

OPTIMIZING CLINICAL INSTRUCTORS' ROLES TO IMPROVE THE STUDENTS' ABILITY IN IMPLEMENTING PATIENT SAFETY BASED CLINICAL PRACTICES

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Abstract

Clinical instructors played an essential role to the improvement of patient safety in the clinical settings. A preliminary study with a qualitative design to nursing students in the profession program indicated that the clinical instructors focused their attention on the attainment of student's clinical competences. Yet, the aspect of patient safety issues was ignored or addressed in a narrow manner. This study aimed to evaluate the effectiveness of optimizing clinical instructors' roles to improve the students' ability in implementing patient safety based clinical practices. This pre-experimental study used pre and posttest designs without control groups. The clinical instructors received daily text messages (by using a SMS gateway) concerning patient safety information. The text contained information on how to achieve six goals of patient safety. The study comprised 125 observations, which were analyzed by using Wilcoxon test. This study revealed that the score of clinical instructors' roles to improve students' ability in implementing patient safety based clinical practices increased by 2.66 (6.44%). The study furthermore showed a significant improvement of clinical instructors' roles on the intervention stage compared to that on the pre-intervention stage ($p < 0.001$; CI = 1.948: 3.380). Patient safety information through SMS gateway was effective to improve the competences of students to implement six goals of patient safety in the clinical practices.

Keywords: nursing students, patient safety, SMS gateway

Background:

Incidents from needle- sticks and physical hazards were the common incidents amongst the nursing students. University of Namibia reported that 34 out of 198 students (17%) got a needle stick injury, but only 55 percent of them were reported (Small, Pretorius, Walters, Ackerman, 2011). Another study conducted in Uganda showed that 20 out of 79 students in a rural hospital got a needle stick injury. Half was caused by potentially infectious sources (50%), and a quarter was

caused by improper procedures, such as by not wearing gloves (25%).

Despite needle stick injuries were the common incidents, these injuries are one of the preventable incidents. They are commonly caused by the poor techniques of nursing care and human errors. Thus, nursing education that underlines universal precautions combined with the safe disposal of sharps and the appropriate use of Post- Exposure Prophylaxis (PEP) may effectively reduce the incidence of needle-stick injuries and the risk of the

transmission of blood- borne diseases in developing countries (Hulme, 2009).

Trainings of patient safety for students in the clinical settings may effectively reduce the incidents. Wang, Fennie, He, Burgess, and Williams (2003, in Lin Yang and Barbara Mullan, 2001) stated that educational trainings from the clinical instructors can enhance the knowledge of students to prevent incidents from various hazards. In addition, a quasi-experimental study conducted to examine the impact of structured training on the occupational exposure prevention against blood borne pathogens. The impact measured included the knowledge, behavior, and the number of needle- stick injuries among the nursing students. The study revealed the significant improvement on the knowledge ($P < .001$) and behavior ($P = 0.002$) of those who participated on the training. In addition, the self- reported needle stick injuries were significantly lower for those who participated on the training.

The references above supported the preliminary research that we conducted to identify the relationship between the roles of clinical instructors and the implementation of patient safety based nursing practices. It also showed that the clinical instructors focused their attention on the attainment of student's clinical competences. Yet, the aspect of patient

safety issues was ignored or addressed in a narrow manner.

Objectives:

This study aimed to evaluate the effectiveness of optimizing clinical instructors' roles to improve the students' ability in implementing patient safety based clinical practices.

Methods:

This pre-experimental study used pre and posttest designs without control groups. The clinical instructors received daily text messages (by using a SMS gateway) concerning patient safety information. The text contained information on how to achieve six goals of patient safety. The study comprised 125 observations, which were analyzed by using Wilcoxon test.

Results:

This study revealed that the score of clinical instructors' roles to improve students' ability in implementing patient safety based clinical practices increased by 2.66 (6.44%). The study furthermore showed a significant improvement of clinical instructors' roles on the intervention stage compared to that on the pre-intervention stage ($p < 0.001$; CI = 1.948: 3.380).

Discussion

Clinical instruction has been always an integral part of nursing education. It has a major role in integrating theory and practice. O' Connor (2006) stated that the clinical instruction enables students to apply the concept of patient care with the use of critical thinking to address the client's health problems by using nursing process in order to establish therapeutic nursing interventions and to evaluate their effectiveness. Also, it helps students in demonstrating safe patient care. Accordingly, during the clinical instruction, students are not only applying the clinical skills, but rather carefully considering the safety of the nursing interventions for both the patients and for themselves.

The effective clinical instructors use various strategies to enhance the critical thinking and problem-solving skills of their students. For instance, they may use the technique of asking, role playing, discussing. Haas and Ken (2013) stated that clinical instruction included all aspects in the clinical settings, including patient safety. Clinical instructors should be able to serve as a resource for students in attaining the expected clinical competences as well as to provide assistance for students in providing safe patient care. Nonetheless, a finding from our preliminary study discovered that

clinical instructors only focused on the clinical competences, and they were not be able to serve as a role model, educator, and safety supervisor. The study furthermore found that the score for the variable of clinical instructors' roles was among the lowest (34%).

The roles of clinical instructors were optimized during all phases of the clinical learning cycle. The clinical learning cycle, as quoted from Ewan and White (2011) consists of: 1) briefing, 2) clinical practices, 3) debriefing, 4) follow-up evaluation, 5) theoretical preparation, 6) laboratory. Since it is a cycle, the process will return to the briefing phase, which follows the laboratory phase of the previous cycle, as the beginning of a new cycle. This study implemented preconference as the initial briefing that allowed the discussion on the target of competences, patient safety and universal precautions. During the last briefing, the clinical instructors facilitated the students in evaluating the clinical competences that have been achieved, and the reports of the near-miss and incidents, if any. This study highlighted the optimization of clinical instructors' roles as the protector from harms and incidents for students. The clinical instructors furthermore would follow-up the incidents.

Conclusion

Patient safety information through SMS gateway was effective to improve the competences of students to implement six goals of patient safety in the clinical practices.

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