Effectiveness of SBAR Daily Shift Report Training program on quality of care among staff nurses

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Abstract: Background: Quality of patient care is achieved by the clear and concise transfer of patient's clinical information among health care providers during handoff. So SBAR technique is a common means of fostering contact between healthcare providers. **Purpose:** To evaluate the effectiveness of SBAR daily shift report training program on quality of care among staff nurses. **Sample:** Conveniences of 58 staff nurse were included. **Setting:** General intensive care unit at Benha University Hospital. **Design:** A quasi-experimental design was used. Instruments: SBAR shift report knowledge questionnaire, SBAR shift report Observational Checklist and quality of nursing care questionnaire. **Results:** The majority of staff nurses (84.5%, 86.2%, & 82.8%) had satisfactory practice levels at both the follow-up and immediately post-program implementation phases, as well as adequate knowledge scores on SBAR daily shift reports. Also the majority of them reported high level quality of care at both the follow-up and immediately post-program implementation phases (82.0% & 86.6%). **Conclusion:** It was concluded that the implementation of shift report by using SBAR communication tool was very effective among staff nurses as their knowledge and practice improved immediate post and follow up program compared to pre-program phase. **Recommendation:** Hospital mangers should consider using of Situation, Background, Assessment, and Recommendation (SBAR) as communication tool among nursing staff during shift handoff.

Keywords: Nursing care, Quality, SBAR, Shift report, Staff nurses.

Introduction

One aspect of daily communication in hospitals is the transfer of knowledge and responsibility for patient care from one healthcare provider to another. The term "handoff communication" refers to a process that includes a variety of

perspectives and methods that can change depending on the location, the shift, the unit, and the nurse. The continuity of patient care and treatment is thought to depend on handoff communication. Therefore, it is crucial to create a setting that supports the process and informs staff nurses about the significance of the handoff process (Perry, Potter, Ostendorf and Laplant, 2020).

Standardized handoff communication in healthcare is the process of passing along information about a patient's, clients, or resident's care in a consistent manner from one health care professional to another. Handoffs take place three or more times per day, depending on shift changes and as needed. A uniform report system is advised by The Joint Commission (2017) in order to reduce medical errors and enhance patient outcomes. A SBAR system is one of the standardized handover techniques. Situation, background, assessment, and suggestion are abbreviated as SBAR (Kacena, 2020).

The SBAR was initially created by the US military for nuclear submarine communication, but it has since shown promise in healthcare settings, notably in terms of enhancing patient safety. Rapid reaction teams at Kaiser Permanente in Colorado first used the technique in 2002 to look into patient safety. The communication method became more and more popular in healthcare settings since it enabled rapid and suitable communication (Achrekar et al., 2016).

The "S" or situation section, the nurse get information about patient such as;

name and role, the name and room number of the patient, and the reason for the hospitalization. The "B" or background section contains any relevant past medical history of the patient, any treatment measures that have taken place to address the current issue, the admitting diagnosis, and any past significant assessment data related to the patient. The "A" or assessment portion which includes a description of what is currently happening, recent changes in the patient's status, and any new assessment data. Finally, in the "R" or recommendation section, the speaker lists his or her questions and any specific requests tests, consultations, changes in treatments (Morsy and Ahmed, 2020).

A structured communication method called Situation-Background-Assessment-Recommendation (SBAR) is intended to reduce communication errors and increase patient safety. When used in communication, SBAR can help nurses communicate more clearly and with greater satisfaction, which in turn improves patient care and quality of service. The SBAR is a technique for succinctly and efficiently conveying important information. The usage of a defined format removes the uncertainty around the delivery of the handoff report and gives speakers a means of communication that boosts their confidence in their ability to submit a valuable description. Additionally, SBAR serves as a guide for the information sharing between staff nurses and doctors, minimizing any gaps in communication (Stewart, 2016 and Jeong & Kim, 2020).

The Institute for Health Promotion introduced the Situation, Background, Assessment, and Recommendation (SBAR) tool as a straightforward and effective method for shift reporting after it was initially created by the US Navy (Pope et al., 2008). Through standardized communication, this technology reduces communication errors during handover. It aids staff nurses in providing accurate, thorough, and concise information that is well-organized and free of superfluous data. A complete and accurate clinical picture of the patient's condition is given to the incoming nurse or shift (Espinoza, 2022).

Using Situation, Background, Assessment, and Recommendation in the work shift delivery report is a quick and effective method. According to Kim, Loversidge, and Fitzgerald (2020), the SBAR tool can enhance staff nurses' sense of teamwork and encourage them to share organized information and details. Afford effective and accurate reports, and share organized information with others without mentioning unnecessary information.

Nursing care is a very important slice of the health care system and the staff nurses become overlooked to get a significant role in providing high quality patients' care. Quality of nursing care is given for individual's physical, emotional, psychological, intellectual, social, and spiritual need. Staff nurses provide high quality patients' care independently as nursing professionals or interdependently with physicians. Quality of patients' care emphasis on the whole patient, and enable them to improve, maintain, or recover health, to cope with health problem, and to achieve the best possible quality of life, whatever their disease or disability, until death (Geyer et al., 2022).

Quality of health care is the degree of the most optimal grade of health outcomes by delivery of effective, efficient and cost-benefit professional health services to people and communities. As staff nurses are the largest groups among health care professionals and are legally liable and morally responsible for their care, thus their perspective on quality of nursing care is important. Quality of nursing care is extent to which health services provided to individuals and patients improve desired health outcomes. So care should be based on strongest clinical evidence and provided in a competent manner technically and culturally with a good communication, collaboration and shared decision making (Labrague, et al., 2022).

Moreover, logical description of quality nursing care is meeting patients' needs without causing harm, and assisting patients to reach goals for health promotion, maintenance and recovery from illness (Kelly et al., 2018) depends upon a strong educational foundation and administrative support, communication tools among health care providers and the care accessible to all at an affordable cost without error (Zamboni et al., 2020).

Significance of the study

Nursing report is the official exchange of information between staff nurses in

written or oral form at the end of each shift. In 2011, Institute for health promotion announced that SBAR is an easy and efficient tool for using in the work shift delivery report. The SBAR tool can improve the team spirit of staff nurses and encourage the staff nurses to provide effective and accurate reports and to share organized information along with details without mentioning unnecessary information (Halm, 2013 and Potter, Perry, Stockert and Hall, 2013). All patients have the right to receive effective quality of care at all times when admitted to health care setting included intensive care units where the patients have severe or life threatening illnesses, and require constant care, and close supervision from life support equipment, continuous assessment and quality nursing care to ensure normal bodily functions. Quality nursing care is very complex and vital where communicating information using common methods is very challenging and difficult. Consequently, the Joint and Australian commissions set a patient safety goal to assure safe patient care by implementing standards for communication between healthcare providers and allowing an opportunity to ask questions. They suggested that, the introduction of SBAR shift report tool support clinical handoff and assist in ensuring the accuracy, relevance and timeliness of information and support the quality of patient care (Ho, 2020). Accordingly this study was conducted to evaluate the effectiveness of SBAR daily shift report training program on quality of care among staff nurses.

Purpose of the study:

The purpose of the current study is to effectiveness of SBAR Daily shift report training program on quality of care among staff nurses.

Research hypotheses:

1) There will be an improving in staff nurses' knowledge and practice regarding SBAR daily shift report after their receiving the training program.

2) There will be positively effect of the training program regarding SBAR Daily Shift Report on quality of care among staff nurses in the general intensive care unit.

Methods

Research Design:

A quasi experimental research design with one group pre and posttest assessments was used in conducting the present study.

Setting:

The present study was conducted in the general intensive care unit at Benha University Hospital (free paid hospitals) Total bed capacity at Benha University Hospital is 880. The hospital is composed of three separated buildings. The medical building contains 478 beds and the surgical building contains 384 beds. Meanwhile, the ophthalmology building contains 18 beds. The total number of beds at general intensive care units was 20 beds. Number included from total bed capacity of hospital.

Sample:

A convenience sample of 58 nurses who are working in general intensive

care units and responsible for providing direct nursing care to the patients was included in the study. Sample size was calculated by using G Power Software, with a power of 0.80, 0 alpha of.05, and a medium effect size. The minimum sample size required for multiple regression analysis was 50 nurses. The total sample size of the current study was increased to 85 nurses to avoid the negative impact of attrition.

Instruments:

Three instruments were used to collect the study data.

Instruments one: SBAR Shift Report Knowledge Questionnaire

It was developed by the researchers based on review of related literature (Abd El-Hamed, 2020; Achrekar et al., 2016; Horwitz, et al., 2013; Elsayed, 2013; Marquis and Huston, 2016). It was used to assess staff nurses' knowledge about SBAR shift report. It consisted of two parts:

- **Part one:** It contained items related to personal characteristics of the study subjects (age, gender, marital status, educational qualification, unit, years of experience, and previous training about SBAR shift report).
- **Part two:** It included 28 questions; 19 multiple-choice questions and 9 true and false questions related to nurses' knowledge about SBAR shift report as concept, aim, content, importance, methods, and barrier. Nurses` responses were given (1) for correct answer and (0) for wrong answer. The maximum total score was 28; the total scores were converted into percentages. The total level of knowledge was considered

adequate if the percent score more than $\geq 60\%$ (17-28) and inadequate if the percent score less than $< 60\%$ (<17) (El Sayed, 2013).

Instruments two: SBAR Shift Report Observational Checklist

It was developed by the researchers after reviewing of relevant literature (Elsayed, 2013; Cornell Gervis et al., 2014; Inanloo et al., 2017; Abd El-Hamed, 2020), to assess levels of staff nurses practice regard to SBAR shift report. It consisted of 79 items divided into two main sections Quality of report (13 items), and SBAR content (66 items) distributed as the following, situation (8 items), background (6 items), assessment (45 items), and recommendation (7items). Each item of observational checklist was scored as following: (1) was given when observed item "Done" and (0) when the item was "Not done". Total score was calculated by summing up- the grades of items of checklist and the scores were converted into percent scores. The level of practice was determined as satisfactory practice if the score was equal to and or more than $\geq 60\%$ (48-79), unsatisfactory practice if the score less than <60% (<47) (Elsayed, 2013).

Instruments three: Quality of Nursing Care Questionnaire

It is a structured questionnaire that was developed by the researchers after reviewing of relevant literature (Sheasha, 2016; Brawen, 2011 and Zineldin, 2006) to assess the quality of care among staff nurses. It contained of 41 items that were divided into five

domains distributed as follows: Dealing with patient (8), rationing of nursing care quality (12), health education (5), prevention of complication (8), and continuity of nursing care (8). Each element response was measured on three point likert scale that ranged from (3) always to (1) never. Scores of each dimension summed up and converted into percent scores. The level of quality of nursing care was considered high among staff nurses if the score more than or equal ≥75% (30), moderate if the score 60-<75 (24.5 < 31) and low if percent score was < 60% (24.5).

Reliability and Validity of instruments

The researchers developed and translated the content of the three instruments into Arabic, and the content validity was assessed by five expert juries: three professors of nursing administration Faculty of Nursing, Menoufia University and two assistant professors of nursing administration from Faculty of Nursing, Benha University, who revised the instruments for clarity, relevance, applicability, comprehensiveness, understanding, and ease of implementation, and minor changes were made based on their feedback.

Cornbrash's Alpha test was also used to assess the instruments' consistency and homogeneity. The internal consistency of the SBAR Shift Report Knowledge Questionnaire, SBAR Shift Report Observational Checklist, and Quality of nursing care Questionnaire

was 0.895, 0.905, and 0.889 respectively.

The Pilot Study

A pilot research was done on 10% of the study sample (6) to assess the clarity and validity of the study instruments' content, add or remove questions, and determine the time required to complete each questionnaire. There were no changes in the instruments.

Ethical Consideration

The ethical approval for conducting the current study was obtained from the Ethical Research Committee in the Faculty of Nursing, Menoufia University Ethical Research Committee. Confidentiality was assured to all participants and their information was used for research purpose only. Each participant has the right to withdraw from the study at any time. The purpose of the study and the method of completing questionnaire were clearly explained for the first line mangers prior to complete the questionnaire.

Procedure of Data Collection

An official letter was sent from the dean of Faculty of Nursing to the directors of the hospital explaining aim of the study. The data was collected for nine months, from the beginning of August, 2022 to the end of April, 2023 as the follows:

Assessment phase: The preprogram tests were fulfilled before beginning of the educational program. The data was collected to assess nurse knowledge before implementation of the training program through using the different

tools of data collection in the available hospital classroom, during their work hours. It was done by collecting data using SBAR Knowledge Questionnaire which took about 15–20 minutes to be completed, and 20-30 minute for completing SBAR Shift Report Observational Checklist and 25–30 minutes for completing Quality of Nursing Care Questionnaire. The data collected three days/week in the morning and afternoon shifts.

Pre-implementation phase (planning): This phase took about one month August, 2022. An education program was developed, the teaching sessions were achieved by using available resources, training strategies was developed based on the pre detected needs. As well, time schedule, teaching sessions, media included, and the handout were prepared. Different methods of teaching were used such as lecture, group discussion, and brain storming. Instructional media included, handout prepared by the researchers and distributed to all participants in the first day of implementing the program. Contents of the program sessions were as follows: back ground communication and documentation, (1st session), shift reporting , the SBAR shift report, including Introduction of SPAR shift report and related concepts, (2nd session), importance, benefits, (3rd session) and process and methods of SPAR shift report Content of SBAR shift report (4th session) barrier of SBAR shift report (5th session).

Implementation phase (intervention): It was carried out during November, 2022. Firstly, staff nurses were divided into 5 small groups. Four groups contained 12 nurses and one group contained 10 nurses. The educational program was implemented by the researchers. The training program was 10 hours distributed as theoretical session 7 and half hours and practical session 2 and half hours, the program took about 6 sessions, and the duration of each session was for one and half hour (one hour theoretical and half hour practical) depending on workload and including periods of discussion according to their achievement, progress and feedback. The program sessions lasted from 10:00 am to 12:00 pm. Each attending nurse received a knowledge booklet and a lecture printout by the end of each session. During the sessions, they were encouraged to ask questions and give feedback. In the practical sessions, each nurse was asked to fill a template for reporting the work shift using the elements of the SBAR tool after the applied training provided by the researchers.

Evaluation phase: During December 2022, the effect of educational program was evaluated; it was carried out immediately after the program implementation by collecting data using the same pre mentioned study tools. Follow- up was carried out three months later by using the pre mentioned study instruments of data collection.

Statistical analysis

The collected data were tabulated and analyzed using Statistical Package for the Social Science (SPSS) program

version 20. Descriptive as well as parametric inferential statistics were utilized to analyze data pertinent to the study. Paired sample t-test and Chi-square test were used to analyze the data. A statistical significant difference was considered if P < 0.05. A highly statistical significant difference was considered if P< 0.01.

Results

Table 1:- illustrates that the majority (89.7%) of staff nurses were married and nearly two thirds (65.5 %) of them were females. Regarding attending training courses, all staff nurses (100%) didn't attend previous training course about SBAR. As far as their years of experience more than half (56.5%) of them had less than 5 years of experience with mean (8.68±5.56) years. In relation to their age, more than one third (34.5%) of them age less than 30 years with mean age (31.10±6.08) years. In relation to their educational level, more than half (53.4%) of staff nurses had Bachelor of nursing.

Table 2:- shows that there was improvement in mean score of staff-nurses' knowledge about SBAR daily shift report at post program implementation phase as compared to the pre -program phase (24.01±1.94& 12.75±2.94) respectively. However, a slight mean decline (22.24±3.83) occurred during follow-up phase. Also, the table shows that there was a highly statistical significant difference between staff-nurses' total knowledge regarding SBAR daily shift report throughout program phases (p = 0.000**).

Figure 1:- indicates that there was an improvement in knowledge levels regarding SBAR daily shift report after intervention both post and follow up phases after three months of program from the preprogram phase. More than three quarters of staff-staff nurses (77.6 %) had inadequate knowledge scores about SBAR daily shift report at pre-program implementation phase before the intervention. While the majority of them (84.5%) had adequate knowledge scores about SBAR daily shift report at immediate post program implementation phase.

Table 3:- indicates that there was improvement in mean score of staff-staff nurses practice at immediate post program implementation and follow-up phase as compared to the pre -program phase (67.23±7.18-62.93±9.08& 40.03±14.25) respectively. Also, the table shows that there was a highly statistically significant difference between staff-nurses' practice throughout program phases (p = 0.000**).

Figure 2:- shows that there was an improvement in staff-nurses' practice level SBAR daily shift report SBAR daily shift report after intervention both post and follow-up phases after three months of program from the preprogram phase. Moreover, more than half of staff-staff nurses (55.2 %) had unsatisfactory practice level at pre-program implementation phase before intervention. While the majority of staff - staff nurses had satisfactory practice level at immediately post-program implementation phase and follow up phase (86.2% & 82.8%) respectively.

Table 4 :- indicates that there was an improvement in mean score of quality of nursing care levels among Studied staff-nurses' at posttest and follow-up phases as compared to pre -program phase (109.61±6.36-101.76±9.63 & 60.59±15.34 respectively). Also, the table shows that there was a very highly statistically significant difference between staff-nurses' reporting about bout quality of nursing care throughout program phases (p = 0.000**).

Figure 3:- shows that there was a highly significant improvement in quality of nursing care levels among Studied staff-nurses' after intervention both for both post and follow up phases after three months of program

from the preprogram phase. Moreover, less than half of staff-staff nurses (46.7 %) reported high level of quality of nursing care at pre-program implementation phase before intervention. While the majority of staff nurses had reported high level of quality of nursing care at immediately post-program implementation phase and follow up phase (82.0% & 86.6%) respectively

Table 5 :- displays that there was a highly statistically significant positive correlation among staff-nurses' total knowledge, practice regarding SBAR daily shift report and total quality of nursing care at pre- program, immediate post and follow up program implementation phases.

Table. (1) Personal Characteristics of Studied Staff Nurses (n=58).

Personal characteristics		No.	%
Age (in years)	< 30 years	20	34.5
	30- < 35 years	18	31.0
	35- < 40 years	11	19.0
	≥ 40 years	9	15.5
	Range 21-44 Mean ± SD	**31.10±6.08**	
Years of experience	< 5 years	33	56.9
	5- < 10 years	3	5.2
	10- < 15 years	4	6.9
	≥ 15 years	18	31.0
	Range 2-22 Mean ± SD	**8.68±5.56**	
Gender	Female	38	65.5
	Male	20	34.5
Marital status	Unmarried	6	10.3
	Married	52	89.7
Educational level	Diploma Degree in nursing	17	29.3
	Associated degree in nursing	10	17.3
	Bachelor of nursing	31	53.4
Attending training courses about SBAR?	Yes	0	0.0
	No	58	100.0

*Effectiveness of SBAR Daily Shift Report Training program on
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Table (2): Mean Distribution of Nurses' Knowledge Pre, Post and Follow up Program

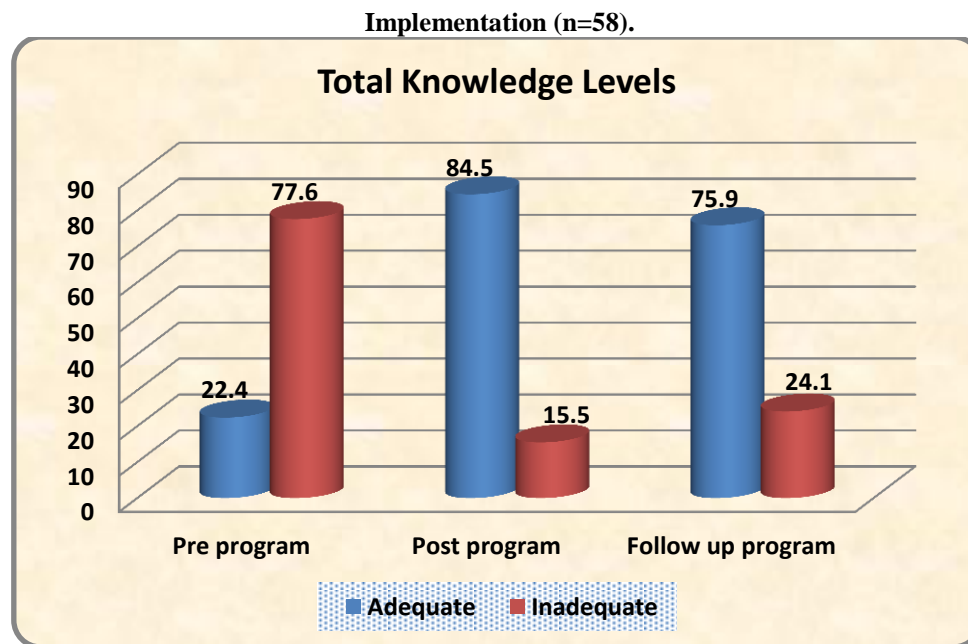| Total knowledge	Maximum Score	Pre- program		Post- program		Follow- up program		paired t1	P-value	paired t2	P -value
		X±SD	Mean%	X±SD	Mean%	X±SD	Mean%				
	28	12.75±2.94	45.5%	24.01±1.94	85.7.3%	22.24±3.83	79.8%	30.553	0.000**	17.518	0.000**

Implementation (n=58).

Figure (1): Percentage distribution of the Studied staff-nurses' total knowledge levels regarding SBAR daily shift report throughout the program phases

Table (3): Total Means score of Staff Nurses' Practices Regarding SBAR at Pre- post and Follow up Program   (n=58).

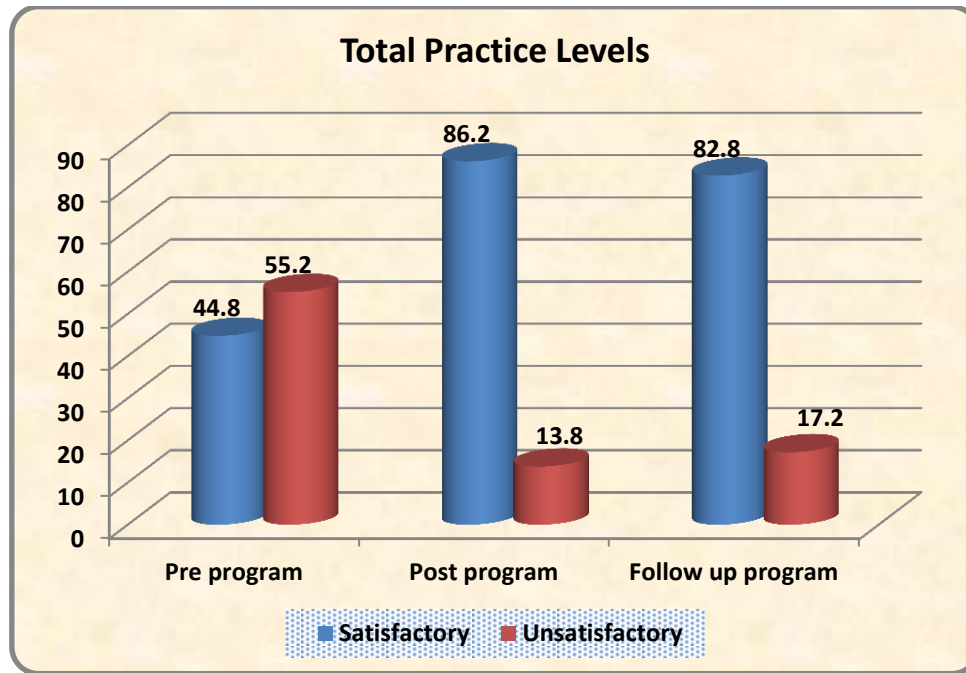| Total SBAR practice domains	Maximum Score	Pre- program		Post- program		Follow- up program		paired t1	P-value	paired t2	P -value
		X±SD	Mean%	X±SD	Mean%	X±SD	Mean%				
Quality of report	13	5.18±2.72	39.8	11.23±1.48	86.4	10.47±2.46	80.5	17.717	0.000**	13.199	0.000**
Situation	8	3.25±1.48	40.6	7.28±2.04	91.0	6.97±1.43	87.1	15.481	0.000**	11.249	0.000**
Background	6	2.49±2.09	41.5	5.43±1.18	90.5	5.04±0.97	84.0	10.728	0.000**	9.780	0.000**
Assessment	42	25.84±5.49	61.5	38.15±1.40	90.8	35.91±2.41	85.5	13.809	0.000**	10.396	0.000**
Recommendations	7	3.27±2.47	46.7	5.17±1.08	73.9	4.54±1.81	64.9	26.620	0.000**	23.678	0.000**
Total SBAR practice	76	40.03±14.25		67.23±7.18		62.93±9.08		29.175	0.000**	21.137	0.000**

Figure (2): Percentage distribution of the Studied staff-nurses' practice levels regarding SBAR daily shift report through the program phases
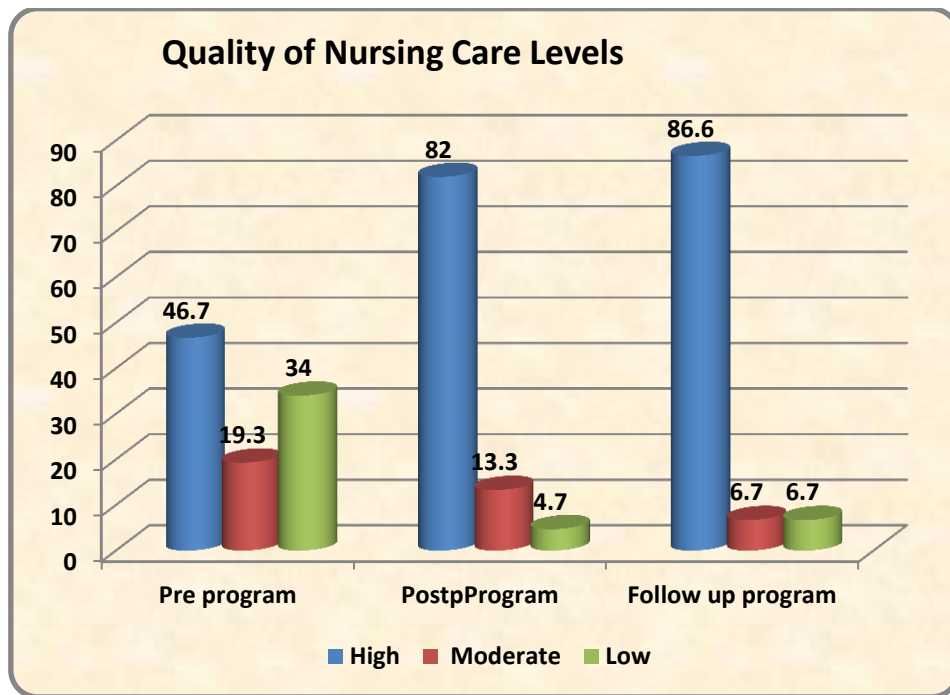
Table (4): Means Score of Quality of Nursing Care among Staff nurses at Pre- post and Follow (n=58).

Quality of nursing care domains	Maximum Score	Pre program		Post program		Follow- up program		paired t1	P-value	paired 2t	P - value
		X±SD	Mean%	X±SD	Mean%	X±SD	Mean%				
Dealing with patient	24	11.43±2.79	47.6	19.72±1.48	82.2	22.37±0.49	93.2	25.117	0.000**	28.850	0.000**
Rationing of nursing care quality	36	16.48±4.29	45.8	30.40±1.82	84.4	31.98±1.25	88.8	19.754	0.000**	23.348	0.000**
Health education	15	5.18±2.43	34.5	12.49±2.18	83.3	12.98±1.47	86.5	14.605	0.000**	25.312	0.000**
Prevention of complication	24	13.08±3.08	54.5	19.45±2.43	81.1	20.49±1.61	85.4	16.397	0.000**	20.491	0.000**
Continuity of nursing care	24	14.42±2.75	60.1	19.71±1.72	82.1	21.79±1.54	90.8	20.438	0.000**	23.480	0.000**
Total quality of nursing care	123	60.59±15.34		101.76±9.63		109.61±6.36		26.221	0.000**	32.848	0.000**

(* A statistical significant difference P ≤ 0.05 **, A highly statistical significant difference P ≤ 0. 001)

t-test & P Value (1): between Pre-Intervention and Post Intervention, t-test & P Value (2): between Pre Intervention and Follow up Intervention

Quality of Nursing Care Levels

Figure(3): Percentage distribution of quality of nursing care among Studied staff-nurses' through the program phases

Table (5): Correlation Matrix among Study Variables at Post Program.

Variables		Total knowledge	Total practice	Total quality of nursing care
Total knowledge	r	…………	0.421	0.384
	p-value	…………	0.001**	0.001**
Total practice	r	0.421	…………	0.847
	p-value	0.001**	…………	0.000**
Total quality of nursing care	r	0.384	0.847	…………
	p-value	0.001**	0.000**	…………

Discussion

Historically health care systems in intensive care units (ICUs) have been designed to respond to life threatening problems, rather than predict and prevent adverse events. Prevention of unrecognized deterioration is always associated with better outcomes. With a definitive objective of quality of

patient care at forefront in healthcare, it is essential to distinguish methodologies which can at last diminish the recurrence of sentinel occasions as situational awareness. Situation awareness could actively scan for risk across multiple domains. It has been defined as "the perception

of elements in the environment within a volume of time and space, the comprehension of their meaning, and the projection of their status in the near future". While SBAR is acromion that represents the actual application of situational awareness through situation, background, assessment and recommendation. A representation of SBAR situational awareness has been depicted as an inner factor in the method for giving patient consideration and basic leadership that helps health care professionals especially in critical care settings to handle and process information about what is occurring (Riesenberg Leitzsch and Little 2019). Concerning staff nurses' knowledge regarding SBAR daily shift report, the findings of the present study indicated that there was an improvement in mean score of staff-nurses' knowledge about SBAR daily shift report at post program implementation phase as compared to the pre -program phase. However, a slight mean decline has been occurred during follow-up phase. Also, there was a highly statistical significant difference between staff-nurses' total knowledge regarding SBAR daily shift report throughout program phases. The finding of the present study was consistent with Dawood, (2021) who concluded that the application of SBAR had a high significant influence on staff-nurses' total knowledge after the application of the program and indicated that program had positive influence on nurses' knowledge and communication skills.

This result was also supported by Inanloo, Mohammadi and Haghani,

(2017) who showed that there was highly statistically significant differences in knowledge scores after implementation of the program from preprogram. In the same line, Dawod, Ali and Bahaaldeen, (2018) mentioned that there was significant statistical difference in all domains of knowledge regard SBAR. In addition to this result was agreement with Jeong and Kim, (2020) as they reported in their study that there was a significant difference in staff nurses total knowledge scores regarding SBAR shift report. In this respect Hanna. et.al. (2014) stated in their study that the SBAR method improves the effectiveness of information transfer especially in acute situations, thus improving patient safety and as sequence quality of nursing care

In addition, the findings of the present study indicated that there was a highly significant improvement in knowledge levels regarding SBAR daily shift report after intervention on post and follow- up phases. More than three quarters of staff nurses had inadequate knowledge scores about SBAR daily shift report at pre-program implementation phase. While the majority of them had adequate knowledge scores about SBAR daily shift report at immediate post program implementation phase. This may be related to training of staff nurses appropriately, provision of refresher training and support and ensuring good training environment facilitates acquisition of knowledge and skills. This result was matched with Galal, Mostafa & Mahmoud (2022) as they found in their study that staff nurses'

knowledge and practice regarding shift hand over and quality of report was improved after implementing the program.

The present study agreed with El sayed, (2013) who showed that there was a statistical significant improvement of knowledge on post program and follow- up phase. Moreover, Randmaa, Martensson, Swenne and Engstrom, (2018) showed that the levels of staff nurse's knowledge about SBAR was inadequate in pre-program intervention, while immediately after program implementation there was improvement in staff nurse's knowledge regarding SBAR daily shift report.This result was agreement with Beigmoradi, Pourshirvani, Pazokian, and Nasiri, (2019) as they found in their study that the majority of participants had good knowledge level after the program implementation. In addition, this finding of the present study was in the same line with Morsy and Ahmed, (2020) as they found in their study that the study participants had a low situational awareness and knowledge level preprogram. In addition, they reported that there was significant improvement in SBAR situation awareness scores were demonstrated between the pre and post-training phase.

Furthermore, this result was matched with Blom et al., (2015) who found in their study that there was an improvement in perceptions of communication in nurse-to nurse and nurse-to physician scenarios after the implementation of the program. And Binion, (2019) stated that the majority

of nursing staff described that SBAR was very helpful and provided a good structure to use in oral reporting on patients' conditions. And reported that using SBAR daily shift report improves the accuracy and efficacy of information exchanged during report, and facilitates the ability of those conducting the report to differentiate the information needed for safe patient care and then convey the information correctly. The findings of this study was in disagreement with Abdel-Aal, et al., (2020) as they found in their study that that majority of studied staff nurses had very deficient total knowledge regarding shift report handover.

The findings of the present study indicated that there was improvement in mean score of staff nurses practice at immediate post program implementation and follow-up phase as compared to the pre -program phase. Also, the table shows that there was a highly statistically significant difference between staff-nurses' practice throughout program phases. This finding of the present study was in the same line with Inanloo, et al., (2017) who reported that a statistical significant difference between the practice scores before and after the intervention and the scores increased after intervention. This result was agreement with Vivian, (2020) who found in his study that there is a statistically significant improvement using the SBAR method of communication. Also, there was a statistical significant difference before and after training program. Also this result was matched with Renz, et al.,

(2015) who founded the majority of subjects were satisfactory from using SBAR tool.

In addition, the findings of the present study showed that there was a highly significant improvement in staff-nurses' practice level SBAR daily shift report after intervention both post and follow up phases after three months of program from the preprogram phase. Moreover, more than half of staff nurses had unsatisfactory practice level at pre-program implementation phase before intervention. While the majority of staff staff nurses had satisfactory practice level at immediately post program implementation phase and follow up phase. These results were consistent with Inanloo, Mohammadi and Haghani (2017) they showed that nurses' practice improved after work shift delivery report training using SBAR tool. Also this finding was in agreement with Dawod, et al., (2018) who found in their study that there was improvement in nurses' practices concerning SBAR communication tool application after implementation of the program. This finding of the present study was in the same line with Phung (2016) who reported that the SBAR tool improves nurses' practice and staff nurses had satisfactory practice level.

This finding was in agreement with Etezadi et al., (2012) showed in their study that using the shift work reporting method SBAR tool among the staff nurses played a significant role in improving the practice of nurses. In addition, the result of the present study was in accordance with Jukkala et al. (2012) founded in their

study that the nurses' using the SBAR method had effective improvement in their practice in the work shift delivery report in the ICUs, also reported the effectiveness of SBAR training program in the development of nurses' capabilities in the field work shift delivery report in hospitals. In this respect De Meester et al., (2013) mentioned in their study that using SBAR tool considerably reduced the rate and report of incidents caused by inappropriate connection and weak relationship of physician and staff nurses after the intervention, referred to the effectiveness of the SBAR method.

In addition, Sears et al., (2014); Randmaa et al., (2014) and Cornell et al., (2014) showed that using SBAR communication tool has been very effective in improving quality of nursing care, improving the level of patient's safety, and reducing the time spent on shift delivery of nurses, also reported that there a significant relationship between using SBAR communication tool and teamwork quality among healthcare and patient safety team. The result of the present study was in contradicted with Abdel-Aal, et al., (2020) they founded in their study that majority of studied staff nurses had low of practice regarding shift report handover. Also this finding was contradicted with Coleman, (2018) who reported in their study that there were no significant differences from pre and post SBAR program implementation phase.

Regarding total means score of quality of nursing care the current study revealed that there was improvement in

mean score of quality of nursing care levels as reported by the studied staff nurses' at immediate post and follow-up program phases as compared to the preprogram phase. Also, there was a highly statistically significant difference between staff nurses' reporting about quality of nursing care throughout program phases. This result might be due to nurses' skills and practice develop through their education and experience of various nursing situations, also the educational program has an effect on improving of quality of nursing care.This result was matched with Ara , Somibala , Urmila, (2016) who reported that better level of quality nursing care rendered by staff nurses. In addition to, Hassanzadeh et al., (2021), who reported that the mean score of quality of nursing care was at a high level. In the same line, Gaalan et al., (2019), who showed that the majority of studied staff nurseshad high level of quality of nursing care.

Also these findings supported by Dong et al., (2020), who revealed that more than half of studied sample rated the quality of nursing care was excellent. On the other hand, this study finding was in disagreement with El-Sayed, Mahfouz, Hasanin (2021), illustrated that more than three fifth of studied staff nurseshad moderate level of quality of nursing care. Also, Nantsupawat , Wichaikhum, Sadarangani (2023),who studied revealed that staff nurses had poor level of quality of care.

Regarding total quality levels of care, the current study indicated that there was a highly significant improvement in quality of nursing care levels among studied staff nurses' after intervention for both post and follow up phases of program from the preprogram phase. Moreover, less than half of staff nurses reported high level of quality of nursing care at pre-program implementation phase before intervention. While the majority of staff nurses reported high level of quality of nursing care at immediately post-program implementation phase and follow up phase. This finding agreed with Ibrahim& Kadry, (2019), illustrated that more than half of staff nurses had high level of quality of nursing care. The findings of this study were in disagreement with Weldetsadika et al., (2019) who reported that the quality of nursing care was substandard level.

The current study illustrated that there that there was a highly statistically significant positive correlation among staff-nurses' total knowledge, practice regarding SBAR daily shift report and total quality of nursing care at pre-program, immediate post and follow up program implementation phases. This result was consistent with Elsayed, (2014) who reported that there is a highly statistically significant correlation between levels of handoff knowledge, practice. Moreover, this finding in the same line with Taiye, (2016) reported that highly statistically significant correlation between staff nurses' knowledge and practice toward handoff and level of continuity of care. Moreover the study finding was consistent with El-Guindy, et al., (2022) revealed that there was a positive highly statistically significant correlation between nurses' level of

knowledge and practice toward handoff immediate post program. This finding was in the same line with El-Sayed, Eid, Rashad, (2021) studied about "The effect of nursing care standards on staff nursing performance" revealed that there was highly statistically significant difference regarding all items of nursing practice pre & post implementing the nursing care standards.

Conclusion

The present study concluded that the implementation of shift report by using SBAR communication tool was very effective among staff nurses as their knowledge and practice improved immediate, post and follow up program compared to pre-program phase.

Recommendations

Based on the findings of the present study, the following recommendations are proposed; hospital administration should address staff nurse's educational needs to realize the importance of reporting nursing care elements. Hospital mangers should consider using of Situation, Background, Assessment, and Recommendation (SBAR) as communication method among nursing staff during shift handoff. Continuous in-service workshops should be conducted about intradepartmental communication among staff nurses through hospital continuous training and learning center. Staff nurses should be encouraged to attend workshop, conference training programs and review nursing care related to SBAR. Periodic training to refresh staff

nurses' knowledge, skill practice about SBAR shift report is required through seminars and workshops. Periodic assessment of head staff nurses and their staff for reporting skills. Provide continuous support to the nursing staff to enhance their documentation skills.

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