Facilitators and Barriers for Research Utilization among Bachelor Nurses

Thesis

Submitted for Partial Fulfillment of the Requirements of Master Degree in Nursing Administration

By Elham Shawky Abd El Maksood

(B.Sc. Nursing)

Faculty of Aursing Ain Shams University 2018

Facilitators and Barriers for Research Utilization among Bachelor Nurses

Thesis

Submitted for Partial Fulfillment of the Requirements of Master Degree in Nursing Administration

Supervisors Dr. Samah Faisal Fakhry

Professor of Nursing Administration Faculty of Nursing, Ain Shams University

Dr. Nema Fathy Saad

Assistant Professor of Nursing Administration Faculty of Nursing, Ain Shams University

> Faculty of Aursing Ain Shams University 2018



First and foremost, I feel always indebted to **Allah** The most Beneficent and Merciful.

I wish to express my deepest gratitude and thanks to **Prof. Dr. Samah Faisal Fakhry,** Professor of Nursing Administration, Faculty of Nursing, Ain Shams University, for her unlimited help and valuable guidance. She was the actual spirit of this work, through her meticulous supervision and great support.

My deepest thanks and sincere appreciation are also due to **Dr. Nema Fathy Saad,** Assistant Professor of Nursing Administration, Faculty of Nursing, Ain Shams University, for her continuous help, critical supervision, fruitful guidance, and full cooperation.

A. Elham Shawky

Dedication

This Thesis is dedicated to my family.

First and foremost to my mother who had always been the greatest by-my-side multitalented resource one could

ever imagine having.

My father

&

All My Family

for their love, care and support that allowed me to accomplish this work.

Elham Shawky Abd El Maksood

List of Contents

Subject	Page
Subject	
Introduction	
Aim of the study	
Review of literature	
Research utilization	7
Concept of research utilization	8
Research process	9
Definition of research utilization	17
Types of research utilization	18
Research utilization in nursing	20
Barriers to RU in nursing practice	22
Facilitators/ Opportunities to RU	32
Research utilization Framework	35
Strategies for Research Utilization	38
Research Utilization Tools	44
Evidence based practice	47
Steps of Evidence based practice	50
Modules to facilitate change to Evidence	50
based practice	
Subjects and methods	
Results	72
Discussion	
Conclusion	

Qontents

Subject	Page No.
Recommendations	128
Summary	130
References	135
Appendices	170
Protocol	
Arabic summary	

List of Tables

Table No.	Title	Page No.
1	Demographic characteristics of nurses in the study sample (n=94)	73
2	Frequency of use of various sources of information and the activities done as reported by nurses in the study sample (n=94)	77
3	Perception of Research Utilization (RU) communication facilitators among nurses in the study sample (n=94)	79
4	Perception of Research Utilization (RU) organization facilitators among nurses in the study sample (n=94)	80
5	Suggestions for improvement and most important Research Utilization (RU) facilitators among nurses in the study sample (n=94)	83
6	Perception of Research Utilization (RU) barriers related to adopter among nurses in the study sample (n=94)	84
7	Perception of Research Utilization (RU) barriers related to organization among nurses in the study sample (n=94)	85
8	Perception of Research Utilization (RU) barriers related to research among nurses in the study sample (n=94)	87
9	Perception of Research Utilization (RU) barriers related to communication among nurses in the study sample (n=94)	89
10	Suggestions regarding total Research Utilization (RU) barriers among nurses in the study sample (n=94)	91
11	Relations between nurses' perception of RU communication facilitators and their demographic characteristics	92
12	Relations between nurses' perception of RU organization facilitators and their demographic characteristics	94

List of Tables

Table No.	Title	Page No.
13	Relations between nurses' perception of RU total	96
	facilitators and their demographic characteristics	
14	Relations between nurses' perception of RU	98
	adopter barriers and their demographic	
	characteristics.	
15	Relations between nurses' perception of RU	100
	organization barriers and their demographic	
	characteristics	
16	Relations between nurses' perception of RU	102
	innovation barriers and their demographic	
	characteristics	404
17	Relations between nurses' perception of RU	104
	communication barriers and their demographic	
40	characteristics	406
18	Relations between nurses' perception of RU total	106
10	barriers and their demographic characteristics	100
19	Relations between nurses' perception of total RU	108
20	barriers and facilitators	109
20	Relations between nurses' perception of total RU facilitators and various barriers	109
21	Correlation matrix of facilitators and barriers	110
<u> </u>	scores	110
22	Correlation between nurses' facilitators and	112
22	barriers scores and their characteristics	112
23	Best fitting multiple linear regression model for	113
43	the facilitators score	113
	the facilitatol 5 score	

List of Figures

Figure no.	Title	Page No.			
	Figures of Review				
I	Components of EBP	49			
II	Steps of the EBP process leading to high quality healthcare and best patient outcomes	51			
III	Stetler Model	53			
IV	Iowa model of evidence-based practice	55			
V	Model of evidence-based practice change	56			
VI	Melnyk and Fineout-Overholt's ARCC model	57			
VII	Johns Hopkins evidence-based practice conceptual model	59			
Figures of Results					
1	Distribution of the nurses in the study sample by work units (n=94)	74			
2	Frequency of search for RU information as reported by nurses in the study sample (n=94).	75			
3	Sources for search for RU information as reported by nurses in the study sample (n=94)	76			
4	Availability of various sources of information as reported by nurses in the study sample (n=94)	78			
5	Total perception of Research Utilization (RU) facilitators among nurses in the study sample (n=94)	82			
6	Total perception of total Research Utilization (RU) barriers among nurses in the study sample (n=94).	90			

Facilitators and Barriers for Research Utilization among Bachelor Nurses

Abstract

Background: Research utilization refers to the use of some aspects of a study in an application unrelated to the original research. Aim: The aim of this study was to investigate the facilitators and barriers for research utilization among bachelor nurses at Ain-Shams University Hospitals. **Subjects and methods**: This descriptive crosssectional study was conducted at all five Ain-Shams University Hospitals on 94 bachelor degree nurses with at least one-year experience in the setting. A self-administered questionnaire including a scale for the facilitators and barriers to use research in practice was used in data collection. The fieldwork lasted from September to November 2016. Results: Most nurses (92.6%) were females, with median age 34.0 years, and median experience 10.5 years. Only 6.4% of them nurses were often using Evidence-Based (EB) information, and 79.8% never applied research in practice. Overall, 80.9% of the nurses had high agreement upon the total facilitators. Their agreement upon barriers was highest for organization (83.0%) and lowest for research (50.0%) barriers; 73.4% had total agreement upon EBP barriers. A significant positive correlation was shown between nurses' scores of agreement upon total facilitators and barriers (r=0.371). The attendance of training in patient care and the frequency of searching literature were significant positive predictors of the total score of agreement upon facilitators, while the postgraduate education was a negative predictor. Conclusion and recommendations: The nurses in the study settings have low utilization of EB sources. Their agreement upon facilitators is higher than upon barriers. The attendance of training courses seems to have a positive impact on nurses' views of facilitators. The study recommends more efforts from hospital administration and nursing management to foster research utilization.

Key words: Barriers, Evidence-based practice, Facilitators, Nurses Research utilization.

Introduction

Scientific research that refines the current knowledge or results in new information is regarded as one of component of nursing practice. However, the process of incorporating good-quality research findings into nursing practice is not straightforward. This drawback resulted in initiation of terms of research utilization and evidence-based nursing into the world of professional nursing care during research development (*Holloway*, 2017).

Research utilization (RU) continuously express concern about whether nurses use the best available research evidence to guide their clinical practice (*Heydari*, 2014). This disparity between the availability of research evidence and its use in practice is often referred to as the "research-practice gap" (*Wallin et al.*, 2012). Research-practice gap have been highlighted in the nursing literature; most of the evidence is anecdotal due to difficulties surrounding attempts to measure whether or not nursing practice is research-based. It remains generally accepted however that a research-practice gap exists (*Majid et al.*, 2011).

Evidence-based practice (EBP) and research utilization (RU) are interrelated concepts that pertain to the identification, utilization and application of knowledge from research sources to clinical practice. EBP has been defined as "the integration of clinical expertise, patient values, and the best research evidence into the decision-making process for patient care" (*Andrews et al., 2015*). RU is a sub-set of EBP, which refers to "that process by which specific research-based knowledge is implemented in practice" (*Peters et al., 2015*).

The concern about the span of time between discovery and utilization became more intense, when it was discovered that many of the findings from research were not being used. Commentators have noted that progress in utilizing the results of nursing research studies in practice has preceded too slowly and a gap between research and practice has appeared. Time lags are the time between the discovery and utilization of knowledge. It has been estimated that the uptake of new medical discoveries into clinical practice progresses is at a rate of only 14% after 17 years (*Seyyedrasooli et al., 2012*).

The International Council of Nurses (ICN) at the occasion of the 100th International Nurses' Day released a

statement with the title "Closing the Gap: From Evidence to Action". The Lancet in response immediately published an editorial pointing out its lateness and implying that contemporary nursing is not evidence-based (*Thorsteinsson*, 2013); this is alarming. Therefore, a number of investigations have been conducted to identify the barriers for RU among nurses (*Barría*, 2014).

The results of several studies indicated that application of research findings improves clinical outcomes (*Walker*, 2014). Nurses as one of the main members of the professional health team should be able to provide best quality care to patients according to the evidences that originated from studies and patient preferences. Nurses' research utilization (RU) is strongly emphasized in today's nursing education and clinical practice; the primary aim of RU is to provide high quality nursing care to patients (*Shelley et al.*, 2015).

Researchers and Experts in the area utilization across disciplines began addressing the problem; examine reasons for the lack of utilization and to propose strategies to improve it. Scientists are gaining insight into the process that occurs in the transfer and utilization of new knowledge. The transfer of knowledge is the dissemination

or diffusion of knowledge. It is the process of communicating research findings from researchers to potential users, including researchers and clinicians (*Squires et al.*, 2011). Nurses in healthcare organizations should use research findings to assess their skills; develop and implement policies and procedures; and perform effective clinical interventions to provide care plan to improve outcomes for patients (*Brown*, 2013).

A number of factors associated with nurses' low extent of research utilization, two years post-graduation, were found, most of them potentially modifiable (Wallin et al., 2012). In the study of Squires et al. (2011), the main barriers included time constraints, lack of knowledge, limitation of access to research literature, lack of clinical authority, inadequate skills in critical evaluation of research papers, and lack of professional support. Interestingly, having sufficient time for review and application of research findings, access to relevant research reports, and peer support were listed as the main facilitators. Overtaking all four stages of researches identification, findings verification, results evaluation, and application to the clinical setting is critical for nurses in order to import the research results in the clinical activities (Shafiei et al., *2014*).

Significance of the Study

There is evidence to suggest that patients who receive care based upon the best evidence from the latest well-designed clinical studies and researches have better outcomes. There is also evidence to suggest that providers who utilize research in to practice when providing care have higher levels of satisfaction than those who simply provide traditional care. Furthermore, one of the goals of conducting healthcare related researches in healthcare organizations particularly university hospitals is to improve the delivery of healthcare services by implementing their researches and evidences into practice. However, many factors can promote or discourage research utilization among healthcare providers, particularly nurses in clinical practice. Understanding the facilitators and barriers to research use would faster the implementation of research utilization among nurses. Hence, it was deemed important to investigate the facilitators and barriers for research utilization among bachelor nurses.