The Use of Evidence-based Practice in Nursing Education

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Professional nursing standards at national and global levels mandate evidence-based practice (EBP) in nursing education (ANA, 2008; ICN, 2010; IOM, 2010; WHO, 2009)
Focus has shifted from inclusion of evidence-based practice (EBP) in nursing education and practice to actual implementation of EBP.
“Begin at the beginning”

Nursing student’s self-perceptions of practice, attitude, knowledge and skill of evidence-based practice
John Dewey

Theory of Experiential Learning

• Reflective and active
• Best occurs in a social environment while interacting with others
• Enhanced by reflection, past understanding and experiences along with group process to critically solve real-life situational problems
• Applicable to today’s healthcare education.
PURPOSE

To compare competency and perceived value of learning evidence-based practice (EBP) in TWU traditional undergraduate nursing students by cohort and ethnicity.

(Repeated didactic and active-learning is employed throughout the nursing program in relation to evidence-based practice)
Study Design and Participants

• Quantitative study conducted with TWU traditional program undergraduate nursing students on both Houston and Dallas campuses

• End of 2016 Fall semester.
Study Participants

• Each year groups of students enroll in a study-abroad class where they visit the associated country
• Jr. 1 through Sr. 1 students are eligible
• Peru, Indonesia, Viet Nam
• Complete an EBP project about the country they visit & share with that country
Instruments

• Demographic questionnaire
• Student Evidence-Based Practice Questionnaire (S-EBPQ) (Upton & Upton)
  – 21 items, includes practice, attitude, retrieving and reviewing evidence, and sharing and applying EBP.
  – All four subscales - high inter-item reliabilities (Cronbach’s alpha = .825 - .937) consistent with previous research.
  – Mean scores were calculated for each subscale and used as outcome measures.
Data Collection

• Students were invited via email to participate in the research.

• Students who agreed to participate could voluntarily access the demographic questionnaire and S-EBPQ questionnaire by clicking on a Psychdata link embedded in the email.

• Participation was anonymous.
Analysis

- Inter-item reliability analysis using Cronbach’s alpha
- Independent samples t-tests and one-way analysis of variance (ANOVA) to compare means and standard deviations for the four subscales by demographic variables.
- All analyzes were conducted with IBM SPSS v23. A $p \leq .05$ was set as significance.
Reliability for the four subscales

21 item survey

- Practice - 6 items: Cronbach’s α = .907
- Attitude 3 items: Cronbach’s α = .825
- Retrieving and reviewing evidence - 7 items: Cronbach’s α = .937
- Sharing and applying EBP - 5 items: Cronbach’s α = .899
Findings

Figure 1. Outcome comparisons by Cohort. All values are in Mean ± SD.
Figure 2. Outcome comparisons by Ethnicity. All values are in Mean ± SD. *, p ≤ .05 vs. Black.


Results

• Black students appear to have lower level of EBP practice than Asian, and a lower level of sharing and applying EBP than Hispanic.

• No significant differences on EBP learning outcomes were observed between junior and senior students.

• Only 6 of the 115 participants were enrolled in the study-abroad classes
Conclusions

• No significant differences between levels of students may indicate a lack of progressive learning about EBP
• No usable data concerning if study-abroad courses increase EBP skills in these students
• Need larger numbers to truly identify if there are significant differences
Limitations

• Participants only from one university system in one area of the United States.

• Most participants were from Houston campus (87.7%), thus the sample size is uneven.

• Sample sizes are small. (14.2% of undergraduate student body; 45.2% of sample from Junior 2 cohort)

• Conflicting demands on potential participants’ time.
Future research plans

• Imbed the research into one course in each level of program, allowing for larger ‘N’ along with tracking and trending

• Gain more support from Dallas faculty to reinforce the survey for their student participation

• Conduct a global study with various universities around the world to compare findings from various countries