

## Barriers of Evidence Based Practice in Saudi Arabia

Fatimah A.Ghulman<sup>1</sup>, Olfat A.Salem<sup>2</sup>, Fatma M. Baddar<sup>3</sup>, Murad A. Mubarak<sup>4</sup>

*Bsn, rn, msn; bsn, msn phd; bsn, msn, phd; b.sc., m.sc., ph.d.*

<sup>1</sup>Director of Nursing Human Resources, General Directorate of Nursing, Ministry of Health, Riyadh, KSA

<sup>2</sup>Nursing Administration and Education Department, College of Nursing, King Saud University, Riyadh, KSA.

Nursing Administration Department, Faculty of Nursing, Menoufia University, Menoufia Egypt

<sup>3</sup>Nursing Administration and Education Department, College of Nursing, King Saud University, Riyadh, KSA  
and Nursing Administration Department, Faculty of Nursing, Alexandria University, Alexandria, Egypt

<sup>4</sup>Clinical Laboratory Sciences Department, College of Applied Medical Sciences, King Saudi University,  
Riyadh, KSA

Corresponding Author: Fatimah A.Ghulman

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**Abstract:** Healthcare has become more challenging as patients, who know well about health care issues, demand a safe and effective health care. Evidence-based practice contributes in the provision of safe and compassionate health care as well as in the development and maintenance of competent nursing practice. Aim of the Study: The aim of this study is to assess the Evidence-based practice Barriers as perceived by Saudi Arabia nurses. Methodology: Theoretical framework Rogers' Diffusion of Innovation Theory is considered as the theoretical framework of the study. Design: Quantitative description study. Setting: The study conducted in A health care organization, affiliated with ministry of health (MOH) in Riyadh, Saudi Arabia selected as the setting of the study. Sample of the Study: Quota sampling technique used to determine the sample of the study. 795 nurses completed the questionnaires with response rate (93.52 %). The data collection tool of this study was the BARRIERS to Research Utilization Scale. Results: Findings of the study pointed out that the organization factors earned the highest overall barrier rating, followed by communication, adopter, and innovation. Four of the top five barriers related to the organization were based on nurses not having enough authority to change patient care procedures by themselves which was considered the greatest barrier of EBP as perceived by nurses working at the study's setting. Conclusion and Recommendation: The study concluded that MOH nursing Policymakers have new challenges in terms of organizational support and creating an organizational culture based on EBP to further promote utilization of research findings on daily nursing practices and recommended Further instructive initiatives should be formed to raise the awareness of the nurses regarding the importance of using the best scientific evidence in practice.

**Keywords:** Evidence-based practice; Barrier; nursing.

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### I. Introduction

Healthcare in Saudi Arabia(S.A) has improved since hospitals were initiated in the 1950s. The society's need for cost control, high-quality care, and documented outcomes of health-care services will continue to provoke positive health-care developments. Nursing is the basic stone of the health care delivery system in any organization; the roles of nurses in such systems are expanding and constantly changing. Similarly, research is the basis for knowledge development and evidenced-based practice capitalizes this fact (1). Evidence-based practice (EBP) meets the society's need for safe, high-quality, efficient, and effective health care and also employs fairness and accountability.(2,3). As nursing is necessary for the society in providing high-quality care, nurses must help fill in the gap that is evident between research findings and their application into practice.(4). Understanding the barriers between research findings and their application at Ministry of Health Hospitals will promote the utilization of Evidence-based in practice. In the same time, merging the EBP philosophy within the body practice of nursing care will improve the quality of nursing care and increase the level of patients' satisfaction. (5, 6,7). In the new health-care era, professionals, healthcare organizations, policy-making bodies, and the community have recognized the importance of evidence-based practice (8, 4. ). Many hospital managers and insurance companies encourage the use of EBP to prevent malpractices and lack of experiential support to reduce conflict and increase efficiency and quality of healthcare(9). Today's nursing practice demands the using of information management skills to provide best practice and high-quality patient care outcomes(10 )

Moreover (Upton & Upton, 2005) revealed that Evidence-based practice can be used as a framework that allows clinicians to ensure that their care is up to date with the current researchers in their field.(11 ). Traditionally, nursing decisions in patient care have been derived from rituals, traditions, communication with

other nurses, knowledge gained in nursing school or preferences of medical providers (12, 13) Research reported that patients who received care based on the best and latest evidence from well-designed studies had 28 % better outcomes in behavioural knowledge as well as physiological and psychosocial outcomes than patients whose care was based on traditional practice(14). Furthermore, practitioners who utilize EBPs have better judgment and are more accurate in their diagnoses (15). The widely recognized evidence-based movement has shown that Evidence-based practice is of major importance worldwide(16). EBP leads to enhance the cost-efficient, & the opportunity for optimal clinical outcomes and quality of life (6,8), to ensure the best outcomes for populations in areas with limited health-care choices and resources(17).

The Joint Commission of International Accreditation for Healthcare Organizations (JCIA) recognized evidence-based practice as a significant step in improving health care quality(18). In addition, the American Nurses Credentialing Center (ANCC) considered the use of evidence-based practice in nursing care a key component of the Magnet program which revealed excellence in nursing care, high public confidence and improved recruitment and retention of registered Nurses(19) Moreover, The International Council of Nurses (ICN) has demonstrated commitment to both nurses' active participation in nursing research and the 'use of research to inform evidence-based practice'(20) Since researchers showed that healthcare professionals find practice more rewarding when engaged in EBP, studying the nurse's perception of the barriers of EBP will contribute to a new understanding of integrating EB into practice. This movement could help facilitate the retention of nurses when nursing is facing severe shortages. (21). Aim of this study is to assess the Evidence-based practice Barriers as perceived by SA nurses

## **II. The Material And Methods**

### **A. Theoretical Framework:**

Rogers' Diffusion of Innovation Theory is considered as one of the most extensively used theoretical frameworks in EBP studies(22,23,24,25,26,27,28,29 )diffusion, as defined by Rogers, is the process by which an innovation is communicated over time among the members of a social system. The main elements of the diffusion theory are innovation, communication channels, time and the social system (22). As applied to EBP, research findings or evidence represent the innovation, the report or presentation of the research findings represent the communication and the healthcare setting represents the social system. (24, 30)

### **B. Research design:**

A quantitative Cross-sectional descriptive correlational design was used in this study.

### **C. Setting:**

A tertiary care health facility, which represents the largest, most important and oldest health care organization affiliated with a ministry of health (MOH) in Riyadh, Saudi Arabia, was selected to be the setting where data is collected in this study. The tertiary was accredited nationally by Central Board for Accreditation of Health Care Institutions (CBAHI) and is in preparation to be accredited internationally by the Joint Commission International Accreditation (JCIA).

### **D. Subjects and sampling plan**

There was approximately 2500 professional nurse from which 1748 are working in In-patient units. An emphatic analysis was done to determine the number of participants needed. In the study, the following parameters used an alpha level of 0.05, an anticipated effect size of 0.35, and desired statistical power level of 0.8; the power analysis minimum required sample size is 394 subjects. Quota sampling technique was used to determine a specific number of nurses in each unit. The representative sample which was drawn from the subjects for this study was (n= 850). From the previous survey studies guided by the Barriers scale for nurses in Saudi Arabia, the sample size was n = 115 & the response rates were 76.7 % (16). Moreover, in (Omar, 2012) the sample size was n = 413 & the response rate was 34.42%), (31)whereas in the current study the sample size is n = 795 & the response rates are 93.52 %. Almost (795) of the (850) registered nurses completed the questionnaires. The response rate is therefore nearly (93.52 %).

### **A. Data Collection Tool:**

The data collection tool of this study was the BARRIERS to Research Utilization Scale which developed by the research team of (Funk et al., 1991a), as well as a demographic data part. The BARRIERS scale contains 29 multiple barrier items that fit into four classifications (Factors) and describe the (a) nurse (adopter), (b) setting (organization), (c) research (innovation), and (d) presentation (communication), for each item, participants will be asked to select the response that best describe their perception using 5-point Likert scale. The questionnaire had a reliability coefficient of 0.74

### **B. Ethical considerations:**

Permission was obtained from the nursing administration of the hospital. In doing so, ethical code of conduct was strictly adhered to in this study and verbal consent was obtained from all participants. All the respondents were notified that their personal data would be kept confidential and anonymity would be maintained.

### **III. Results And Discussion**

The result of the study showed that participants rated nearly two-thirds of Barrier Scale items as moderate to the little extent. Findings of the study pointed out that the organization factors earned the highest overall barrier rating, followed by communication, adopter, and innovation. Four of the top five barriers related to the organization were based on nurses not having enough authority to change patient care procedures by themselves which was considered the greatest barrier of EBP as perceived by registered nurses working at the study's setting as shown in table 1. This barrier has not changed in the 23 years since Funk et al. reported it in 1991.(32)

Similarities and differences in perceptions of these barriers were found among staff, project leaders and administrators(33) (Time constraints are identified almost by all literature reviewed as the greatest barrier to the implementation of EBP(34.35.36). These findings might be the result of the workload as nurses each day have to do non-direct nursing care activities; which was confirmed by (Hommelstad & Ruland, 2004), who found that only 10 to 20 % of the nurses' time is contributed to direct nursing care activities(37). Additionally, in relation to barriers to the use of research by nurses, the barrier of "The nurse sees little benefit for themselves" was Getting the highest rating scale in comparing to the barrier of " the Characteristics of the nurse" which was perceived as a little extent barrier by the study subjects. This result contradicts (Strickland, & Rosemary 2009)) who found that the greatest barriers were organizational and nurse characteristics.(38) Most participants 53.8% held Diploma in nursing, while 44.8% held a Bachelor's degree and 1.3% had Associated Degree. Only one participant held a Master's degree. Despite their diverse nationalities and educational and social backgrounds, participants did not consider demographic characteristics like adopters the most significant barrier. This shows that the level of education is important to help prepare nurses for EBP. Many researchers proved that nurses may be highly motivated to base their practice on research evidence but they may not have the training necessary to locate, appraise, synthesize, and apply research findings into practice with confidence (39, 40) Also, the study illustrated that there were no differences in the perception between nurses who have a diploma, an associate degree, and a bachelor degree; this result was supported by (Koessler, 2009). This finding was expected because most diploma and associate degree programs have little or no research education included in their curriculum and, although bachelor level programs do require at least one research course, it may not be enough for a nurse to develop the research skills required to understand and incorporate research into practice.(41)

### **IV. Conclusions**

EBP is a mark of excellence of professional nursing practice and high-quality patient care. When nurses base their clinical decisions on research, they build a stronger foundation for respect and cooperation from other healthcare professionals. The current study addressed the primary information regarding MOH nurses perception toward the barriers of evidence-based practices, the results identified in this study are similar to those of prior studies conducted in other developed and developing countries. Nurse perceptions of factors impeding the implementation of research findings in practice relate mainly to organization characteristics, followed by communication through adopters, and finally the innovation of research. Based on the findings of the present study, and opportunities for EBP implementation, the recommendation will be in four fields, which are: nursing administration, management, practice, education, staff development and nursing research

### **V. Recommendations**

The Findings of this study provide policymakers and administrators with baseline information about barriers affected nurses' application of research evidence in their clinical practice. The nursing manager can develop strategies to increased knowledge and skills in EBP among health care professionals. Administrators can also encourage EBP environment, by asking for evidence to support nurses 'suggestions or recommendations for change in a clear way, so as to improve the patient's care and the nurse as an individual will feel encouraged, supported and valued. Nurses working in healthy work environments with a strong & supportive leadership, and minimal workload and work-related stressors, report significantly more research utilization than nurses working in less positive environments. EBP becomes the standard of care in healthcare and these changes must be made now in order for hospitals to continue to provide excellent care to their patients, integrating the EBP philosophy within the body practice of nursing care will enhance the quality of nursing care and advanced the level of patients' satisfaction.

MOH nursing Policymakers have new challenges in terms of the different approaches to promote the utilization of research findings as well as evidence-based practice on everyday nursing practices in the Saudi hospitals. Further instructive initiatives and researchers must be formed to raise the awareness of the nurses regarding the importance of using the best scientific evidence in practice. It is also important to understand the ability of clinical nurses to implement evidence-based practice in the actual practice environment and to

document the effectiveness of initiatives undertaken. Thus, future research related to the implementation of the EBP should be conducted in MOH hospitals.

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