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Hospital nurses' perception of evidence-based practice: A descriptive-analytical study

Parisa Soleymanifar[1], Aziz Kamran[2], Milad Jafari[3], Mohammadtaghi Savadpoor[4], Khadijeh Nasiri[3]*

[1] Department of Medical Surgical, Kermanshah University of Medical Sciences, Kermanshah, Iran
[2] Department of Health Education, Ardabil University of Medical Sciences, Ardabil, Iran
[3] Department of Medical Surgical, Khalkhal University of Medical Sciences, Khalkhal, Iran
[4] Department of Medical Surgical, Faculty of Nursing and Midwifery, Ardabil University of Medical Sciences, Ardabil, Iran

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ABSTRACT

Background & Aim: Evidence-based practice refers to the use of the best research evidence, personal knowledge and clinical expertise, and patients' values and preferences for the provision of healthcare services. This study aimed to evaluate hospital nurses' perception of evidence-based practice.
Materials & Methods: This descriptive-analytical study was conducted in 2015 on 374 nurses randomly recruited from five teaching hospitals in Ardabil and Khalkhal, Iran. Data were collected using the Evidence-Based Practice Questionnaire and analyzed through the SPSS software (v.13.0).
Results: The total mean scores of nurses' perception of evidence-based practice and its practice, attitude, and knowledge/skills domains were 107.40±18.76, 4.66±1.34, 3.63±1.48, and 4.63±1.03, respectively. The mean scores of these domains had significant correlations with each other (P<0.05).
Conclusion: Nurses' perception of evidence-based practice is at moderate level and hence, they have moderate readiness for evidence-based practice. Coherent policies, educational strategies, and environmental improvements are needed to improve nurses' perception of evidence-based practice.

Introduction

Nurses constitute the biggest group of healthcare providers worldwide. They are responsible for the provision of about half of all healthcare services. Therefore, the quality of healthcare services largely depends on the quality of nursing care services (1).

Because of their critical roles in care delivery, nurses need to continuously develop their knowledge and skills and keep their knowledge up-to-date (2). They need to acquire knowledge about the newest evidence on nursing practice (4).

The American Association of Colleges of nursing introduced the ability to provide evidence-based nursing care as a striking characteristic of quality nursing care (3). Thus, healthcare providers have become interested in evidence-based practice (EBP) (5, 6).

Nurses consider professional care delivery, patient-centeredness, and quality care as the core concepts of EBP (7, 8). However, the aim of EBP is to use knowledge and the results of the latest clinical researches based on patient's conditions in order to provide healthcare services (9–11). EBP has four main phases, namely changing a clinical scenario to an answerable and organized question, searching the literature to find the best evidence for answering the question, critical appraisal of the evidence to assess

*Corresponding Author: Khadijeh Nasiri, Postal Address: Department of Medical Surgical, Khalkhal University of Medical Sciences, Khalkhal, Iran. Email: khadije.nasiri@yahoo.com

its validity and applicability, and integrating the acquired data into clinical practice (12).

EBP is the core of advanced nursing practice. Yet, nurses do not use EPB due to their lack of knowledge about it (13). A study on 120 critical care nurses reported that they had limited knowledge about evidence-based prevention of ventilator-associated pneumonia (14). Another study also reported that 58% of nurses in the United States had never used the Medline database (15). Similarly, a study in Iran showed that although nurses had positive attitudes towards EBP, most of them had poor EBP-related knowledge and practice (16). Another study in Iran showed that 74% of educational managers and 86.7% of clinical managers were indifferent to EBP and only 14% of educational managers and 6.7% of clinical managers had positive attitudes towards it (18). The main barriers to EBP were reported to be time limitation (17), managers' indifference, and non-supportive organizational climate (19).

Despite the positive effects of EBP on the quality of healthcare services, there are limited studies in the area of EBP in Iran. The most primary and the most important step to the implementation of EBP is to assess its current status. Therefore, the present study was conducted to evaluate hospital nurses' perception of EBP.

Methods

This descriptive-analytical study was conducted in 2015 on nurses in five teaching hospitals affiliated to Ardabil and Khalkhal Universities of Medical Sciences, Ardabil and Khalkhal, Iran.

For sampling, the total number of nurses in each hospital was determined and then, a proportionate sample of nurses was randomly selected from each hospital through simple random sampling. Inclusion criteria were a clinical work experience of more than one year and a bachelor's degree or higher in nursing.

Sample size was calculated to be 400. Sample size calculation parameters were a mean of 4.58, a standard deviation of 1.5 (24), and a type I error of 0.05.

Data collection tool was the Evidence-Based Practice Questionnaire. This questionnaire was developed by Upton and Upton in 2006 for the measurement of nurses' perception of EBP. It includes 24 items in the three main domains of practice, attitude, and knowledge/skills. The first six items assess nurses' practice on a seven-point Likert scale from 1 ("Never") to 7 ("Frequently"). Items 7–10 assess nurses' EBP-related attitude on a seven-point spectrum ranging from negative attitude (scored 1) to positive attitude (score 7). Items 11–24 are related to nurses' EBP-related knowledge/skills. These items are scored on a seven-point scale from 1 ("Poor") to 7 ("Best").

The possible total scores of the questionnaire and its domains are respectively 1–168 and 1–7, with higher scores showing better EBP perception. The validity and reliability of this questionnaire were confirmed in an earlier study which reported that the Cronbach's alpha values of the questionnaire and its practice, attitude, and knowledge/skills domains were 0.84, 0.87, 0.67, and 0.79, respectively (38).

The data were analyzed via the SPSS software (v. 13.0). The scores of nurses' EBP-related practice, attitude, and knowledge/skills were described through the measures of descriptive statistics such as mean, standard deviation, and relative frequency. The correlations among nurses' EBP-related practice, attitude, and knowledge/skills were examined using the Pearson's correlation analysis. The level of significance was set at less than 0.05.

This study received ethical approval from the Ethics Committee of Ardabil University of Medical Sciences, Ardabil, Iran (approval code: IR.ARUMS.REC.1395.187).

level which is in line with the findings of several earlier studies (21–24). However, a study in Oman found that nurses had positive attitudes towards EBP (25). A study in Iran also showed that more than half of the instructors of a leading nursing and midwifery faculty believed that EBP was inconsistent with the realities of the Iranian community and hence, its implementation was almost impossible (26).

The highest item mean score in the knowledge/skills domain was related to the item "Ability to apply information to individual cases". This contradicts the findings of three earlier studies which reported that the highest item mean score in the knowledge/skills domain was related to the item "Sharing of ideas and information with colleagues" (20, 21) and the item "Ability to identify gaps in your professional practice" (26). Moreover, in line with the findings of earlier studies (15, 21–23), our findings revealed that nurses' EBP-related knowledge/skills was at moderate level. A study reported that only 24% of nurses attempted to find answers to their questions through health-related databases (15). Therefore, nursing curricula should be revised to include courses on searching, appraising, and using evidence for clinical practice.

We also found significant pairwise correlations among the domains of nurses' perception of EBP. Two earlier studies also reported the same finding (21, 28). Therefore, improving nurses' EBP-related knowledge, skills, and attitudes and then, providing them with adequate organizational support can be effective in promoting their EBP.

This study concludes that hospital nurses' perception of EBP is at moderate level, denoting that they have moderate level readiness for EBP. Therefore, strategies are needed to improve their EBP-related perception and readiness. The most important strategies for this purpose may include development of coherent policies and educational programs and improvement of organizational and clinical environments.

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Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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