FISEVIER

Contents lists available at ScienceDirect

Applied Nursing Research

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



Original Article

Developing a tool that explores factors influencing the adoption of evidence-based principles in nursing practice in Jordan



Muwafaq M. Al-Momani, Msn, PhD ^{a,*}, Marwa A. Al-Barmawi, Msn, PhD ^b, Lourance Al-Hadid, Msn, PhD ^{c,1}, Ahmed Aljabery, MSN ^{d,2}

- ^a Princess Aisha Bint Al-Hussein Collage of Nursing and Health Sciences, Al-Hussein Bin Talal University, Ma'an, Jordan, 71111
- ^b Department of Adult Nursing, Faculty of Nursing, Alzaytoonah University, Amman, Jordan, 11733
- ^c Al-Hussein Bin Talal University, Princess Aisha Bint Al-Hussein Collage of Nursing and Health Sciences, Ma'an, Jordan, 71111
- ^d Al Ghad International Colleges for Applied Medical Science, Nursing Department, Tabouk Campus-Male, Tabouk, Saudi Arabia, 71491

ARTICLE INFO

Article history: Received 3 February 2016 Revised 24 June 2016 Accepted 5 July 2016 Available online xxxx

Keywords: Evidence-based Factors Jordan Nursing practice Tool validation

ABSTRACT

Aim: To measure the psychometric properties, reliability and validity of a tool that explores factors influencing the adoption of principles of evidence-based in nursing practice in Jordan.

Background: The use of principles of evidenced-based practice in nursing practice has been widely endorsed in many countries around the world; these principles have not yet been implemented in Jordan. Factors influencing the adoption of evidence-based practice in Jordanian nursing context were not identified to date.

Methods: A descriptive, cross-sectional research design approached experienced nurses from different specialties across Jordan (3 military, 3 governmental and 5 private hospitals).

Results: The psychometric properties indicated a valid and reliable tool. It consisted of three factors: personal characteristics; source of professional knowledge; and organizational environment.

Conclusions: Findings provided evidence on the impact of the identified factors on nurses' adoption of evidence-based practice. Although tests in this report showed the validity of this new tool, it still requires further testing to ensure its stability over time.

© 2016 Elsevier Inc. All rights reserved.

1. Background

Evidence-based practice (EBP) movement has gained a considerable attention in many countries around the world during the past two decades (Gerrish et al., 2007). With the availability of valid evidence from research, adopting EBP may still be impeded by factors that keep progressing toward becoming an adopted model in nursing practice (Dalheim, Harthug, Nilson, & Nortvidt, 2012). Although emphasized by the Jordanian Nursing Council (JNC) as a crucial component of nursing care (JNC, 2010), EBP can rarely be observed in nurses' daily activities and practices (Al Hadid, Abu Hasheesh, & Al Momani, 2011). In addition, there is an extremely limited literature exploring factors influencing the adoption of EBP in nursing practice in Jordan despite JNC efforts to promote this model in Jordanian nursing practice, which

include the development of clinical evidence-based guidelines for nurses. With the absence of tools that explore these factors, the promotion of EBP can be seen as difficult.

Tools investigating factors that influence adopting EBP have been

Tools investigating factors that influence adopting EBP have been developed, tested and validated in different nursing cultures and disciplines worldwide, mainly in the USA and the western countries. However, none of these tools were located in the Middle East, particularly Jordan. Although there is an increased awareness of the importance of EBP in nursing practice in Jordan, factors that influence the adoption of this model has not been explored yet. Therefore, this study reports the process of developing, validating and testing a tool that explores these factors among nurses in Jordan.

2. Factors influencing evidence-based nursing practice

Since 1990s, efforts to facilitate adopting EBP in nursing have increased worldwide (Baumbusch et al., 2008). Many nursing experts are shifting clinical expertise from book-based practice that utilizes individual experience into evidence based practice integrating empirical evidence to build EBP (Adib-Hajbaghery, 2009). However, effort of those experts to move toward EBP usually encounters factors that deter or delay the achievement of this target (Kajermo et al., 2010).

^{*} Corresponding author at: Jordan, Maan, PO Box 20. Tel.: +962~32179000, +962~777661238, +962~796021441; fax: +962~32133608.

 $[\]label{lem:email} \textit{E-mail addresses:} \ muwafaq_almomani@hotmail.com, M.Al-Momani@ahu.edu.jo (M.M. Al-Momani), Tazco003@yahoo.com (M.A. Al-Barmawi), Lourans71@hotmail.com (L. Al-Hadid), Jabery.gimsct@gmail.com (A. Aljabery).$

¹ Tel.: +962 79 616 8012.

² Tel.: +966 543 809 412.

Literature addressed a variety of factors that influence the adoption of EBP in nursing practice (Al Hadid et al., 2011; Kajermo et al., 2010). Of these factors were misconceptions about EBP where nurses might not be fully aware of the defining characteristics of this model of practice. Misconceptions about EBP can be related to factors like nurses' lack of awareness of the role of research input in clinical standards (Koehn & Lehman, 2008). Another factor is the inability to generalize research results to make them applicable in the daily practice (Hannes et al., 2007).

During their undergraduate preparation, nurses are usually taught how to identify and appraise research, but they are not challenged with the applied parts of research, including implications (Olade, 2005). At the time when they are provided with a research article, nurses often encounter difficulty trying to implement implications, especially those recommendations that can be transformed into nursing actions (Wallen et al., 2010). This leaves nurses in need of depending on other resources for learning, such as senior nurses and inherited practices that can be hardly justified (Dalheim et al., 2012).

Nurses working individually may not find their way into determining the quality research they need even when published in scientific journals. This is particularly relevant when much of the research related to nursing practice is primarily published in either nursing or nonnursing journals, which require fees (Koehn & Lehman, 2008). Although open access journals are becoming more widely spread, there are still issues concerning which research that can be considered as a reference to build evidence-based practice. In addition, building EBP requires more than what has been published in these accessible journals. Even the nursing literature where evidence can be accessed and extracted by nurses, it is still not always available.

Other factors that may restrict the use of EBP include lack of time; understaffing; limited organizational and administration support (Brown, Wickline, Ecoff, & Glaser, 2009); weak beliefs in the anticipated outcomes of research (Koehn & Lehman, 2008); and lack of nurses' authority and autonomy to produce change in practice (Adib-Haibaghery, 2009). Research appraisal is another issue of concern as the validity of research evidence and the process of integrating evidence into practice have considerable impact on professional nursing practice toward meeting patient's needs (Gerrish, 2005). Clinical proficiency of nurses and their ability to perform research appraisal are crucial components of the process of finding evidence and applying principles of EBP. Once able to do so, nurses can then make decisions based on value of evidence and patient preference and consequently plan alternative models for care (Melnyk et al., 2004). However, failure to apply EBP would be due to the fact that nurses are either unable to identify evidence or do not have time to do so. Additional barriers reported in the review included limited funding for nursing research and a lack of incentives for evidence-based action (Pravikoff, Tanner, & Pierce, 2005).

Although considerable literature examining barriers to EBP in nursing is widely present internationally, similar studies could not be located in Jordan to address these factors using a valid tool. In addition, the tools utilized in these studies focused mainly on the barriers with limited attention to the facilitating factors that would promote better EBP among nurses or ranked in different tools (Wang, Jiang, Wang, Wang, & Bai, 2013). By examining how nursing is moving in the world toward the adoption of EBP principles in nursing practice, it is therefore timely to examine this particular subject using a valid and reliable tool in addressing nurses and nursing practice in a Middle Eastern country like Jordan.

3. Aim

This study measured the psychometric properties, reliability and validity of Evidence-Based Nursing Questionnaire (EBNQ) developed to assess factors influencing the adoption of EBP in nursing practice in Jordan.

4 Methods

4.1. Design, setting and participants

A descriptive, cross-sectional research design was used in this study. The study was conducted in eleven hospitals (three military, three governmental, and five private hospitals) across Jordan with a total capacity of 250–1100 beds. A convenience non-probability sample of 340 nurses from different settings completed the study questionnaire.

4.2. Statistical analysis

Data analysis was performed using SPSS 20. Central tendency and distribution of scores of the EBNQ were examined for normality using Q-Q plot and Kolmogorov–Smirnov goodness of fit statistic. Exploratory factor analysis using principal components with list wise deletion of missing data was used with a cut-off point of 0.60 (Field, 2000; Tabachnick & Fidell, 2007). The internal consistency of the scale was also calculated using measures like Cronbach's alpha.

4.3. Instrument development

The first step in developing EBNQ was a review of current literature to find how the concept of 'evidence-based' in nursing practice was used and evaluated in existing tools and in instruments closely related to this concept (Goodwin, 2005). All tools had different definitions for the categories/themes of evidence-based in nursing practice. Many of these tools were still in their early stages of development, and there was hardly any tool providing a reliable and accurate measure of this concept. As the researchers could not locate a tool that serves the aim of this study, a decision was made to develop EBNQ.

Assuring content validity of EBNQ involved four steps. Firstly, to ensure a comprehensive search, a range of databases were selected to conduct this search, including CINAHL, ProQuest, PubMed, Science Direct, Wiley Online Library, and the Cochrane Database of Systematic Reviews. The following terms were used as keywords for to guide the initial search: evidence-based; nursing; and nursing practice. Terms then were meshed to achieve the maximal number of documents from the search. When a citation was found, links to other studies from the reference list were also explored. The search was widened through further searches conducted on the names of authors of research articles found in the initial search, as well as on the names of their projects.

Secondly, thematic analysis of the available documents from the first step was performed. The result was the formulation of general and specific themes with similar ones were collected into groups. These groups were then transformed into statements to reflect their meanings each under its underlying theme. A questionnaire was then developed with these statements representing three main themes exploring factors influencing EBP in nursing practice. The themes were; personal characteristics; sources of professional knowledge; and organizational environment. This version of the questionnaire was sent to five nursing experts in the field of EBP. In a period of three weeks, those experts reviewed the items of the questionnaire and suggested a list of descriptions they found necessary to include under each theme. These descriptions were matched with the themes, and the researchers highlighted the similarities and discussed the differences with the experts. Finally, by consensus, the researchers and the experts reached an agreement on the themes and their related factors. They all agreed that these items adequately assessed factors influencing EBP in nursing. This resulted in identification of the three factors influencing implementing evidence-based in nursing practice.

Thirdly, the logical consistency of the statements forming the themes of the tool was evaluated by five nurses with doctoral degrees. A 60-item set of factors influencing adopting EBP in nursing was critically reviewed to evaluate their relevance by using a self-administered questionnaire submitted to 12 nurses. The nurses were asked to judge

Download English Version:

https://daneshyari.com/en/article/2644745

Download Persian Version:

https://daneshyari.com/article/2644745

<u>Daneshyari.com</u>