Effectiveness of Peripherally Inserted Central Catheter Training Program on Knowledge, Attitude and Confidence Regarding Peripherally Inserted Central Catheter Care among Nurses.

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Background

In Thailand, the insertion of Peripherally Inserted Central Catheter or PICC line has been increased over the period of 5 previous years, and the Faculty of Medicine Siriraj Hospital was the first organization introducing PICC line technology for use by anesthetists. The quantity of PICC line use has grown every year. Based on the statistics of the year 2016, it was 41% higher than that of the preceding year. Nurses play a very important role for PICC line insertion care. This medical technology is an innovation that all parties must be aware that it is important to provide knowledge and training to improve potentiality of nurses caring for patients in order to minimize the risks of potential errors caused by the lack of proper knowledge and understanding.

Purpose

To conduct a comparative study on knowledge, attitude and confidence of nurses in caring for patients with PICC line insertion between the group of nurses who were trained and the group of nurses who were not trained.

Implementation

1. Collect the list of nurses in experimental group and controlled group from 7 nursing agencies. There were 60 nurses participating in the research project.
2. Divide nurses into 2 groups as follows:
   - Experimental group: 30 nurses were selected based on purposive sampling to participate in the training workshop on care of patients with PICC line insertion of the nursing department on January 26-27, 2017.
   - Controlled group: 30 nurses were selected based on matching group and random sampling by drawing lots to choose the nurses who did not participate in the training workshop on care of patients with PICC line insertion, and removing the list of nurses from experimental group.

Both groups of nurses answered the questionnaires with the following 3 parts.

Part 1: Record of personal information

Part 2: Test of the knowledge of care of patients with PICC line insertion. There were 10 questions in the test. The correct answer would get 1 mark while no answer or choosing more than 1 answer would get 0 mark.

Part 3: Questionnaires on opinion and confidence in care of patients

3. Evaluate the results
4. Analyze the data

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Results

The results revealed that most samples had work experience ranged from 5 – 10 years calculated to be 65% and 28.3% of them were under Department of Nursing, Surgical division. They were both those who were trained and not trained under PICC Line Care Workshop calculated to be 50% each. The group of trained nurses had high level of knowledge (mean = 7.367 S.D. ± 1.629) while the group of untrained nurses had low level of knowledge (mean = 5.667 S.D. ± 1.688) with P value < 0.001.

Conclusions

The training is an important procedure for providing knowledge, and raising attitude and confidence for nurses who have a vital role in caring for patients with PICC line insertion.

References