



Summary

Educators use a variety of delivery methods to maintain students' motivation and attention, and to address different learning styles. Vehicles that can reinforce cognitive knowledge and provide students with the opportunity to put theory into practice include simulations, role-play, and CBT. CBT can enhance the quality of education, supporting or replacing traditional classroom lectures, while providing the learner with interactive presentations that fit their needs.

The aim of the present study was to identify the effectiveness of teaching a clinical administrative course by using CBT in developing nursing interns' administrative knowledge and skills, at Benha University Hospital, through designing and implementing clinical administrative course using computer-based training for nursing interns, assessing the effect of CBT on nursing interns' administrative knowledge and skills, identifying nursing interns' attitudes toward computer-based training, and determining nursing interns' preference for computer-based training or traditional methods.

To fulfill the aim of the present study, the following research hypotheses were formulated: computer- based training is more motivating and stimulating to the nursing interns' to gain knowledge and skills than traditional training methods, and there are significant difference in the mean scores of both the control and the experimental group's regarding to administrative knowledge and skills.



The classroom and interactive learning lab at Faculty of nursing, Benha University, as well as the medical and surgical clinical departments at Benha University Hospital were used in the study. The subjects included 98 nursing interns enrolled in the 2009-2010 internship year at the Faculty of Nursing. The participants were divided into two groups; a control group (traditional training method) with 50 nursing interns, and a study group (computer-based training) with 48 nursing interns.

Four tools were used for data collection in the study. Firstly, *Administration knowledge test* was used to assess the nursing interns' knowledge regarding clinical nursing administration. The test consisted of 100 questions that covered the head nurse's roles and functions in management; planning (38 questions), organizing (2 questions), directing (54 questions) and controlling (6 questions) in the form of multiple choice, true or false, matching, crossword puzzle, and filling the spaces according to the situation. Secondly, *an administrative skill scale* was designed to assess nursing intern's clinical nursing administration skills. The scale consisted of 129 items that covered the head nurse roles and functions in management: planning (9 items), organizing (27 items), directing (89 items) and controlling (4 items). Thirdly, *an attitude toward CBT questionnaire* was designed to identify nursing intern's attitudes toward CBT. The questionnaire had 28 items that covered four dimensions: confidence (4 items), usefulness (4 items), learning motivation (6 items), and instructional design; that included format (5 items) and presentation (9 items). Fourthly, *Preference for TCT or CBT questionnaire* was used to identify nursing intern's preference for TCT or CBT. It consisted of 11 items.



The study has generated the following findings:

1. Both the control and the study groups had poor mean score of administration knowledge and skills in relation to pre administration course, and there was no significant statistical difference between the two groups.
2. There were general improvements in administration knowledge and skills for both groups in relation to immediate and post administration course evaluations. However, the study group had significantly higher mean scores for the immediate and follow-up administration knowledge and skills than the control group.
3. There were positive attitudes toward CBT for the pre, immediate and follow-up phases of the clinical nursing administration course. The total mean scores of all attitude items were higher for the immediate and follow-up phases using CBT than total mean scores of all attitude items before using CBT.
4. The highest percentage of nursing interns (97.9%) preferred CBT over TCT.

In the light of the findings obtained from the present study, these points are recommended:

1. Undergraduate nursing courses must be modified and changed to accommodate electronic courses to cope with the development in education technology, and to encourage students to engage in self-directed learning and lifelong learning.



2. Establish Nursing Educational Technology Center (NETC) at the Faculty of Nursing with a basic mandate to help course instructors to design, experiment, evaluate, and develop instructional program to attain effective learning outcomes.
3. For effective teaching, CBT should be combined with traditional teaching methods for increasing nursing students learning and retention of information.
4. Regularly update courses content to facilitate transforming them into electronic courses based on new acquired information.