRS	23	17	0		
5.2	6-10 YRS	5	3	1		
5.3	11-15 YRS	2	1	1		
5.4	16-20 YRS	3	1	0		
5.5	ABOVE 20YRS	3	0	0		

#### **4. OUTCOME OF THE STUDY**

From the above findings, it is clear that significant improvements in knowledge regarding the provision of ISBAR clinical hand over communication between nurses. So the self-study module worked. Studies have shown that ISBAR has been effective in being a good tool for patients who report conditions.

#### **5. CONCLUSION**

In order to improve patient communication and safety, a standard ISBAR format was required in the critical care unit. Looking at the existing practice of allocating shifts identified this. The study analyzed best practices and sharing of vacancies and barriers to the provision of nursing transitioners within the ICU setting. They were then incorporated into the National Guidelines, which contributed to the development and implementation of technology assisted by a specific ISBAR delivery template. This is ideal for the purpose and can be used extensively in any hospital department setting.

#### **6. RECOMMENDATION ON THE STUDY**

- The study could be repeated in a larger sample to add to the findings.
- Future research on education and the development of strong communication skills between nurses and other health care facilities should be a priority for nursing education and health facilities.
- Comparative research can be done in rural and urban settings
- Future studies should use randomly selected participants to increase the accuracy of the results
- More research is needed to determine if the use of this ISBARR Communication Workshop will work in training student nurses so that they can communicate effectively with other health professionals such as doctors or nurses.

#### **7. REFERENCES**

- [1] Thomas, C. M., Bertram, E., & Johnson, D. (2009). The SBAR communication technique: teaching nursing students professional communication skills. *Nurse Educator*, 34(4), 176-180.
- [2] Toghian Chaharsoughi, N., Ahrari, S., & Alikhah, S. (2014). Comparison the effect of teaching of SBAR technique with role play and lecturing on communication skill of nurses. *Journal of Caring Sciences*, 3(2), 141-147.
- [3] Üstün, B. (2006). Communication skills training as part of a problem-based learning curriculum. *Journal of Nursing Education*, 45(10)
- [4] Gunawan, J., Aunguroch, Y., & Fisher, M. L. (2017). Factors contributing to managerial competence of first-line nurse managers: A systematic review. *International Journal of Nursing Practice*.
- [5] Jeli, M. M., & Ulfa, M. (2014). Kepatuhan Perawat dalam Melaksanakan Standar Prosedur Operasional Pemasangan Infus di Rumah Sakit PKU Muhammadiyah Gombong. *Mutiara Medika: Jurnal Kedokteran dan Kesehatan*, 14(1), 51-62.
- [6] Khushf, G. (2008). Health as intra-systemic integrity: Rethinking the foundations of systems biology and nanomedicine. *Perspectives in Biology and Medicine*, 51(3), 432-449.
- [7] The Joint Commission. Hand-off communications: standardized approach. The Joint Commission 2008 available at <https://www.jointcommission.org/> Accessed 22 July 2018.
- [8] Doucette J. View from the cockpit: what the aviation industry can teach us about patient safety. *Nursing*. 2006;36(11):50-3.
- [9] Woodhall L, Vertacnik L, McLaughlin M. Implementation of the SBAR communication technique in a tertiary center. *J Emerg Nurs*. 2008;34(4):314-7.
- [10] Randmaa M, Mårtensson G, Swenne CL, Engström M. SBAR improves communication and safety climate and decreases incident reports due to communication errors in an anaesthetic clinic: a prospective intervention study. *BMJ Open*. 2014;4(1):e004268.
- [11] Randmaa M, Swenne CL, Mårtensson G, Högberg H, Engström M. Implementing situation-background-assessment-recommendation in an anaesthetic clinic and subsequent information retention among receivers: a prospective interventional study of postoperative handovers. *European*.