

Nurses' Perceived Barriers in Utilizing Research Findings in Nursing Practice

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ABSTRACT

Nurses are the leading healthcare professionals that play a vital role in providing health care facilities based on research findings for positive patient outcomes. The application of research findings is compulsory in nursing practice but considerable amount of barriers could hinder nurses to implement research outcomes in practice. Therefore, to boost research utilization and change current nursing practices the current study observed the obstacles to utilization of research findings in clinical practices within the nursing culture of Pakistan. A descriptive cross sectional study including 76 nurses from Pakistan through convenient sampling technique was conducted. Out of 76 nurses, 69 (87%) were females and 7 (9%) were male nurses working in medicine, surgery, medical specialty, and critical care departments. Majority of the participants belong to age 31-35 years (50%) and 25-30 years (30%) while remaining 20% from age group 36-50 years. The top four barriers were "Inadequate time to implement new ideas", "non-cooperation of colleagues", "The unwillingness of nurses to accept change", and "Research articles are not published fast".

Conclusion: The results of the present study highlight the main barriers to research utilization among Pakistani nurses. Most of the barriers experienced by Pakistani nurses are related to those explored by other countries' nurses.

Keywords: Research utilization, Perceived barriers, Nurses, Nursing practice

INTRODUCTION

Nurses are the leading healthcare professionals that play a vital role in providing health care facilities based on research findings for positive patient outcomes (Aljezawi et al., 2019). Due to the growing social anticipation of high quality care, health care organizations expected that nurses should establish and make use of the best research findings in their practice to improve clinical cost-effectiveness and outcomes (D'Sa & Varghese, 2020). The implication of research findings to everyday practice may not only promote the quality but also improve the standards of nursing care (Wei & Watson, 2019). Research utilization not only benefits patients but also supports nursing as a profession. On the other hand, incorporating research outcomes into clinical practice remains a key challenge (Tan & Hatah, 2017). There is a gap between commendations for research utilization and the actual care nurses deliver in practice. In addition, newly-industrialized and developing countries are little involved in utilizing research to improve nursing practices (Duncombe, 2018).

Research utilization is defined as an application of a specific kind of knowledge as well as the use of knowledge based on studies in clinical settings. Research utilization involves in resolving problems concerning to the health of patients, health expenses, harmless care and better patient outcomes (Ramadan, Elsabahy, & El-shaer, 2020). In nursing, research utilization should be the base for medical practice that assimilates the best accessible precise evidence with nurse's expertise and the patient's inclinations and values to decide about the care of individual patients.

Nurses have a firm duty in caring for hospitalized patients, as this duty pay out nearly all time in direct patient care. As research and knowledge in health care flourish, research utilization in nursing is getting significant in providing high quality in clinical practice. Internet deals a surplus of information, which is easily acquired and can be used as a learning instrument (Gifford et al., 2018). Research utilization is crucial for nurses to get familiar with the accessible proof and appliance research findings in clinical care (Spiva et al., 2017).

The application of research into nursing practice is necessary to hospital systems for the progress of outcomes and the improvement of the nursing profession (Swito & Sidin, 2020). Nursing research resulting from qualitative and quantitative approaches provides data, resolutions and results that support and highlight methodologies to clinical practice for best research evidence (Hendricks & Cope, 2017).

Over-all, in clinical nursing practice, the application of research findings has been found to be low. Therefore, several studies have inspected barriers that can obstruct research use in clinical practice (Aljezawi et al., 2019). Deficiency of access to funds, inadequate time to read research, insufficient colleague support, lack of power to change care practices, small or no administrative support, absence of research expertise, low team working, and no motivations are the some perceived barriers that hinder them to use research findings in their clinical practice (D'Sa & Varghese, 2020). Though supervisors and ward culture environment have long been renowned as being among the chief barriers to evidence-based practice (Bianchi et al., 2018).

The implementation of research outcomes in clinical setting is important but still gap remains between knowledge and application of these findings in daily practice (Alatawi et al., 2020). To recognize the poor development of research utilization by nurses, it is essential to study the potential factors prompting nurses to use the research evidence into their training. It is a global issue as a lot of countries have surveyed their nursing staff to know about their research-related activities. In the health care system of Pakistan, the factors that facilitate or inhibit research application in clinical practice have not yet been identified particularly in the discipline of nursing. Therefore, this research study will explore the experience and knowledge of nurses related to barriers research utilization in clinical practices within the nursing culture of Pakistan.

METHODOLOGY

Design: A cross sectional descriptive design was used.

Settings: General Medicine, General Surgery, Medical Specialties (Neurosurgery, Oncology, Peadriatics, Obstetrics & Gynaecology, and Orthopaedic Ward) and Critical Care Units of Jinnah Hospital Lahore, Pakistan.

Sample Size: 76 Registered nurses having age 25-50 year.

Study Instrument: The barriers to research utilization scale was used to measure the top barriers perceived by nurses in clinical practice (Chien, Bai, Wong, Wang, & Lu, 2013). It consists of 29 questions that examined the nurses' perception of four subscales (Chien et al., 2013). It has high internal validity i.e., Cronbach's alphas ranged from 0.78-0.84.

Data Analysis: Descriptive statistics were used to describe demographics characteristics of respondents and characteristics of barrier scale. Mean, standard deviation, frequencies, and proportions were used to report outcomes of study.

Ethical Considerations: Ethical approval was taken from the institutional review board (IRB) committee. Moreover, informed consent was signed by the participant before giving the data. Confidentiality of data was maintained and assured.

RESULTS

The participants' demographic characteristics are given in (Table 1). As reported in (Table 1) demographic analysis showed that data comprises of nine percent (N=7) males and 87 percent (N=69) females nurses. Majority of the participants belong to age 31-35 years (50%) and 25-30 years (30%) while remaining 20% from age group 36-50 years. Mostly respondents hold Post RN degree (55%) and BSN degree (45%). All the respondents belong to a public sector. Besides above demographic data, we inquired about respondents' experience with organization. Experience of respondents range from 3-5 years (80%) and 6-10 years (20%). In addition 29% nurses belongs to medicine department, 25% from surgery department, 28% from medical specialties departments and 18% from critical care areas. About 66% nurses do not read articles, 74% nurses never participated in any Journal club, and 71% nurses never participated in any research project.

The value of chronbach-alpha for reliability of every construct is greater than 0.78 which shows high reliability between different items.

Table 2 represents the barriers perceived by nurses in a rank order. The total score of mean of barrier scale was high at 3.88 (SD 0.32) out of 4. In the table 2, the moderate to greater barriers were ranked accordingly from highest to lowest scored percentages. The first four barriers were "inadequate time on duty to implement research findings", "Other staff have no cooperation to try new thoughts", "The unwillingness of nurses to change their practices", "and late publication of research reports". Though, the lowest four barriers are "The conflicting results of research literature reports", "The outcomes of research are not applicable to every setting", "Non-cooperation of physicians in implementation",

and "Lack of expert persons of research with whom to discuss the new findings".

In analysis of top ten barriers, four were related to "nursing", three to "organization", two to "presentation", and one to "Research".

Table 1. Demographic Characteristics of Respondents

SN	Demographic Characteristics	N	%
1	Male	7	9
	Female	69	87
2	25Year-30Year	23	30
	31Year-35Year	38	50
	36Year-40Year	13	17
	41Year-45Year	2	3
	46Year-50Year	0	0
3	BSN	34	45
	Post RN	42	55
	MSN	0	0
4	3-5 Years	61	80
	6-10 Years	15	20
	11-15 Years	0	0
	16-20 Years	0	0
	20 Years or more	0	0
5	General Medicine	22	29
	General Surgery	19	25
	Medical Specialties	21	28
	Critical Care Units	14	18
6	Yes	0	
	No	76	100
7	Yes	26	34
	No	50	66
8	Yes	20	26
	No	56	74
9	Yes	22	29
	No	54	71

Table 2. Nurses' awareness regarding barriers to utilization of research

Rank	Sub scale	Barriers	(Items rated as greater to moderate barrier) N	%	MEAN	S.D
1	O	Inadequate time on the job to implement new ideas	76	100%	3.88	0.325
2	O	No support of Other staff	76	100%	3.59	0.496
3	N	Unwillingness of nurses to try new ideas	76	100%	3.74	0.443
4	R	Research articles are not published fast	76	100%	3.63	0.486
5	N	The nurse does not see the worth of research for training	75	98.6%	3.58	0.523
6	N	There is not a documented need to change practice	75	98.6%	3.67	0.500
7	P	The appropriate literature is not assembled in one place	75	98.6%	3.70	0.490
8	O	The nurse does not feel she/he has enough authority to change patient care procedures	75	98.6%	3.87	0.377
9	N	The nurse is unaware of the research	75	98.6%	3.68	0.496
10	P	Research articles are not freely available	72	94.7%	3.22	0.571
11	O	The facilities are inadequate for implementation	72	94.7%	3.67	0.575
12	P	Statistical analyses are not understandable	71	93.0%	3.36	0.608
13	N	The nurse feels the benefits of changing practice will be minimal	69	90.7%	3.34	0.684
14	O	The nurse does not have time to read research	66	86.8%	3.49	0.721
15	N	The nurse perceives little advantage for self	64	84.2%	2.42	0.753
16	R	The assumptions drawn from the research are not truthful	64	84.2%	3.43	0.789
17	N	The nurse does not feel skilled of assessing the quality of the investigation	63	82.8%	3.38	0.799
18	P	The research is not stated visibly and readably	63	82.8%	3.32	0.787
19	N	Implications for practice are not made clear	62	81.5%	3.22	0.741
20	R	The nurse is unclear whether to rely on the results of the research	54	71.0%	3.33	1.038
21	P	The amount of research information is overwhelming	54	71.0%	3.01	0.902
22	N	Management will not allow application	51	68.0%	2.95	1.070
23	R	The research has methodological insufficiencies	50	65.7%	3.24	1.118
24	R	The research has not been replicated	48	63.1%	2.83	0.900
25	P	The research is not applicable to the nurse's practice	44	58.6%	2.83	1.038
26	N	The nurse is unreachable from educated colleagues with whom to discuss the research	43	56.6%	2.67	0.985
27	O	Non cooperate of Physicians in implementation	43	56.5%	2.68	1.098
28	O	The nurse thought results are not generalizable to own setting	31	40.7%	2.41	0.969
29	R	The conflicting results of literature reports	07	09.2%	2.64	1.639

Note. Subscales: "N" for nursing; "P" for presentation; "R" for research and "O" for Organization %; ranking items as great or moderate barrier SD: Standard Deviation

DISCUSSION

This study explored factors, which served as obstacles to research utilization in clinical setting of a public hospital of Pakistan. This study explored that greatest perceived barriers to research utilization which Pakistani nurses experience, were related to organizational or nursing factors. They include greatest barriers to the research utilization, which were recognized in the current study was "inadequate time on job to practice new findings", "non-cooperation of other staff for implementation", "The unwillingness of nurses for change". In this study, 100% of nurses reported these barriers as greatest hurdles in the practice of new research findings. These results were not same as some previous studies of other countries showed different results. As a study identified Inadequate resources (85.2%; n = 52) and insufficient training (83.6%; n = 51) as top barrier to implement new research findings (Duncombe, 2018).

In this study, nurses perceived that inadequate time on job is a greatest barrier. The sufficient time is necessary for proper implementation of research findings in clinical practice. Unfortunately, deficiency of time in health care system is too common happening in developing countries like Pakistan. This phenomenon represents a very serious issue to the execution of research utilization by nurses in practice. Moreover, nurses frequently reported that non-cooperation of staff is also a major challenge to the uptake of research utilization. The 100% nurses surveyed in the current study, perceived that the lack of support from staff was as barrier to the application of research. This point out that nurses do not know the importance of research based practice. In addition, 'The value of research for practice is not seen important' and 'unwillingness of nurses to change practices" were two of the top five barriers. These barriers were also rated highly in other study (Wei & Watson, 2019).

The findings also show that the common chief barriers perceived by Pakistani nurses (three out of five) were related to the factor "nursing". The results are same as in reported in previous reports (Tan & Hatah, 2017). In a systematic review, the top ranked barriers 85% (53 out of 63) of the encompassed studies were the following: "nurses have no time to read research reports", and "no authority of nurses to try new techniques for patient care (D'Sa & Varghese, 2020).

CONCLUSION

The result findings of the present study elaborate the major barriers to research utilization among Pakistani nurses. Majority of the barriers faced by Pakistani nurses are same as faced by nurses of the other countries. The major four barriers to utilization of research described by Pakistani nurses are (a)lacking time on duty to implement evidence based practices (100%), (b) unavailability of support from other staff (100%), (c)The refusal of nurses to try new ideas (100%), and (d) late publication of

research articles (100%).. All the Barriers on scale influence the usage of research among Pakistani nurses to a specific level.

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