ABSTRACT

Background:

Evidence-Based Practice (EBP) is a problem solving approach to clinical care that incorporates the conscientious use of current best evidence from well-designed studies, clinician’s expertise and patient’s values and preferences. To provide safe and compassionate health care, EBP has been recognized as the gold standard and health care professionals should be competent in its use. A systematic review undertaken by the researcher revealed that there have been few studies on EBP interventions among nurses. However, there are gaps in this area in terms of lack of studies from India and South Asia, studies on nurse educators and randomized controlled trials on EBP interventions. The present research work was carried out to develop and determine the effectiveness of a Multilevel Integrated Training Program in Evidence-Based Practice (MITP-EBP) on teaching and patient care outcomes among nurses. The objectives of the study were categorized into three main areas. Firstly, to conceptualize and develop MITP-EBP on teaching and patient care. Secondly, to examine the effect of MITP-EBP in terms of increase in integration of EBP in teaching and patient care among nurses. Last objective was to assess the barriers to practice MITP-EBP in academic and clinical setting.

Method:

An evaluative approach was considered for this study since the aim was to find the effect of MITP-EBP on teaching and patient care. A randomized controlled trial design was used, with cluster randomization in the academic setting and simple randomization in the clinical setting. The sample consisted of 51 nurse educators, 72 postgraduate nursing students and 49 clinical nurses. A 30 hour EBP training program was conducted for nurse educators and 15 hour EBP training program was carried out for clinical nurses with follow up sessions. A pre-test and two post-test measures were done for nurse educators at 5 month and 10 month after the intervention. However, for postgraduate nursing students and clinical nurses, a pretest and a single post-test was carried out 6 months after the intervention.

Data were collected using variety of approaches such as self-report scales, objective measurements, observational tools and activity log. The data collection instruments used in the study were EBP knowledge scale, EBP attitude scale, EBP practice scale, EBP
knowledge source for practice scale, EBP activity log, EBP teaching assessment tool and Fresno test for nurse educators. The tools used to collect data from postgraduate nursing students were Evidence-based Practice Questionnaire which measured EBP knowledge, attitude and practice and 'Knowledge of Research Evidence Competencies' (K-REC) instrument which measured EBP competency. From clinical nurses data were collected using EBP knowledge scale, EBP attitude scale, EBP practice scale, EBP knowledge source for practice scale and compliance with EBP guidelines. In addition, barrier scale was used to collect data from nurse educators and clinical nurses regarding barriers in academic and clinical setting. Validity and reliability were established for the tools developed by the investigator.

Results:

The analysis related to sample characteristics revealed that the nurse educators, postgraduate nursing students and clinical nurses in the experimental and control group were having similar characteristics considered for the study. The intent of the current study was to evaluate the effect of a training program in EBP on teaching and patient care outcomes in three different samples of nurses in academic and clinical settings respectively. The results of the effect of intervention on teaching outcomes revealed that there was a positive change in the experimental group for most of the outcome variables. The significant findings were increase in knowledge, attitude, practice, competency and reduction in barriers related to EBP in nurse educators in the experimental group compared with the control group. The postgraduate nursing students in the experimental group also had an increase in knowledge, practice and competency. The nurse educators in the experimental group did not demonstrate statistically significant change in knowledge sources for practice and the attitude of postgraduate nursing students did not improve with EBP intervention. The results of the effect of intervention on patient care outcomes revealed that there was a positive change in the clinical nurses in the experimental group for all of the outcome variables. The clinical nurses in the experimental group demonstrated an improvement in knowledge, attitude, practice and compliance with EBP guidelines.
Conclusion:

The research provided practical strategies for developing EBP intervention program for academic and clinical nurses as well as measuring the teaching and patient care outcomes related to EBP. The on-going challenge for nurse educators is to establish a regular pattern in training students in EBP and to incorporate EBP in classroom and clinical teaching. The challenge for clinical nurses is to include EBP as a routine in patient care practice.