Strengthening Patients Safety Culture through the Implementation of SBAR Communication Method

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ABSTRACT

The communication method of Situation, Background, Assessment, and Recommendation (SBAR) are effective communication techniques that aim to improve patient safety. This study aims to analyze the application of SBAR communication to nurses to improve the safety culture of patients who are part of the service at A.W. Sjarhanie Hospital, Samarinda, Indonesia. This study used a cross-sectional design with a population of 452 people spread over 14 service units. The sample size was 77 people. Variables in this study were SBAR communication methods and patient safety culture. The instrument used to assess the application was the SBAR communication method in the form of an observation sheet for the procedure for reporting patients’ conditions during handover while collecting data on variable patient safety culture used a questionnaire from the agency for Healthcare Research Quality (AHRQ). Data of SBAR communication technique variables were collected using the observation method, while the patient safety culture variable was collected by distributing patient safety culture questionnaires. Data were analyzed using a Chi-Square test. The results of this study showed that nurses who used the SBAR communication method had a better patient safety culture (p = 0.000). The conclusion is the SBAR communication method to nurses can use to improve patient safety culture in the hospital.

Keywords: SBAR communication method, Patient safety culture

INTRODUCTION

An important aspect must be provided by the provision of health services, especially nursing service is communication. Effective communication in professional nursing practice is a key of the element for nurses in carrying out a nursing care in achieving optimal results. One of nursing activity that requires effective communication is when handover and telephone communication(1). Hands off from one health care provider to another is recognized as vulnerable to communication failure(2).

Moreover, inappropriate with patient safety standards, effective communication is an effort for nurses to achieve patient safety in the Hospital. So the SBAR communication method (Situation, Background, Assessment, Recommendation) is an effective communication method used for members of the health team, especially in terms of reporting the patient’s condition. SBAR is a structured communication method and can improve patient safety(3). SBAR adoption is associated with increased perceived communication between professionals in improving the quality and safety of patient care(4). Sentinel cases in hospitals often occur because effective communication is not implemented properly. Nearly 60% of medical errors are caused by communication problems(5). Join the committee reported during 2015 a total of 936 sentinel events, communication identified as root caused more than 70% of serious medical errors(2). The consequences of communication that failed during hands-off included medication errors, inaccurate patient plans, delays in transferring patients to critical care, increasing the length of hospital stay and repeated tests(6).
The SBAR communication method (Situation, Background, Assessment, Recommendation) is an effective communication technique framework used between health care teams in communicating to convey the patient’s condition. One of the goals of using SBAR communication is to improve and develop a culture of patient safety. Patient safety culture as a form of individual and group values, attitudes, competencies, and behavior patterns for patient safety programs. This patient safety culture is intended to reduce the incidence of patient safety which is become global issues in the Hospital.

The AW. Sjahranie Hospital Patient Safety and Quality Committee (AHPSQC) has evaluated SBAR communication methods to 64 nurses who were considered to represent every inpatient wards, 100% of nurses have applied SBAR communication during handover, however based on recognition from AHPSQC, the data was not accurate. The results of observations and interviews in the field, it found that the method used when handover between shifts in the room already uses SBAR communication, but the implementation has not been maximal and has recently been implemented and not yet entrenched. There has not been a study of how SBAR communication can strengthen patient safety culture, so researchers are interested in conducting this research.

METHODS

Type of this research was an analytic study with a cross-sectional design. The population in this study were 452 nurses in the inpatient unit of A.W. Sjahranie Hospital in 14 service units. A total of 77 people were obtained using two different independent groups formulas with a 5% confidence level. The variables studied were the application of the SBAR method of communication and patient safety culture. Data collection instruments for SBAR communication techniques were the procedure observation sheet to report the condition of the patient at the time of handover. While the instrument to collect patient safety culture data was a patient safety culture questionnaire according to AHRQ. Data of SBAR communication technique variables were collected using the observation method, while the patient safety culture variable was collected by distributing patient safety culture questionnaires to respondents. The observation result of the application of SBAR communication techniques was stated by the assessment: the value of two if applying perfectly, the value of one if the application was imperfect and zero if it did not do. The patient safety culture questionnaire using a Likert scale contains statements strongly agree (4), agree (3), disagree (2), strongly disagree (1). The collected data were analyzed by chi-square test ($\chi^2$).

RESULTS

Characteristics of Respondents

The results of data analysis can be seen in table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td>28.6</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>71.4</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>14</td>
<td>18.2</td>
</tr>
<tr>
<td>25-35</td>
<td>44</td>
<td>57.1</td>
</tr>
<tr>
<td>36-45</td>
<td>15</td>
<td>19.5</td>
</tr>
<tr>
<td>&gt; 45</td>
<td>4</td>
<td>5.2</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma III Nursing</td>
<td>64</td>
<td>83.1</td>
</tr>
<tr>
<td>Diploma IV Nursing</td>
<td>6</td>
<td>7.8</td>
</tr>
<tr>
<td>Nursing</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Professional Nursing</td>
<td>6</td>
<td>7.8</td>
</tr>
<tr>
<td>Experience in unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>38</td>
<td>49.4</td>
</tr>
<tr>
<td>5-10 year</td>
<td>29</td>
<td>37.7</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>10</td>
<td>130</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100</td>
</tr>
</tbody>
</table>

Characteristic of respondents that most of them were females (71.4%), most of the age group were 25-35 years (57.1%), almost all nurses had Diploma-III Nursing education (83.1%), nearly half of the respondents had a working period of <5 years (49.4%).
Application of SBAR Communication Method Between Nurses During the Handover Process

The description of the application of the SBAR communication method when the handover process between nurses can be seen in Figure 1.

Figure 1. Application of SBAR communication method

Figure 1 shows that 61% of nurses implemented the SBAR method in the good category.

Implementing Nurse Perceptions of Patient Safety Culture

The nurse's perception of the patient's safety culture can be seen in Figure 2.

Figure 2. Nurse’s perceptions of patient safety culture

In Figure 2 it can be seen that the most of nurse’s perception of the patient's safety culture were good (58.4%).

The effect of SBAR Communication Method on Patient Safety Culture

Table 2. The effect of SBAR communication method on patient safety culture

<table>
<thead>
<tr>
<th>Application of SBAR Communication Method</th>
<th>Patient Safety Culture</th>
<th>Total</th>
<th>p-value</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>23</td>
<td>76.7</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>Good</td>
<td>9</td>
<td>19.1</td>
<td>38</td>
<td>80.9</td>
</tr>
</tbody>
</table>

Based on table 2 it can be seen that 30 respondents who did SBAR communication were not good, 23 respondents (76.7%) had a poor patient safety culture and 7 respondents (23.3%) had a good patient safety culture. Whereas from 47 respondents who carried out SBAR communication well, 9 respondents (19.1%) had poor patient safety culture and 38 respondents (80.9%) had a good patient safety culture.
DISCUSSION

Communication is one of the factors that influence patient safety culture. Communication culture is a condition in which a nurse is able to handle work problems and has the rights and responsibilities in conveying the patient's condition. In communication giving feedback or building trust and openness are important characteristics of patient safety culture\(^{(10)}\). The results showed that 30 respondents (39%) who did SBAR communication were not good, 23 respondents (76.7%) had a poor patient safety culture and 7 respondents (23.3%) had a good patient safety culture. Whereas from 47 respondents (61%) who carried out SBAR communication well, 9 respondents (19.1%) had poor patient safety culture and 38 respondents (80.9%) had a good patient safety culture. Miscommunication among health care providers can be caused by hierarchical reporting structures, gender, education, cultural background, stress, fatigue, ethnic differences, and social structures\(^{(11)}\).

The principles in the used of SBAR communication and the components that must be communicated are situations where nurses when handover between shifts mention the name of the patient, age, date of entry and day of care, the doctor in charge, medical diagnosis, and briefly explain the patient's problem or complaint. In the background of the nurse conveying the background or problem of the patient such as explaining related actions of each patient's nursing problem, history of allergies and surgery, installation of invasive devices and administration of drugs and intravenous fluids, as well as identification of patient's knowledge of the disease. At the time of assessment, a nurse explained in full the latest patient assessment results and supporting investigations that support clinical conditions such as laboratory, x-ray, and other results, while on recommendation, the nurse will explain and ask about actions that must be continued, modified, or stopped. In this component, nurses have the opportunity to discuss and think about recommending treatment with other nurses and doctors\(^{(12)}\).

The results showed that 61% of implementing nurses had applied SBAR method communication techniques well and 39% had a poor implementation. This is because not all nurses mention the date of entry or length of the day of patient care. Most are found on inpatient wards. It could be that this happens because too many patients are treated so that the nurse cannot maximize the report according to the procedure, and is considered to buy time. The importance of mentioning the length of days of patient care can be used as a reference in maximizing the service and improving the quality of the hospital. According to the Ministry of Health of the Republic of Indonesia, one indicator of the quality of hospital services is the length of days for patient care\(^{(13)}\).

In accordance with the observations made, that the nurse reported every installation of invasive devices as well as drug and intravenous administration, history of allergies and surgery, there are some nurses who don't mention patients have allergies or not. Mentioning the patient's allergic history aims to avoid the effects of unwanted errors and errors in drug administration. Usually, the nurse only mentions the patient's allergy history to the drug when he first enters the treatment room. This is supported by the absence of standard SOP and concepts that are determined by the Hospital so that from the findings of the nurse, only the things that are considered important.

Regarding the current assessment of the patient's condition, almost all nurses mentioned the vital signs and results of the last laboratory examination. When observing when a handover is found, the nurse encounters confusion when communicating about supportive clinic conditions. This can occur due to a lack of understanding of the SBAR application in detail in the implementation steps.

The implementation of the recommendation component is expected to reach 100% because in this section nurses should provide recommendations or suggestions that must be done in the next shift. Not only medical intervention/action but also emphasized in the provision of nursing care. Based on observations made during the study, there was a lack of understanding of the application of these components. SBAR is only one method of communication that can help communicate information about patients, not only from the medical aspect but from the aspect of nursing care. SBAR can be used to help ease operands because SBAR can help nurses sort out what stages should be reported so that information about patients is missing. Communication between nurses at shift must be maximized\(^{(14)}\).

The results of the study showed a significant influence between SBAR communication methods and the application of patient safety culture in nurses. Research at Lagaligo Hospital, Panti Waluyo Hospital Surakarta and Unhas Hospital Makassar which states that there were a significant relationship between effective communication and patient safety culture\(^{(15,16,17)}\). SBAR communication methods could reduce the incidence of patient safety in the medical-surgical room\(^{(16)}\).

According to the confession of the A. W. Sjahranie Hospital's Quality and Safety Improvement Committee, they are in the process of improving especially improving Hospital services towards JCI accreditation. One of them is by applying the SBAR communication method during the handover process between shifts, which is just that the implementation has not been maximized because it has not used a standard concept and its implementation is not in accordance with the Standard Operational Procedures.

The assumption of researchers that nurses who have a good patient safety culture tend to apply SBAR communication methods also good, while nurses who have poor patient safety culture tend to apply SBAR
communication methods are also poor. This is supported because nurses who have a good patient safety culture have a positive understanding of the importance of patient information. SBAR method is a powerful and easily remembered communication mechanism that is useful for framing every conversation, especially the critical one, which requires immediate attention to clinical and action \(^{(18)}\). This allows an easy and focused way to set expectations about what will be communicated and how to communicate between team members, which is very important for developing teamwork and improving the patient's safety culture. SBAR’s communication techniques have a structured framework in hopes of improving communication and have been proven in ensuring patient safety \(^{(19)}\). The SBAR communication method is able to improve the quality of guarding and significant improvement after being given SBAR communication training to nurses \(^{(20)}\) and provides clarity for nurses in communicating, organizing information, and improving patient safety \(^{(21)}\).

Abdul Wahab Sjahranie Hospital Samarinda is expected to continue to develop the application of SBAR communication methods in the handover process between shifts. Starting from setting a standard concept according to SOP and explaining in detail the stages of SBAR application to nurses so that later it will not cause confusion and create a harmonized understanding. As one of the goals of patient safety continues to be effective, along with other targets, the application of a patient safety culture in A. W. Sjahranie hospital Samarinda will continue to improve and be positive. So that later created standardized service quality and guarantee patient safety. In addition to the SBAR communication method other patient safety training was needed such as reduce the risk of healthcare-associated infections reduce the risk of patient harm resulting from falls and improve the accuracy of the patient identification etc. Improving nurses’ skills towards the application of patient safety goals will become a culture and maximize the quality of services at A. W. Sjahranie Hospital.

**CONCLUSION**

The communication method of SBAR (Situation, Background, Assessment, Recommendation) can strengthen patient safety culture in RSUD A.W. Sjahranie Samarinda. The result of this study expected to improve the application of SBAR communication (Situation, Background, Assessment, Recommendation) and strengthen patient safety culture in hospital.

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