Using Simulation Teaching to Enhance Undergraduate Nursing Students' Situation Awareness of Patient Safety

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Introduction

Early detection of patient problems is essential for nurses to provide effective and efficient management to ensure patient safety. By enhancing situation awareness, students can improve their clinical performance and patient management. Insufficient training may contribute to a low level of confidence in managing patients, which may result in frustration and disengagement in nursing. In view of this, we conducted simulation to enhance the situation awareness and clinical competency of undergraduate nursing students.

Method

We developed a simulation workshop with the focus on clinical assessments (1) insulin injections and (2) wound management. In addition, we used different risk scenarios that are commonly found in the clinical setting, such as dislodged nasal cannulas, loosened nasogastric tubes, and disconnected intravenous infusions, so that the students' situation awareness could be evaluated during clinical assessments. All final year nursing students (n = 210) were invited to the workshop. They were told to complete two skill assessments within 20 minutes. Their performance was assessed using a standard checklist. After the assessment, there was a 10-minute debriefing, during which the assessors not only reinforced the nursing student's skills but also emphasized the importance of situation awareness during skills performance and informed them of the impact of ignorance on a patient's condition and safety.

Findings

In the simulation workshop, all nursing students completed the two nursing skills on time. However, most of them focused only on completing their tasks without awareness of the risk situations. Many students indicated that they were too nervous in performing the tasks and felt surprised that they did not recognize the risk situations and perform timely intervention. Although they showed dissatisfaction with their performance, they appreciated the constructive feedback at the debriefing session. They indicated the importance of situation awareness when managing their patients in practice.

Conclusion

Simulation teaching of situation awareness was found successful in undergraduate nursing education. Further studies will be designed to strengthen the briefing session to alleviate student anxiety, the training strategies to enhance students' awareness, and the structured debriefing to consolidate student learning in the process.