



RESEARCH ARTICLE



Received on: 09-04-2014
Accepted on: 10-05-2014
Published on: 15-06-2014

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Conflict of Interest: None Declared!

DOI: 10.15272/ajbps.v4i32.485

Perceived barriers to Evidence Based Practice among Registered Nurses

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Abstract

Background: Despite the huge increase in the amount of research being generated within the nursing professions, the integration of research findings into practice remains problematic (Parkin & Bullocks, 2005) and the actual utilization of research finding is still poor (Rassool, 2005).

Objective: The main aim of the present study is to assess the perception on barriers to utilize the research findings into practice among registered nurses.

Materials and Methods: The study design chosen was descriptive in nature. The study was conducted among 100 registered nurses of Yenepoya University and hospital. The samples were selected by non probability purposive sampling technique. After the approval from the Institution Ethics Committee, the data was collected through Sandra G. Funk's Barriers to Research Utilization Scale, which is a 5 point Likert scale ranging from 1 to 5 with 35 items related to barriers for research findings utilization.

Findings: The base line data revealed that 85% of the samples were in the age group of 21-30 years and most of the samples were female(91%). Majority (65%) of the participants were working as staff nurse with GNM qualification and had no research experience. The finding of the study denotes that most of the respondents perceived that the physician, administration and other staffs won't cooperate to implement the research findings. The nurses working in the hospital felt that there is no time to implement the evidence into practice; relevant literature is not compiled in one place and uncertain whether to believe the research results. The greatest barriers identified by the registered nurses are that the nurse doesn't have enough authority to make change, the benefits of change will be minimal and the nurse is unwilling to try new ideas. There was no association found between the barriers and the demographic variables.

Conclusion: Perceived personal, unit-based, and organizational barriers were identified through this research in an effort to highlight the areas for improvement at the local and national levels. Effort can be taken to remove these barriers and resources can be provided to implement evidence based practice which enhances the patient care outcome.

Keywords: Barriers, Evidence Based Practice, Registered Nurses.

Cite this article as:

Umarani.J. Perceived barriers to Evidence Based Practice among Registered Nurses. Asian Journal of Biomedical and Pharmaceutical Sciences; 04 (32); 2014. 15-19.

Introduction:

Ever since the term evidence-based medicine (EBM) first appeared in the literature (Guyatt, 1991) and was used to describe clinical learning strategies used at McMaster Medical School in Canada (Rosenberg and Donald, 1995), a variety of health professions have embraced this approach (see for example Bilsker and Goldner, 2000; Gambrill, 1999). Evidence based health care is defined EBP has been defined as the "conscientious, explicit and judicious use of current best evidence in making decisions about care of individual patients integrating individual clinical expertise with the best available external clinical evidence from systematic research" ¹.

A number of studies investigating nurses' perceptions show that nurses generally view evidence based practice positively and consider it important to better patient care². Nevertheless, it is a fact that the pace of accepting and implementing evidence based practice is rather slow³.

Flemming, a nurse researcher from the UK, defines evidence based practice as a process, which encompasses the use of best available evidence alongside clinical expertise and the patient's perspective, to plan care as well as evaluating the performance through a process of self reflection or peer assessment. Fundamental to adopting an evidence based practice approach in nursing is educating future practitioners about it⁴.

Patients who receive nursing care based on the research make "sizeable gains" in behavioural knowledge, and physiological and psychosocial outcomes compared with those receiving routine nursing care⁵.

O'Connor and Pettigrew investigated the perceived barriers to implementing evidence based practice for therapists working in southern Ireland. Lack of time to search for, understand, and interpret research findings were the most significant barrier they reported. In addition to that inadequate access to information technology (IT), limited IT skills, and lack of information searching skills are the other barriers to adopting evidence based practice ^{6,7,8}.

A study conducted to identify the research capacity and value of research that translates to EBP in organizations in rural Victoria, Australia revealed that approximately a third of respondents report they have skilled staff for research and evidence assessment. However more than 50% expressed that limited time to research or collects the evidence. Approximately 40% of respondents reported that research is a priority for the organisation. The translation of research to

evidence based practice was noted by approximately 50% of respondents who report that decision makers in their organisations consider high quality relevant research when making choices about quality care activities⁹.

The call to provide evidence-based nursing care is based on the assumption that integrating research findings into clinical practice will increase the quality of health care and improve patient's health. It is reported that the degree to which nurses base their practice on research had not been motivated^{10,11,12}.

The nursing profession has long recognized the importance of research as an essential basis for its development. More recently, the evidence-based practice has brought the need for incorporation research findings in to practice. However, little research has been conducted to identify factors that interfere with the ability of nurses to base their practice on research evidence¹. Hence the researcher would like to explore the barriers perceived by the nurses.

Materials and Methods

The study design chosen was descriptive in nature. The study was conducted among 100 registered nurses of Yenepoya University and hospital. The samples were selected by non probability purposive sampling technique. After the approval from the Institution Ethics Committee, the data was collected. The tool consisted of **Section-A** Baseline data includes, age, sex, qualification, designation, years of working experience and research experience **Section-B** Sandra G. Funk's Barriers to Research Utilization Scale¹³ which is a 5 point Likert scale ranging from 1 to 5 with a total of 35 items related to barriers for research findings utilization. First 29 items are categorized under 4 aspects such as adopter, setting, research and communication (Table.1). Item No.30-35 are the open ended questions.

Results

The base line data revealed(Fig.1) that 85% of the samples were in the age group of 21-30 years and most of the samples were female(91%). Fig.2. shows that Majority (65%) of the participants were working as staff nurse with GNM qualification and had no research experience.

The findings of the study denotes that most of the respondents perceived that the physician, administration and other staffs won't cooperate implement the research findings, insufficient time on the job to implement new ideas and does not have time to read the research. The nurses working in the

hospital felt that there is no time to implement the evidence into practice; relevant literature is not compiled in one place and uncertain whether to believe the research results. Table 2: depicts the greatest barriers identified by the registered nurses as 72% agreed to a great extent that the nurse does not feel she/he has enough authority to change patient care procedures and insufficient time on the job to implement new ideas. Among 100 nurses 64% agreed to a great extent to the statements such as, the nurse doesn't have time to read the research, physician, administration will not cooperate with implementation, other staff are not supportive of implementation. Overall, 52 % of the nurses agreed to a moderate extent that the research is not relevant to the nurse's practice, the benefit of changing practice will be minimal and the nurse is unwilling to change /try new ideas.

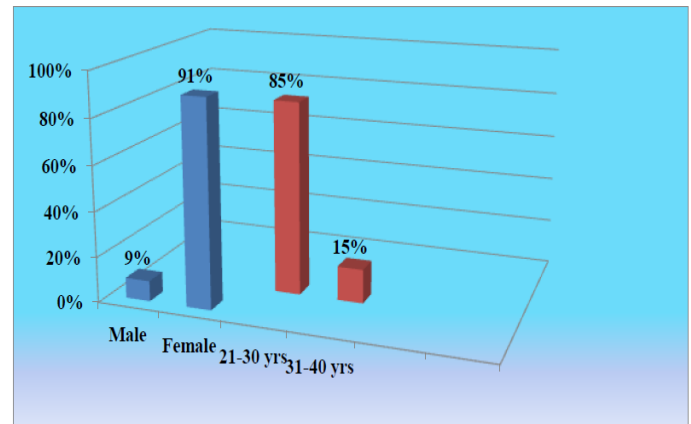


Figure: 1 Distribution of samples according to age and gender

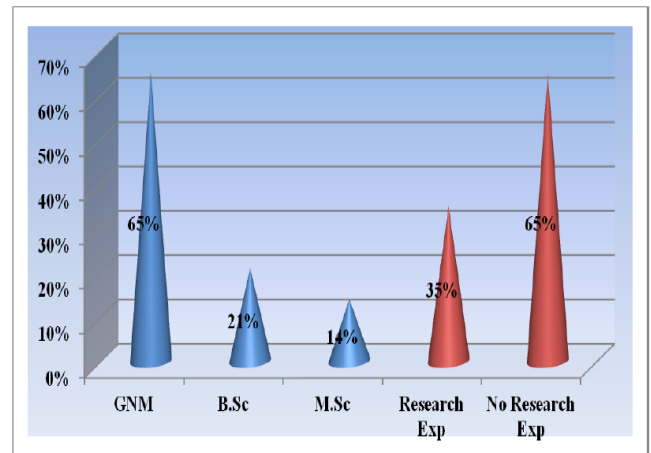


Figure: 2 Distribution of samples according to qualification and research experience

CHARACTERISTICS OF THE ADOPTER: The nurse's research values, skills, and awareness.	CHARACTERISTICS OF THE ORGANIZATION: Setting, barriers and limitations.
<ul style="list-style-type: none"> The nurse does not see the value of research for practice. The nurse sees little benefit for self. The nurse is unwilling to change/try new ideas. There is not a documented need to change practice. The nurse feels the benefits of changing practice will be minimal. The nurse does not feel capable of evaluating the quality of the research. The nurse is isolated from knowledgeable colleagues with whom to discuss the research. The nurse is unaware of the research. 	<ul style="list-style-type: none"> Administration will not allow implementation. Physicians will not cooperate with implementation. There is insufficient time on the job to implement new ideas. Other staff are not supportive of implementation. The facilities are inadequate for implementation. The nurse does not feel she/he has enough authority to change patient care procedures. The nurse does not have time to read research. The nurse feels results are not generalizable to own setting.

CHARACTERISTICS OF THE INNOVATION: Qualities of the research.	CHARACTERISTICS OF THE COMMUNICATION: Presentation and accessibility of the research.
<ul style="list-style-type: none"> The research has methodological inadequacies The conclusions drawn from the research are not justified. The research has not been replicated. The literature reports conflicting results. The nurse is uncertain whether to believe the results of the research. Research reports/articles are not published fast enough. 	<ul style="list-style-type: none"> Implications for practice are not made clear. Research reports/articles are not readily available. The research is not reported clearly and readably. Statistical analyses are not understandable. The relevant literature is not compiled in one place. The research is not relevant to the nurse's practice.

Greatest Barriers Identified	Little Extent	Moderate Extent	Great Extent
The nurse does not feel she/he has enough authority to change patient care procedures.	4%	24%	72%
Insufficient time on the job to implement new ideas			
The nurse doesn't have time to read the research.			
The physician, administration will not cooperate with implementation.	11%	25%	64%
Other staff are not supportive of implementation			
The research is not relevant to the nurse's practice.	-	52%	48%
The benefit of changing practice will be minimal			
The nurse is unwilling to change /try new ideas.			

Table 2: The greatest barriers identified by the registered nurses

Table 1: Four aspects of the Scale

The other barriers identified by the participants by answering open ended questions were, lack of awareness about research and utilization of research findings, fear for experimentation, lack of cooperation by the coworkers, more academic workload and coworkers are jealous not competent. It was suggested to facilitate/enhance research findings utilization by certain ways such as, nurse must have adequate knowledge on research, support from authorities, physicians, fellow colleague, adequate facilities in the organization, research to be done as per the felt need of the patients and the research articles must be accessible for the nurses. It was also found that there was no association between the barriers and the selected demographic variables.

Discussion

The findings of the present study revealed that majority of the registered nurses perceived that, the adopter, setting and the research communication as the barriers for utilization of research findings. It is consistent with the findings of a cross-sectional survey done among registered nurses in Swedish. The study identified the barriers through the barriers scale and the Research Utilization Questionnaire. The result showed that the characteristics of the organization and the presentation of research findings were rated as the most significant barriers. The three most frequently reported barriers were, the nurse is separated from knowledgeable colleagues with whom to discuss the research (89%); the facilities are inadequate for implementation (88%); and, the relevant literature is not compiled in one place (81%). Surveyed nurses suggested more support from unit managers and better availability of user-friendly reports in Swedish to enhance research use¹⁴.

Bostrom and Suter found that only 21% of 1200 practicing nurses had implemented a new research finding in the previous six months¹⁵. Luker and Kenrick used qualitative techniques in an exploratory study of community nurse decision-making in the United Kingdom and determined that the nurses had an awareness of research but did not perceive it as informing their practice¹⁶. It is also supported by previous reports that nurses have difficulty to access the published research studies, due to lack of access to journals and libraries, and they were not taught how to find and appraise research^{17, 18, 19}. In contrary the barriers found in the present study were, the nurse does not feel she/he has enough authority to change patient care procedures, Insufficient time on the job to implement new ideas, the nurse doesn't have time to read the research, the physician, administration will not cooperate with implementation and other staff are not supportive of implementation

McCaughan et al (2002) conducted a study in the north of England and reported that nurses who were confident with research based information felt that organizational support was a significant block to the Use of EBP. Organizational support has been recommended as a requirement of a receptive environment for EBP to flourish (Bonner and Sando 2008; LeMay et al 1998)²⁰. The present study also found the same barrier. Few studies (n = 6) reported any attempt to examine an association between barriers and research use. Of these, five reported only bivariate assessments and one used a multivariate assessment. Barta found no significant association between research use and reported barriers²¹. Similarly the present study also didn't have association between the barriers and demographic data.

The limitations of the present study are it was conducted in one setting and sample size is small thus the results may not be generalizable to nurses working in other practice settings. The study has implications in all the field of nursing such as to enhance Nurses to collaborate with other health professionals to implement change in the current practice, to incorporate student's curriculum with the importance of evidence based practice, nursing personnel as an administrator can plan various in-service training for the nurses to create awareness about the research utilization in to practice and periodical research can be conducted to evaluate how the research findings are utilized by the nurses in day today practice.

Conclusion

The present study highlighted the nurses perception on barriers to evidence based practice. Effort can be taken to remove these barriers and resources can be provided to implement evidence based practice which enhances the patient care outcome.

Acknowledgement

The author is grateful to Sandra G. Funk's for permitting to use the Barriers to Research Utilization Scale and the participants of Yenepoya University and hospital for their valuable support for the study.

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