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Personal Attributes Contributing to EBP Adoption by Nurses: Commitment, Empathy, and Reflection

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Introduction

Since exposing the medical error crisis in the 1990s, new evidence surpasses earlier estimations. More recently, Makary & Daniel (2016) estimated medical error to be the “third biggest cause of death in the US” (p.1) following heart disease and cancer. Evidence-based practice (EBP) has been shown to improve patient care outcomes, and its adoption is recommended by national healthcare and quality organizations as the ‘gold standard’ of care. (Melnyk, B. M., Grossman, D., Chou, R., Mabry-Hernandez, I., Nicholson, W., Dewitt, T..., & Flores, G., 2012) The EBP framework requires the integration of the current best evidence, patient preference and values, and clinical expertise. (Stevens, 2013) for the deliverance of quality nursing care while narrowing the research to practice gap. (Boren & Balas, 1999; Melnyk & Fineout-Overholt, 2005) Organizations continues to pursue strategies to promote and sustain EBP although adoption of EBP by nurses, is less than optimal. (Melnyk, Grossman, Chou, Mabry-Hernandez, Nicholson, DeWitt, Cantu, & Flores, 2012)

An extensive review of the literature in multiple databases, across multiple domains including nursing, psychology, business, and medicine, produced more than 500 relevant articles. Selection of the study variables was informed by the body of literature in neuroscience and the relationship of metacognitive and cognitive processes on learning and behavior.

Empathy is defined as a cognitive process achieved innately or by training and manifested by the nurse by their emotional alignment with another person’s state (Schantx, 2007) in understanding the other’s experience. Empathy is critical to building nurse-patient relationships and has an impact on patient outcomes, nurse satisfaction, and promotion of learning. (McKenna, Boyle, Brown, Williams, Molloy, Lewis, & Molloy, 2012)

Reflection is a metacognitive process manifested by the nurse in the evaluation of personal motives, values, and outcomes of actions in forming future actions in a self-reflective process. (Bandura, 2001; Frith & Frith, 2012) Reflection leads to self-awareness as a continuous process of learning and knowing feelings and behaviors and how they affect others. (Racheed, 2015, p.213; Frith & Frith, 2012). Self-awareness, reflective thinking, and reflective practice have been shown to impact performance, patient care outcomes, and nurse satisfaction. (Duke & Appleton, 2000; Frith & Frith, 2012; Hojat, Louis, Markham, Wender, Rabinowitz, & Gonnella, 2011; Ward, Cody, Schaal, & Hojat, 2012; Lehman, Greener, & Simpson, 2002; Powell, 1989; Teekman, 2003)

OC is a widely researched business concept as a means to understand organizational change strategies, individual attitude toward organizational change, commitment to the

goals, and job performance as well. (Conway & Briner, 2012; McNeese-Smith, 1995; Meyer, Irving, & Allen, 1998; Smith, 2009; Susanty & Miradipta, 2013) OC is defined as an attitude that reflects one's alignment with organizational goals as established by the organization they work in, a willingness to contribute to the organization they work in, and a desire to maintain a relationship with the organization they work in. (Liou, 2008) Organizational Commitment (OC), empathy, and reflection are concepts which have been shown to positively impact organizational and patient care outcomes and facilitate adoption of innovations such as practice changes; however, studies evaluating their effect on adoption of EBP, have not yet been reported and was the focus of this study. The purpose of this study was to determine the relationship of nurses' individual intrinsic attributes namely, OC, empathy, and reflection, and how these three attributes may be related to successful or failed EBP adoption by nurses. The Quality Caring Model (Duffy and Hoskins, 2003) was chosen for this study as it provides a framework to study complex relationships across the continuum of care.

Methods

This was a descriptive correlational study examining 474 registered nurses at all levels of education, recruited via email or in person, from five national and regional professional organizations and one university in the United States (U.S.). Four valid and reliable instruments were selected to measure the relationship of the variables respectively, the Three Commitment Model (Meyer, Allen, & Smith, 1993), the Empathy Components Questionnaire (Batchelder, Brosnan, & Ashwin, 2017), the Self-Reflection and Insight Scale (Grant, Franklin, & Langford, 2002), and the Evidence-Based Practice Implementation Scale (Melnyk & Fineout-Overholt, 2003) This research was approved by the Institutional Review Board of the candidate's university as well as participating organizations. Informed consent was obtained, and confidentiality was maintained.

Findings

A total of 474 nurses completed the survey. The sample population was predominately white females spanning evenly across age groups, and educated in the U.S. with a baccalaureate or master's degree. The majority of the nurses worked on Mother/Baby (35.2%) and Medical-Surgical (19.6%) units. Only 12.2% had reported they had never received EBP training and 50.8% reported they had not participated in empathy training in the past. Whilst 91.8 % of participants had implemented EBP in practice.

It was hypothesized that empathy, reflection, and organizational commitment would each be positively correlated with EBP adoption. A Pearson r correlation was computed for the ECQ overall and the four sub-scales and were not significant. For self-reflection, results were a significantly positive weak correlation between the overall SRIS scale and self-reflection sub-scale, but not significant for the insight sub-scale. This indicates that the overall self-reflection and self-reflection subscale are significantly correlated to EBP. For OC, results of the Pearson r was a weak significant correlation for the overall three-component model of commitment indicating that the overall organizational commitment scale was correlated to EBP alone with both affective commitment and continuance commitment.

The fourth hypothesis stated that each independent variable would contribute to EBP adoption in a significant way when combined. This hypothesis was analyzed two ways using a multiple regression. The results of the ANOVA was statistically significant and

explained 5.3% of the variance in predicting EBP. All three variables significantly predict EBP.

The fifth hypothesis predicts that one variable contributes more to EBP adoption than the others. Through regression analysis we found they both contribute equally to predicting EBP. Empathic drive had the highest beta and indicates that this is the strongest contributor to EBP, but total empathic was the second highest.

Interpretation

EBP implementation has been widely studied and clear barriers and facilitators have been identified yet, more than 50% of nurses have not adopted this practice according to previous studies. In contrast, this study demonstrated 91.8% of nurses across the U.S. have implemented EBP in their practice. This can be related to the many initiatives requiring and or supporting EBP in nursing in the last decades. Of note, there has been a large increase in the focus on Magnet designation, increasing since its inception in 1993 to 8 % of all hospitals. (American Nurses Credentialing Center, 2018)

The findings of this study demonstrate that OC, empathy, and reflection significantly predict EBP adoption by nurses accounting for 5.3% of the variance. The literature does support that while women scores higher on empathy scores than men, it is likely attributed to the empathic drive which appears to be innate in females. (Batchelder et al., 2017) Our sample was 94.2% female and the aforementioned would be consistent with this population characteristic.

While there was a weak significant correlation between OC and EBP adoption, this was influenced by affective and continuance commitment. This indicates that those nurses who adopt EBP do not stay at their jobs out of a sense of obligation but because they desire to remain in their current organization. Furthermore, they have a sense of “needing” to stay and they consider the impact that leaving the organization would have for them.

Self-reflection was significantly correlated with EBP adoption, but the subscale insight was not. Self-reflection is a process guided by reflective thinking as a metacognitive process that has been demonstrated to affect behavior and improve performance. Metacognitive processes also direct cognitive processes such as empathy. Current literature supports that metacognition influences how we think and learn. Considering the adoption of EBP as a practice change, those with stronger self-reflective practices would understandably have higher EBP adoption scores as reflective processes drive and shape practice behaviors.

Implications for Nursing practice

Evidence has shown that adopting an evidence-based practice reduces poor outcomes and increases staff satisfaction and retention. Increasing knowledge about the influences of individual characteristics on nursing practice can help guide education and practice. Those who are resistant or struggling with adoption of EBP might be supported with training in reflective practice. Nursing recruitment departments and schools of nursing can assess the organizational commitment of candidates during the pre-selection process. Human Resources departments might develop programs to support further development of OC during the orientation and beyond.

Future Research

Future research might be conducted to examine the relationship between outcomes such as nursing sensitive indicators with OC and self-reflection. An in-depth

examination of the influence of gender on empathy would help to shed light on the construct muddled in previously reported studies. Finally, more studies using U.S. nursing populations would validate generalizability of other OC studies performed outside the U.S.

Title:

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Keywords:

Evidence-based Practice (EBP), Organizational Commitment and Reflection

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Abstract Summary:

Evidence-based practice (EBP) has been deemed the gold standard in providing health care yet, the adoption of EBP by nurses has been challenging. Appreciating the literature from business and the neurosciences, this study sought to examine the effect of personal attributes: organizational commitment, empathy, and reflection on individual EBP adoption.

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