Research Article

Barriers of Research Utilization in Nursing Practices in Public Hospitals in Lahore, Pakistan

Roubina Kousar*, Robina Kousar, Muhammad Azhar, Ali Waqas and Syed Amir Gilani

Department of Nursing, Lahore School of Nursing, University of Lahore , New Campus Bhupttian Chowk, Lahore, Pakistan

*Corresponding author: robinakousar999@gmail.com

Abstract

Aim: The aim of this study was to assess the barriers of research utilization among nurses of public hospitals Lahore, Pakistan. **Methodology:** Descriptive cross sectional study was used. This study was conducted among nurses of Mayo Hospital Lahore and Lady Aitchison Hospital Lahore. The data was collected through simple random sampling from 245 registered nurses from both hospitals. The questionnaire of barriers to research utilization developed by Funk *et al.* (1993) was used. **Result:** The current study results show that nurses didn't utilize the research in practices. Non-supportive organization, colleagues, inadequate facilities, insufficient time, nurse feels she has no authority to change patient care procedure, research factor and nursing factor is the main barrier of research utilization. In the future nurses should come on a paradigm of research. **Conclusion:** This reveals that management should increase the focus on nurse's knowledge and facilities about research utilization

Keywords: Nurse; Research Utilization; Communication.

Introduction

For providing quality care research utilization is very necessary. In different countries quality care is improved by the utilization of research findings into practices. Nursing research has been proved that research utilization in patient care improve the patient outcome (Kang., 2015)

Now a day's its necessary for nurses bring up to date their knowledge and skills due to rapid enhancement in technology and medical knowledge. This is only possible when nurses utilize the current knowledge into their practices after approved by research. There are very few researches that have been conducted in Pakistan regarding barriers of research utilization in nursing practices. While many researches conducted in other medical professions regarding barriers of research utilization. There is a need to high light the barriers of nurses in the utilization of the research in nursing practices.

Nursing is an occupation that is to be considered as this occupation is best to know about how to provide an optimum level of good care to the patient, because patient is fully depended on nursing care. So that's why, this is only possible by getting evidence base knowledge through updating their knowledge which is guided the nurses to how

fulfill their optimal task to quality improving. (Buhaid and Lau., 2014).

Several studies indicated that only few nurses Implement the research into their practices (Adejumo and Guobadia., 2013). Research itself again has been considered as much a vital strategy via as a discipline particularly in nursing, be able to generate knowledge then improve it in keeping its professional reputation.

Researchers are expected in stimulation of their study be carried out as nicely so utilized in order after enhance among the growth regarding patient care. Nursing research utilization is the system on synthesizing, disseminating or the use of research generated competencies to fulfill massive influence about the present nursing practice.(Nwozichi and Ojewole., 2014).

The purpose of the study is to assess, the hurdles behind research utilization in nursing practice.

Material and Methods

The study design was descriptive co relational study intended to fulfill the objective of the study. Two government hospitals were used to collect the data, Mayo Hospital Lahore and Lady Aitchison Hospital Lahore. Both

were affiliated with the medical universities and considered as the tertiary care hospital. Many researchers conduct the study on barriers of research utilization. All indicated barriers that were quite different from each other. Questioner was used in this study barrier scale is utilized with demographic sheet. Funk *et al.* in 1991 designed this scale he categories this scale into four subtypes. (1). Characteristic of research (3items). (2). Characteristic of nurse (3 items). (3). Characteristic of communication (3 items) (4) Characteristic of organization (8items).The tool was the questionnaire designed by funk et al (1991). Likert scale choice, from 1,"Strongly Disagree", to 5, "Strongly Agree' (Mohsen *et al.*, 2016)(Funk *et al.*, 1991)**.** Register nurses of both hospitals, of all shifts were participants (including night shift). Student nurses, midwifes and LHV, s, and register nurses those are not willing to participate in study were excluded. Simple random sample of 245 nurses.266 from Mayo hospital Lahore and 45 from Lady Aitchison Hospital Lahore

Ethical consideration conduct from Institution review board of University of Lahore, School of Allied Health Sciences and Department of Nursing. Official letter of co-operation was written to Mayo Hospital Lahore and Lady Aitchison Hospital Lahore from School of Nursing (UOL). This study was conducted during the time period from end of January 2017to May 2017.From both Hospitals administrations official approval was carried out for the purpose of the study and also tell about where the data will be collected.

Questioners were filled secretly. They completed the questioner at their own work place hardly in 15-20minutes. Before distribution of the questionnaires, introduce and tell the aim and objectives of the study.

By personal computer using SPSS (version 21.0) data collection were coded, entered, tabled and statistically analyzed. Data present statistical frequencies, mean, mode, median, standard deviation, and variables of the quantitative study. The relation between the variables assess by using correlation analysis. Statistical significance will be considered at p-value <0.05.

Results

Table 1 shows that two organizations were selected in which 12.7% (n=31) nurses from Lady Aitchison Hospital and 87.3% (n=214) nurses from Mayo Hospital Lahore**.** Participants age was 21.2 % (n= 52) respondents were between 20-25 years old, 54.7% (n=134) were between 26-30 years, 19.6% (n=48) were between 31-35 years old and 4.5% (n=11) were between 36-40 years of age. Most of the nurses were having <1 years of experience (n=39, 15.9 %), 1-5 year experience was (n=97, 39.6%), while 6-10 years experience were (n=84, 34.3%) and above 10 year were (n=25, 10.2%).Mostly nurses were diploma holder (n=113, 46.1%), specialized nurse were (n=81, 33.1%) and Post RN were (n=51, 20.8%) in the study. Most of the respondents

were charge nurse (n=231, 94.3%) and head nurses were (n=14, 5.7%). Participants were 39.2% (n=96) married, Unmarried were 60.8% (n=149).

Table 1: Socio-demographic characteristics of respondents of public Hospitasl Lahore Pakistan.

Socio-demographic variables	Frequency (*f*)	Percentage (%)
(1) Organization		
Mayo Hospital	214	87.3
Aitchison Hospital	31	12.7
Total	**245**	**100**
(2) Age		
20_25 yrs	52	21.2
26-30yrs	134	54.7
31-35yrs	48	19.6
36-40yrs	11	4.5
Total	**245**	**100**
(3) Job experience		
< 1 yrs	39	15.9
1-5 yrs	97	39.6
6-10	95	34.3
Above 10yrs	25	10.2
Total	**245**	**100**
(4) Qualification		
Nursing Diploma	113	46.1
Post RN	81	33.1
Specialization	51	20.8
Total	**245**	**100**
(5) Designation		
Charge Nurse	231	94.3
Head Nurse	14	5.7
Total	**245**	**100**
(6) Marital Status		
Married	96	39.2
Unmarried	149	60.8
Total	**245**	**100**

Table 2 shows that nurses responded regarding the barriers of research utilization scale. The most prominent barriers were organization sub scale (mean=3.0934) and research sub scale (mean=3.0680). Setting related barriers were the inadequate facilities (49.8%), Nurse feels she has no enough authority to change the patient care procedure (49.8%), Other staff are not supportive (49.0%), Physicians are not

co-operative for implementation (44.5%), Nurse feels results are not generalize to own setting (40.2%), Insufficient time on job to implement new ideas (41.2%).Research related barrier were research reports are

not publish fast enough (48.6%). Nurse related barrier namely nurse feels little benefit for self (48.6%), Research is not relevant to nurses practices

Table 2: Barriers of research utilization

	S. N.	Questions	Options	Frequency (*f*)	Percentage (%)	Mean+ SD
(1)Characteristics of Nurse	1	Nurse feels benefits of changing practice will be minimal.	Strongly disagree	20	8.2	`3.07 ± 1.080
			Disagree	64	26.1	
			Neutral	49	20.0	
			Agree	102	41.6	
			Strongly agree	10	4.1	
			Total	**245**	**100**	
	2	Nurses see little benefit for self.	Strongly Disagree	13	5.3	3.24 ± 1.133
			Disagree	64	26.1	
			Neutral	49	20.0	
			Agree	88	35.9	
			Strongly agree	31	12.7	
			Total	**245**	**100**	
	3	Nurses feel she is not capable of evaluating the quality of the research.	Strongly Disagree	56	22.9	2.35 ± 1.047
			Disagree	93	38.0	
			Neutral	56	22.9	
			Agree	35	14.3	
			Strongly agree	05	2.0	
			Total	**245**	**100**	
(2) Organization Characteristics	4	Facilities are inadequate for implementation	Strongly Disagree	9	3.7	3.30 ± 1.023
			Disagree	53	21.6	
			Neutral	61	24.9	
			Agree	100	40.8	
			Strongly agree	22	9.0	
			Total	**245**	**100**	
	5	Nurse does not fell he/she has enough authority to change patient care procedure	Strongly Disagree	9	3.7	3.25 ± 1.028
			Disagree	53	21.6	
			Neutral	61	24.9	
			Agree	100	40.8	
			Strongly agree	22	9.0	
			Total	**245**	**100**	
	6	Nurse feels results are not generalizable to own setting	Strongly Disagree	24	9.8	3.09 ± 1.132
			Disagree	52	21.2	
			Neutral	68	27.8	
			Agree	79	32.2	
			Strongly agree	22	9.0	
			Total	**245**	**100**	

Table 2: Barriers of research utilization

	S. N.	Questions	Options	Frequency (*f*)	Percentage (%)	Mean± SD
	7	Nurse does not have time to read research	Strongly Disagree	40	16.3	2.71 ± 1.159
			Disagree	77	31.4	
			Neutral	53	21.6	
			Agree	63	25.7	
			Strongly agree	12	4.9	
			Total	**245**	**100**	
	8	Other staff are not supportive of implementation	Strongly Disagree	10	4.1	3.28 ± 10.47
			Disagree	55	22.4	
			Neutral	60	24.5	
			Agree	96	39.2	
			Strongly agree	24	9.8	
			Total	**245**	**100**	
	9	Physician will not cooperate with implementation.	Strongly Disagree	10	4.1	3.13 ± 1.129
			Disagree	85	34.7	
			Neutral	41	16.7	
			Agree	82	33.5	
			Strongly agree	27	11.0	
			Total	**245**	**100**	
	10	There is insufficient time on the job to implement new ideas.	Strongly Disagree	20	8.2	3.01 ± 1.127
			Disagree	79	32.2	
			Neutral	40	16.3	
			Agree	91	37.1	
			Strongly agree	15	6.1	
			Total	**245**	**100**	
	11	Administration will not allow implementation.	Strongly Disagree	25	10.2	2.98 ± 1.182
			Disagree	73	29.8	
			Neutral	54	22.0	
			Agree	68	27.8	
			Strongly agree	25	10.2	
			Total	**245**	**100**	
	12	The research has not been replicated	Strongly Disagree	13	5.3	2.98 ± 0.971
			Disagree	70	28.6	
(3). Research Characteristics			Neutral	81	33.1	
			Agree	72	29.4	
			Strongly agree	09	3.7	
			Total	**245**	**100**	
	13	Research reports/articles are not published fast enough.	Strongly Disagree	20	8.2	3.2 ± 1.076
			Disagree	40	16.3	
			Neutral	66	26.9	
			Agree	100	40.8	

Table 2: Barriers of research utilization

	S. N.	Questions	Options	Frequency (*f*)	Percentage (%)	Mean± SD
			Strongly agree	19	7.8	
			Total	**245**	**100**	
	14	The conclusions drawn from the research are not justified.	Strongly Disagree	15	6.1	2.99 ± 0.982
			Disagree	65	26.5	
			Neutral	81	33.1	
			Agree	75	30.6	
			Strongly agree	09	3.7	
			Total	**245**	**100**	
(4). Communication Characteristics	15	The research is not reported clearly and readably.	Strongly Disagree	23	9.4	2.76 ± 1.013
			Disagree	86	35.1	
			Neutral	68	27.8	
			Agree	62	25.3	
			Strongly agree	06	2.4	
			Total	**245**	**100**	
	16	The research is not relevant to nurse's practice.	Strongly Disagree	29	11.8	2.59 ± 1.058
			Disagree	109	44.5	
			Neutral	51	20.8	
			Agree	45	18.4	
			Strongly agree	11	4.5	
			Total	**245**	**100**	
	17	Nurses are not interested in the topics of research.	Strongly Disagree	45	18.4	2.64 ± 1.255
			Disagree	92	37.6	
			Neutral	37	15.1	
			Agree	47	19.2	
			Strongly agree	24	9.8	
			Total	**245**	**100**	

Table 3: Correlation between barriers subscale

	Nurse Factor		Organization Factor		Research Factor		Communication Factor	
	r	p	r	p	r	p	r	p
Nurse Factor	---	---	.421**	0.000	.282**	0.000	.329**	0.000
Organization Factor	0.421**	0.000	---	---	.364**	0.000	.479**	0.000
Research Factor	.282**	0.000	.364**	.000	--	--	.554**	.000
Communication Factor	.329**	0.000	.479**	0.000	.554**	0.000	-	-

Table 3 shows correlation between barriers scale, table shows that there was a statistical significant correlation (p≤0.05) between nurse sub scale, organization subscale, and research sub scale and communication subscale.

Table 4 shows the correlation between barriers sub scale and demographic characteristics. Statistical analyzing between demographic and barrier sub scale revealed that stay in organization and qualification have significant relationship with organization sub scale, research sub scale and communication sub scale except nurse sub scale. Age has no significant relationship with all barriers sub scale.

Table 4: Correlation between barriers subscale and demographic characteristics

Factors	Nurse Factor		Organization Factor		Research Factor		Communication Factor	
	r	p	r	p	r	p	r	p
Age	.114	.075	.061	.345*	-.025	.697	.002	.975
Stay in organization	.110	.085	.156*	.015	.130*	.042	.149*	.020
Qualification	.071	.268	.229**	.000	.139*	.029	.064**	.000

Discussion

Passion of work for achievement and continuous development in professional status in nursing has a result that there is a need of knowledge based on research to upgrade the nursing practices. Regardless of moving towards evidence base practices, there is no evidence of research utilization in nursing practices. It has become an important topic of discussion and study from last many decades.

This study was conducted to assess the barrier of research utilization among registered nurses in two government hospitals. Both hospitals for the first time used to identify the barriers of research utilization, and their related characteristics. The study results discussed in following section are composed of the barriers of research in Mayo Hospital Lahore and Lady Aitchison Hospital Lahore and their relationship with the nurse's demographic characteristics.

Regarding, barriers to research utilization results of the present study revealed that utilization of research findings are the complicated organizational procedure rather than the individual procedure as a prominent barrier, based on the mean score are related to the characteristics of organization. Similarly to the study conducted in Egypt, China and Iran reported that setting barrier is the top barrier to research utilization (Belal *et al.*,2012) (Salemi *et al.*,2010) (Schoonover, 2009). Setting is also ranked the top barrier to research utilization in (Strickland *et al.*, 2009) (Funk *et al.*, 1991).Results shows that organization is the greatest barrier and this can increase the frustration in nurses with organization. Setting related barrier that come at the top rank; facilities are inadequate for implementation, nurse doesn't fell she has enough authority to change patient care procedure, other staff are not supportive for implementation, physicians not cooperate in implementation, Insufficient time on job to implement the research in practices. In other words, setting in current study has providing the low financial support which is directly affected on research utilization.

Setting related barriers to research utilization rank non supportive physician and other supportive staff. Similarly to the study conducted in Iran (Mohammad pour *et al.*, 2014).

Unfortunately, tension has always existed between nurse and clinicians.

Regarding, the research characteristics nurses of Mayo Hospital and Lady Aitchison Hospital Lahore ranking that "research articles are not publish fast enough". This is due to lack of communication between practitioner nurse and nurse researcher due to discrimination between education, knowledge, skill and lack of interest in research utilization. Ezz study say that nurse who received only bachelor degree don't receive courses related the research except for those who are registered for post graduate studies (Ezz *et al.*, 2011).

The last but not the least barrier based on the mean score is the "Nurse Characteristics". Similarly with the Ezz study in which the last barrier is the nurse barrier (Ezz *et al.*, 2011). This credited may be due to the fact that about level of nursing practices asked significant questions in nursing profession. Nurses have difficulties in the description of their nursing profession after providing the list of daily performance for the evidences (Oelke *et al.*, 2008).

The barrier marked in nurse barrier is the; Nurses sees little benefit for self. The results of current study similarly to the study conducted in China (Wang *et al.*, 2013). This may be due to lack of questioning, nurse do not have the ability to identify the clinical problems and many uses the traditional knowledge and practices without questioning. In the future nurses must be prepared about the paradigm of evidence and practices, rather than traditional (Malik *et al.*, 2017).

Study findings depicted that there are statistical significant differences between nurses demographic and sub scale of nursing research barriers (Table No.06). Qualification has significant relationship with sub scale of barriers of research except nurse factor. Age has no significant relationship with all barriers sub scale. Similarly with the study yava *et al.*, showed that barriers of research utilization not influenced by age (Yava *et al.*, 2009).

Acknowledgement

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