Nurse Education Today 64 (2018) 5–10

Contents lists available at ScienceDirect

Nurse Education Today

journal homepage: www.elsevier.com/locate/nedt

Health professions faculty beliefs, confidence, use, and perceptions of organizational culture and readiness for EBP: A cross-sectional, descriptive survey☆

Kerry A. Milner*, Holly B. Bradley, Tammy Lampley

Sacred Heart University, College of Nursing, 4000 Park Avenue, Fairfield, CT 06825, United States.

ARTICLE INFO

Keywords:
Evidence-based practice
Education/curriculum/learning
Professional issues
Professional standards

ABSTRACT

Background: Evidence-based practice (EBP) is an essential skill and ethical obligation for all practicing health professions clinicians because of its strong association with improved health outcomes. Emerging evidence suggests that faculty who prepare these clinicians lack proficiency to teach EBP.

Objectives: The purpose of this study was to describe; 1) health profession faculty beliefs about and confidence in their ability to teach and implement EBP, 2) use of EBP for education, 3) organizational culture and readiness for EBP; and to determine whether relationships exist among these variables.

Design: This study used a cross-sectional, descriptive survey design.

Setting and Participants: College of Nursing (CON) and College of Health Professions (CHP) faculty from a university located in the Northeast, United States. Faculty were defined as anyone teaching a course for the CON or CHP during the fall of 2016.

Methods: Faculty were invited to complete an electronic survey measuring EBP beliefs, EBP use, and EBP organizational culture and readiness. The survey was comprised of three tools developed specifically for health professions educators in 2010 by Fineout-Overholt & Melnyk.

Results: Sixty-nine faculty returned usable surveys (25.5% response rate). Mean EBP beliefs score was 89.49 (SD = 10.94) indicating respondents had a firm belief in and confidence in their ability to implement and teach EBP. Mean EBP use was 32.02 (SD = 20.59) indicating that respondents taught and implemented EBP between 1 and 3 times in the last 8-weeks. Mean EBP culture and readiness score was 90.20 (SD = 15.23) indicating essential movement toward a sustainable culture of college-wide integration of EBP. Mean scores for beliefs/confidence were higher for full-time clinical faculty compared to other groups [$F_{(2,\ 55)} = 0.075$, $p = 0.928$; $\eta p^2 = 0.003$)]. Adjunct faculty reported higher EBP behaviors expected by health profession educators in the last 8-weeks compared to other groups [$F_{(2,\ 55)} = 0.251$, $p = 0.779$; ηp^2.

$= 0.009$)]. Adjunct faculty had the highest mean scores on OCRSIEP-E followed by full-time clinical faculty. These group differences in OCRSIEP-E were statistically significant [$F_{(2,\ 49)} = 7.92$, $p = 0.001$; $\eta p^2 = 0.244$)]. OCRSIEP-E was significantly different between full-time tenure/tenure track faculty (M = 78.0, SD = 12.58) and full-time clinical faculty (M = 91.37, SD = 14.79, $p = 0.027$) and between full-time tenure/tenure track faculty and adjunct faculty (M = 97.19, SD = 12.39, $p = 0.001$).

Conclusions: Faculty adoption of EBP as a foundational pillar of teaching is essential. Research is needed to define the scope of the problem internationally. Organizations need to set standards for faculty teaching in the health professions to be EBP proficient. Programs preparing faculty to teach in nursing and other health professions must include educator EBP competencies.

1. Background

Evidence based practice (EBP) is a problem-solving approach to how healthcare is delivered that integrates best available evidence with a clinicians' expertise and patient values and preferences (Melnyk and Fineout-Overholt, 2015). EBP is the gold standard for clinical practice for health professions disciplines and has been endorsed as a core competency by the Institute of Medicine (IOM) since 2003 (Institute of

☆ This work was funded by a University Research and Creative Grant (URCG) from Sacred Heart University (SP2014).

* Corresponding author.
E-mail addresses: milnerk@sacredheart.edu (K.A. Milner), bradleyh@sacredheart.edu (H.B. Bradley), lampleyt@sacredheart.edu (T. Lampley).

https://doi.org/10.1016/j.nedt.2018.02.003
Received 12 November 2017; Received in revised form 8 January 2018; Accepted 1 February 2018

Medicine, 2003). The EBP process has been associated with improved healthcare quality, reliability, patient care outcomes, and reductions in variation of care and costs (Melnyk et al., 2014). Faculty as role models for EBP across didactic and clinical courses is essential for supporting the paradigm shift from tradition based care to evidence based care (Melnyk et al., 2008). Creating a culture that uses evidence to inform clinical practice starts with faculty who use the EBP process in their teaching and academic practice (Kalb et al., 2015).

Adoption of the EBP process in nursing education has been slow because of several factors (Al Hadid et al., 2011; Patterson and Klein, 2012). The majority of nurse educators are aged 46 to 60 years (63%) with 30% aged 60 and older; in contrast to the 6.7% of educators who are < 46 (Kauffman, 2010). EBP competencies were not introduced to nursing education until after 2003 (Stevens, 2013) so many of today's nurse educators did not have EBP content in their nursing or post-professional degree education and may lack knowledge or understanding of the EBP process (Mick, 2017). Other barriers include lack of knowledge and confidence in teaching EBP, weak information and literacy skills, no framework for curricula (Stichler et al., 2011), no time for EBP, minimal resources and support (e.g. having accessible, relevant evidence) (Stichler et al., 2011; Upton et al., 2015), and lack of cohesion between academic and clinical teaching contexts (Upton et al., 2015). These barriers are not unique to nursing and exist in other health professions disciplines (Harding et al., 2014; Manspeaker and Van Lunen, 2011).

EBP is an expectation in clinical practice so health professions educators must recognize the ethical obligation to be proficient in EBP for teaching (Orta et al., 2016). An emerging body of evidence suggests that faculty proficiency in EBP is mixed. Nursing faculty in one university were found to have EBP knowledge and competence similar to that of undergraduate nursing students (Orta et al., 2016). A survey of faculty in the United States and United Kingdom revealed positive attitudes toward EBP but faculty lacked confidence in knowledge and skills (Upton et al., 2015). A survey of nurse practitioner faculty demonstrated fairly high self-reported knowledge of EBP however there were gaps in knowledge (Bernadette Mazurek Melnyk et al., 2008).

1.1. Statement of Problem

With the IOM 2020 goal that 90% of clinical decisions be evidenced-based, there is a need to foster faculty use of EBP in their academic practice, to prepare graduates at all levels to use EBP effectively in all practice settings (Kalb et al., 2015), and to prepare faculty to be EBP mentors in complex healthcare systems (Jeffers et al., 2008). To meet this mandate, faculty in higher education must examine their own EBP knowledge, beliefs, and skills in order to achieve sustained EBP culture in academia that translates to practice (Fineout-Overholt et al., 2010).

1.2. Purpose

The primary purpose of this study was to describe; 1) health professions educator's beliefs about and confidence in their ability to teach and implement EBP, 2) use of EBP for education, 3) the organizational culture and readiness for EBP; and 4) to determine whether relationships exist among these variables.

1.3. Ethical Considerations

The University Institution Review Board approved this study. An introductory email with a link to the survey explained the voluntary nature of the study and confidentiality of data. Consent was implied by participant completion of survey. Permission to use the EBP tools for educators was obtained (Fineout-Overholt and Melnyk, 2010a, 2010b, 2010c).

2. Methods

2.1. Design and Participants

Using a cross-sectional, descriptive survey design, all College of Nursing (CON) and College of Health Professions (CHP) faculty from a university in the Northeast, United States were invited to complete an electronic survey measuring EBP beliefs, EBP use, and EBP organizational culture and readiness. Faculty were defined as anyone teaching a course for the CON or CHP during the fall of 2016.

2.2. Measures

The survey was comprised of the following tools developed specifically for health professions educators in 2010 by Fineout-Overholt and Melnyk (2010a). There were also 10 demographic questions included in the survey.

The EBP Beliefs Scale for Educators (EBPB-E) is a 21 item, 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) that measures health profession educators' beliefs about and confidence in their ability to teach and implement EBP. There are two reverse scored items ("I believe that EBP takes too much time." "I believe EBP is difficult."). Scores range from 21 to 105 with higher scores indicating stronger EBP beliefs about and confidence in educators' ability to teach and implement EBP. Scores ≥84 indicate a firm belief in and commitment about implementing EBP (E. Fineout-Overholt, personal communication, June 2, 2017).

The EBP Implementation Scale for Educators (EBPI-E) was designed by Fineout-Overholt and Melnyk (2010b) to measure health profession educators' actual implementation of EBP through self-report of engagement in expected behaviors of evidenced-based educators. There are 18 items scored with a 5-point frequency scale where respondents select the number that best describes how often each item applied to them in the past 8 weeks (0 times, 1–3 times, 4–5 times, 6–8 times, > 8 times). The range of scores is 18 to 90. Higher scores indicate more times implementing EBP in the last 8 weeks. For example, a score between 36 and 53 would indicate that respondents have implemented EBP between 4 and 5 times but < 6 times in the last 8 weeks (E. Fineout-Overholt, personal communication, June 2, 2017).

The Organizational Culture and Readiness for School-wide integration of EBP Scale (OCRSIEP-E) was designed by Fineout-Overholt and Melnyk (2010c) to measure cultural factors that influence the implementation of EBP within an academic environment and the perceived readiness for school-wide integration of EBP. The OCRSIEP-E is a 25 item, 5-point Likert scale with varying response categories (1 = "none at all" to 5 = "very much"). Scores range from 25 to 125 with scores > 75 indicating moderate movement toward a culture of EBP, but not yet sustainable; scores < 75 indicate an opportunity for growth within the academic organization toward a culture of EBP; and scores < 100 and > 75 indicate an essential movement toward a sustainable culture of school-wide EBP. Validity of all the tools described in this section has been established and consistently performs reliability with internal consistency > 0.85 (E. Fineout-Overholt, personal communication, June 2, 2017).

2.3. Procedures

Study authors collaborated with tool authors to create an electronic survey to collect data for this study. A list of faculty teaching in the fall of 2016 was obtained from each program in the CON and CHP. Faculty were sent an email describing the study that included a URL to take study participants to the electronic survey. Time to complete the survey was approximately 25 min. In order to increase the response rate program chairs and directors in the CON and CHP were asked to announce the study at their faculty meeting. The initial survey was sent October 2016 and monthly follow up emails were sent through December 2016.