

# Practical Progress of SBAR Communication Model-Related Teaching in Clinical Teaching

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**Abstract:** This paper elaborates the core and essence of situation, background, assessment, recommendation (SBAR) communication model, clarify the application status of SBAR communication model in the clinical teaching of nursing students, and describe its effectiveness and limitations, so as to provide reference for improving clinical nursing teaching ability.

**Keywords:** SBAR communication model; Clinical teaching; Nursing education; Progress

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## 1. Introduction

Situation, background, assessment, recommendation SBAR standardized communication mode is proposed by the World Health Organization (WHO) as an efficient communication mode that can improve communication efficiency and communication ability. It is mainly based on objective evidence and practicality<sup>[1]</sup>. This model assists medical staff in sorting out the patients' information, clarify treatment ideas, and ensure concise and orderly delivery of information. It includes four elements: individual situation (Situation, S), background (Background, B), assessment (Assessment, A), recommendation (Recommendation, R). The SBAR communication mode has been widely used in clinical work at home and abroad, such as in the intensive care unit, the coronary care unit (CCU), the emergency department, the surgical anesthesia recovery room, the critical patient handover, and other departments<sup>[2-3]</sup>, and it has gradually become an interdisciplinary communication mode. The standardized communication mode not only significantly improves the prognosis of patients, but it also reduces medical costs and increases patient satisfaction. Besides, with the development of clinical nursing, SBAR communication mode has been applied gradually in the teaching of clinical nursing students<sup>[4]</sup>. The use in nursing teaching provides a certain basis.

The SBAR communication model was first applied in the medical service system in the late 1990s. It was proposed by Professor Kaiser Permanente<sup>[5]</sup>. It was also gradually applied to nurse-patient communication, so that nurses can quickly and accurately grasp the patient's condition. When communicating with patients, they can quickly capture useful information and give timely feedback to the questions raised by patients, which is conducive to building a harmonious nurse-patient relationship<sup>[6]</sup>. Studies<sup>[7-10]</sup> have shown that, due to the change of environment and role, nursing interns are lacking in clinical theoretical knowledge and practical operation skills, as well as experience and interpersonal

communication skills. Therefore, in order to improve the communication skills of intern nursing students and reduce miscommunication between nurses and patients, the application status of SBAR communication mode in the teaching of clinical nursing students is summarized as follows.

## **2. SBAR communication mode in teaching mode of clinical nursing students**

According to reports, in obstetrics, nearly 2/3 of infant injuries and deaths come from poor communication, especially during delivery <sup>[11]</sup>; more than 1/2 of medical adverse events are caused by poor communication <sup>[12]</sup>. For a long time, our country's higher medical education has often focused on the study of theoretical knowledge and the cultivation of practical skills, while ignoring the cultivation of medical students' communication skills and communicative competence. Nursing interns are often at a loss when they step into clinical work due to the changes in environment and complex clinical problems. Problems often occur during the process of communication due to their incapacities <sup>[13]</sup>. Therefore, it is clear that the cultivation of communication skills is very important. The research shows that the application of SBAR communication model plays an important role in improving the communication ability of clinical nursing students. Chen, Qin, *et al.* <sup>[7]</sup> applied the SBAR communication model to the clinical nursing teaching practice of the cardiology department, under the guidance of the student-centered teaching concept, integrated the SBAR communication model, and took the specialist case as the guide, using the SBAR evaluation form, enable nursing students to analyze and integrate cases, give complete and clear nursing records, and then continuously improve clinical nursing practice plans, undergraduate nursing students' comprehensive clinical abilities such as communication skills, understanding skills, and analytical skills, as well as the teaching quality of clinical nursing. Ha, Wang *et al.* <sup>[14]</sup> used the SBAR communication model to train the students practicing in the Department of Pediatrics and found that not only the communication skills of the nursing students were improved, but also the enthusiasm of the nursing students for practice and the degree satisfaction of the nursing students towards the teachers has been significantly improved. Zhang <sup>[15]</sup> conducted SBAR communication mode training among undergraduate nursing interns in thoracic surgery and found that SBAR communication mode can improve the safety and continuity of nursing work, ensure that patients receive timely and safe medical services, and improve the quality of nursing students. When the patients are satisfied, the reputation and image of the nurses will also improve. Chen and Li <sup>[16]</sup> used the same method to train nursing students in the SBAR communication mode during the handover between nursing and student departments and found that the nursing defects in clinical teaching decreased from 1.2% to 0.3%, and the communication ability between nursing students has been significantly improved, and this teaching method is also well-received by nursing students. In addition, the SBAR communication mode has been widely used in the teaching of nurses and students in many clinical departments such as obstetrics and gynecology, operating room, radiotherapy, surgery, etc. <sup>[17-20]</sup>, and has achieved remarkable results.

## **3. SBAR communication mode combined with other teaching modes in teaching mode of clinical nursing students**

### **3.1. SBAR communication mode combined with scenario simulation teaching mode**

Cheng, Fu and others <sup>[21]</sup> applied the combination of SBAR communication mode and scenario mode to clinical teaching. The so-called scenario simulation means that the trainer combines theoretical teaching with case simulation, and uses the communication sequence of SBAR to make a group of 2-3 nursing students complete nurse-patient communication drills together; the results showed that the communication ability of the nursing students was significantly improved, and the communication ability of the nursing students in the experimental group ( $24.92 \pm 1.28$ ) was significantly higher than that in the control group ( $20.29 \pm 1.62$ ), ( $P < 0.05$ ) the difference was statistically significant. The same research by Stevens <sup>[22]</sup>, Yu

and others <sup>[23]</sup> also confirmed this conclusion.

### **3.2. SBAR communication mode combined with Mini-CEX teaching evaluation**

The Mini-Clinical Evaluation Exercise (Mini-CEX) model, proposed by the American Medical Association in the 1990s, is a new evaluation model with teaching and evaluation functions, and is now commonly used to evaluate clinical practice and teaching effect <sup>[24-25]</sup>. It is divided into objective evaluation and subjective evaluation. The objective evaluation includes a 100-point assessment of theory, operation, and simulation exercises; subjective evaluation allows nursing students to evaluate the teaching process using a self-made scale. Combining this evaluation mode with the SBAR communication mode, focusing on the cultivation of nursing students' subjective initiative, makes nursing students more active during the internship process, significantly improve their clinical thinking ability, deepen their understanding of patients' conditions, and communicate with patients better. Through the combination of these modes, their communication skills have been significantly improved and enhanced <sup>[26-27]</sup>.

### **3.3. SBAR communication mode combined with OSCE teaching mode**

Objective Structured Clinical Examination (OSCE) is a series of corresponding training and assessment of clinical interns' comprehensive abilities such as theory, skills and thinking. This exam includes clinical scenarios using standardized patients as the basis in a few established assessment sites <sup>[28]</sup>. The highlight of this model is to refine the setting of the assessment site and allow nursing students to analyze and deal with different problems and emergencies in different situations. This teaching mode along with the SBAR communication mode has been applied in the teaching of nursing students in the operating room. It has set up 5 courses, including preoperative visits, morning shifts, implementation of nursing operations, intraoperative emergencies, and postoperative nursing care. This scenario simulation assessment not only encourages nursing students to actively communicate with patients, but also stimulates their thirst for knowledge, develops their thinking ability, communication ability, adaptability, and problem-solving abilities, and then refine the operational details to ensure medical safety <sup>[29]</sup>.

### **3.4. SBAR communication mode combined with CICARE communication mode**

CICARE communication mode is a streamlined nurse-patient communication mode, including: Connect (Connect, C), introduce (Introduce, I), communicate (Communicate, C), ask (Ask, A), respond (Respond, R), and exit (Exit, E ). These steps are followed to build a relationship with the patient, understand the patient's needs, figure out the patient's psychology, and answer and give feedback to the questions and requirements raised by the patient <sup>[30]</sup>. Wang and Liu <sup>[31]</sup> combined this model with the SBAR communication model and applied it to the teaching of clinical nursing students, guiding the nursing students to carry out standardized communication training for patients step by step from general to in depth, providing a basis for building a harmonious nurse-patient relationship .

### **3.5. SBAR communication model combined with modified early warning score (MEWS system)**

Modified Early Warning Score (MEWS) is a commonly used assessment tool for assessing critically ill patients. It can identify "potential critically ill patients" at an early stage and provide rapid and efficient intervention measures. The combination of MEWS with the SBAR communication mode is more commonly used in clinical nursing <sup>[32]</sup>, but less used in nursing teaching. A combination MEWS score with the SBAR handover sheet is used in the teaching of nurses and students in hemodialysis, so that patients can be evaluated according to the MEWS score and the SBAR handover sheet before, during, and after dialysis. Nursing measures or handover omissions and the number of problems have been significantly reduced, which improves the safety of patients' diagnosis and treatment <sup>[33]</sup>.

### **3.6. SBAR communication mode combined with CPBL teaching mode**

Clinical Problem-Based Learning (CPBL) is a combination of Case-Based Learning (CBL) and Problem-Based Learning (PBL). It is a teaching method based on actual clinical cases, where overall and sub-teaching goals are determined, therefore allowing students to think, analyze, and learn from the real patients' cases [34]. Xing C, Zhou Y *et al.* [35] applied CPBL teaching mode and SBAR communication mode to 102 clinical nursing students. The nursing students were scored from four dimensions, including positive problem orientation, negative problem orientation, avoidance style and impulsive neglect style. Besides, questionnaires were given to students and a semi-structured interviews were conducted before and after applying the teaching mode. The results of the survey showed that the scores of the four dimensions were all improved compared to those before the intervention. Hence, this joint model can improve the clinical thinking ability and problem-solving ability of nursing students, deepen the understanding and mastery of the patient's condition, strengthen the relationship with patients, and ensure effective delivery of information.

### **3.7. SBAR communication mode combined with quality control circle nursing teaching mode**

Quality Control Circle (QCC) is a group (also known as QC group) composed of several staff (about 6-10 people), which work together to solve problems according to the PDCA procedure. Its purpose is to cultivate students' learning initiative while optimizing service quality, thus it ensures continuous improvement of nursing service quality [36]. Tao Chen [37] and Rong Zhang [38] combined this model with the SBAR communication model in the clinical teaching of neurosurgery. First, the nursing students are trained and assessed through the SBAR communication model, and then a quality control group is established. The group leader formulates a study plan, answers, and solves the common problems or difficulties encountered by the nursing students during practice, and at the same time assesses the nursing students. The results showed that the observation group did not only perform significantly better than the control group in the theory and operation assessment, but was also better than the control group in terms of learning attitude, ability, initiative, and made lesser errors ( $P < 0.05$ ). Hence, this shows that the quality control circle combined with SBAR communication nursing teaching can effectively discover the problems existing while teaching the nursing students, make timely improvements, improve the enthusiasm and initiative of nursing students in learning, and help students improve communication with patients and their families. Besides, it also reduces the safety hazards in the work and the occurrence of clinical nursing errors.

### **3.8. SBAR communication mode combined with “trilogy” bedside teaching nursing teaching mode**

On the SBAR communication model, Chen, Pan and others [39] continued to use the “trilogy” bedside teaching method by Professor Ramani [40], a medical education expert at Boston University in the United States, which includes 3 stages: before teaching, during teaching, and after teaching, each stage contains different small steps, a total of 12 sub-steps. The pre-teaching stage covers 3 sub-steps, which are as follows: preparing teaching materials, formulating teaching plans and teaching introduction. The teaching stage covers 5 sub-steps, which are as follows: mutual introduction, communication and interaction, key observation, teaching development, and summary evaluation. The post-teaching stage covers 4 sub-steps, which are as follows: case report, mutual feedback, summary reflection and re-preparation. Combining these 3 stages and 12 steps with the SBAR communication model, the observation ability, comprehension ability, analysis ability, communication ability, and other scores of the nursing students in the experimental group were significantly improved compared with those of the control group ( $P < 0.05$ ). Therefore, SBAR communication mode combined with the “trilogy” bedside teaching mode can significantly improve the

communication skills of nursing students, and at the same time contribute to the continuous development and improvement of clinical nursing quality.

#### **4. Application evaluation and prospect of SBAR communication mode in teaching of nursing students**

SBAR communication mode is currently widely used in clinical teaching of nursing students, and its application is mostly combined with educational training, such as scenario simulation, case analysis, theoretical explanation, and many more. However, a unified training mode has not yet been formed, which is crucial during the actual application. This causes several deviations. Secondly, the formulation of the SBAR handover sheet has not been standardized. In actual practice, nursing students often focus on recording information, while ignoring the importance of communicating with patients. Thirdly, the evaluation indicators have not been standardized. Most of them are self-made scales, comparisons of theoretical or operational assessment results, and comparisons of nursing students' teaching satisfaction. These indicators do not directly evaluate communication behaviors, and further scientific and standardized assessment indicators need to be established. Finally, the SBAR communication mode is combined with other application modes in various ways, with a variety of training methods and evaluation indicators. A joint mode has not yet been explored to form a standardized system which can be extended to various fields of clinical nursing teaching.

#### **5. Conclusion**

In short, the SBAR communication mode can ensure clinical safety and convey information effectively. Although it is widely used in the clinical teaching of nursing students, it still has many shortcomings. In the future, a unified training model and evaluation standards need to be formulated, using scientific and quantifiable assessment indicators. The use of the SBAR communication model, including the combination with other models should also be popularized. This requires continuous exploration and innovation. Besides, it is important to strive to provide patients with safe and secure medical care services and improve SBAR communication mode in all aspects from nursing students to nurses.

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