

Factors Associated with Dread of Research Among Nurses in Clinical Setting of University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State

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Abstract

Research is a formal systematic process of carrying on scientific method of analysis. The involvement of nurses in research has the potential to informed practice, improve quality care, and enhance positive patient outcomes, but the number of nurses engaging in research appears low. This study aimed to identify factors associated with dread of research among nurses in clinical setting in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State. A cross-sectional descriptive research design was used and the study population was 750 nurses working in the hospital. The calculated sample size using Taro Yamane's formula was 261 and the participants were proportionately calculated according to each department in the hospital for generalization, simple random sampling technique was used to select the participants in the departments and the instrument for data collection was a self-structured questionnaire. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 25.0. Frequencies, percentages, mean and standard deviation was used for descriptive statistics while chi-square test were used for inferential statistics. The findings of the result showed that lack of knowledge of research publications 247(100%) is a barrier to clinical research. Also, there was a significant relationship between age and the utilization of research findings as the p -value = 0.00 is less than 0.05. In conclusion, there should be an enabling environment to help research studies thrive in the clinical settings. The recommendations made, government should encourage research studies by giving grants to those who embark on research in clinical areas and nurses should be courageous and develop interest in taking up research studies in clinical settings.

Keywords: *Factors, Dread, Research, Nurses, Clinical Setting*

Introduction

Research is considered to be formal systematic intensive process of carrying on the scientific method of analysis. It involves a more systematic structure of investigation usually resulting in some sort of formal record of procedures and report of results or conclusion (Basavanthappa, 2014). The involvement of nurses in research has the potential to informed practice, improve quality care, and enhance positive patient outcomes, but the number of nurses engaging in research appears low. This deficit involves conducting and utilizing research which may be associated with limited or lack of research knowledge, training, funding, incentives and poor motivation for nurses to conduct research. Although there is a growing demand for nurses in the clinical service areas to conduct research independently and collaboratively, many nurses find it difficult to start the process (Brysiewicz & Oyegbile, 2021).

In other to ensure delivery of appropriate and safe nursing care, nurses must initiate, conduct and utilize research as scientific evidence to further the practice and delivery of effective, appropriate and safe nursing practice (Brysiewicz & Oyegbile, 2021). Identifying barriers nurses experience when conducting, participating and utilizing research is the first step towards debunking the fears associated with research. With the development of the nursing discipline and evidence based nursing practice, nursing research competence is increasingly important for clinical nurses (Chen et al., 2022). A study in Ghana showed that less than 36.1% of (n=57) compared to that of Nigeria where 25% (n=30) of nurses participated in designing and planning research (Nkrumah et al., 2018).

In India, 38.7% (n=51) nurses cited poor knowledge of numbers and in Norway, lack of skills in using computerized statistical packages and low educational training, as reasons for their poor involvement in research activities (Vijayalakshmi et al., 2015). Although evidence suggests increased involvement of South African critical care nurses in research compared to other countries in Africa, 21.3% (n=17) of nurses were unfamiliar with the term “evidence- based practice”(EBP) (Almaze & Emmanuel, 2015).

The fast changing healthcare environment demands that nurses discharge their duties within the confines of evidenced based practice, which has been found to improve the quality of patient care, raise the standard of nursing practice, enhance professional excellence and carrier development (Mohsen et al, 2016). However, most nurses find the rigorous scientific enquiry challenging because of lack of adequate research knowledge and confidence to complete the process (Spiva et al., 2017). Lack of time, motivation and incentive to conduct research (Lingcon, 2018), low educational qualification, lack of resources and management support are some of the challenges cited (Aksoy et al., 2018).

Conducting research in an environment that demands prompt care delivery, achievement of role expectations and improving patient outcomes could also act as a disincentive for engaging in the rigorous academic activities (De Von, 2013). Concerns around the how and why of engaging in research exists as some nurses think it is the exclusive duty of the academics. Nursing literature affirms that the urgency to complete the job, shortage of nursing staff, belief that conducting research is the exclusive job of medical professionals, lack of award system and non-recognition of nurse-researchers, appears to limit nurses’ participation and utilization of research (Brysiewicz & Oyegbile, 2021).

These challenges also appear to be responsible for the existing gap between research and practice. Research workshops and training, seminars have been shown to strengthen nurses research skills and to also build a research culture within the profession (Scala et al., 2016). Difficulties around lack of access to current literature and non-availability of research support in hospitals was found to limit nurses access to best available evidence and result in non-implementation of current treatment models (Warren et al., 2016).

Nursing profession is an evolving profession. For continuing growth of any profession, body of knowledge is an essential part and nursing research is one of the ways to generate a body of knowledge that helps advance nursing practice and shapes health policy and contribute to global healthcare. The move towards evidence-based nursing practice requires active participation by nurses at all levels along the continuum of care. Despite this fact, nursing involvement in multicenter research is limited. This does not only limit the generalizability of findings but hinders collaborative and inter-disciplinary research networking among hospitals. Consequently, lack of inter-disciplinary collaboration research networking leads to patient dissatisfaction, misdiagnosis, delayed treatment, medication errors and injury. Thereby losing public confidence in health care services (Rolfe, 2016).

Healthcare research continually produces large amount of results and revised methods of treatment and care for patients, which if implemented in practice, can potentially save lives and improve the quality of life of patients and improves clinical outcomes. Nonetheless, a rise in the amount of research results available does not automatically translate into improved patient care and treatment. There is a broad evidence that there is a substantial gap between the healthcare that patients receive and the practice that is recommended-also known as the research-practice gap, evidence-practice gap or knowing-doing gap (Konwar et al., 2018).

Despite evidence which suggest that research is integral for the development of the profession, nurses encounter numerous barriers and challenges while conducting nursing research and utilizing its findings thus leading to dread of research among nurses in clinical setting. Therefore, this study is set to explore the barriers in conducting nurses research, challenges in utilizing research findings and identify ways of reducing dread of research among nurses in the clinical setting. The study provided answers to the following research questions:

1. What are the barriers to conducting nursing research in clinical setting among nurses in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State?
2. What are the challenges to utilization of research in clinical setting among nurses in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State?
3. What are the measures aimed at improving nurse's participation in research among nurses in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State?

Hypothesis

There is no significant relationship between age and the utilization of research in clinical setting among nurses in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State.

METHODOLOGY

Cross-sectional descriptive research design was adopted for the study. The population of this study comprised 750 Nurses working in University of Port Harcourt Teaching Hospital, River State, Nigeria. The sample size for the study is 261 which was determined using the Taro Yamane's formula (1967) given thus: $N / 1+N(e)^2$. Where, N is the target population (750) and e is level of

significance (0.05). A simple random sampling technique was used. A total of 261 respondents was sampled from the target population of 750 from the 6 units Paediatrics, Surgery, Medicine, Obstetric and Gynaecology, Psychiatry and Nurses Administration. This was done using simple balloting. Nurses were given folded papers labeled Yes or No to pick either ‘Yes’ or ‘No’. 261 ballot papers were labeled Yes another 261 ballot papers were labeled ‘No’. all the nurses from each unit who picked ‘Yes’ made up the sample size of 261 and were selected for the study. The inclusion criteria are: all respondents who have a minimum of Registered Nurse Certificate; willingness to participate in the study; and availability at the time of data collection.

The instrument for data collection was a self-structured questionnaire with a reliability coefficient of 0.57, drafted based on the study objectives. The data was collected through face-to-face administration of questionnaire to the respondent in the clinical area. The administration of questionnaires and retrieval of completed questionnaires took a period of one week. Data generated for the study was entered into Statistical Package for Social Sciences (SPSS) version 25 and Microsoft excel for analysis. It was entered, coded, cleaned and analyzed. The descriptive statistical analysis was presented in charts, frequencies, percentages, mean and standard deviation while chi-square test was used for inferential statistics at 0.05 level of significance.

For ethical consideration, a letter of introduction was obtained from the Head of Department, School of Post Basic Nursing Studies, UPTH and submitted to the Director of Nursing UPTH, to obtain administrative permission and same was forwarded to the Ethical Committee of the Hospital for consideration. Confidentiality was assured and maintained. The respondents were assured of respect of their freedom of choice and that they will not be prejudiced in anyway.

Results

The results of the study are shown below:

Table 1: Socio-Demographic Characteristic of Respondents (n = 247)

Variables	Frequency (f)	Percentage (%)
Age		
15 – 24yrs	37	15.0
25 – 34yrs	60	24.3
35 – 44yrs	78	31.6
45 – 49yrs	46	18.6
50yrs and above	26	10.5
Total	247	100
Gender		
Male	60	24.3
Female	181	73.3
Missing system	6	2.4
Total	247	100
Marital Status		
Single	87	35.2
Married	156	63.2
Divorced	4	1.6
Total	247	100
Religion		

Christianity	213	86.2
Islam	26	10.5
Traditional Religion	8	3.2
Total	247	100
Ranking		
NO II	31	12.6
NO I	59	23.9
SNO	25	10.1
PNO	36	14.6
ACNO	26	10.5
CNO	30	12.1
ADN	40	16.2
Total	247	100

Table 1 is illustrating the socio-demographic characteristic of nurse respondents in clinical setting in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State. It shows that most 78(31.6%) of the respondents are within the age group of 35 – 44 years, followed by 60(24.3%) those of the age group of 25 – 34 years, the least represented 26(10.5%) are 50 years and above. They are mostly of female gender 181(73.3%), only 60(24.3%) are male, only 4(1.6%) are divorced while majority 156(63.2%) are married and are equally Christians 213(86.2%). On the rank of respondents, 59(23.9%) are NO I, followed by ADNs 40(16.2%) and the least 25(10.1%) are the SNOs.

Table 2: Showing Barriers to conducting nursing research in clinical setting

SN	Item	Yes	No
6	Lack of knowledge of research publications.	247(100%)	0(0.0%)
7	There is insufficient time on the job to implement new ideas.	232(93.9%)	15(6.1%)
8	Research reports/articles are not published fast enough.	184(74.5%)	63(25.5%)
9	Physicians will not cooperate with implementation, each replaced in one dimension separately.	202(81.8%)	45(18.2%)
10	There is reluctance of patients to research participation.	229(92.7%)	18(7.3%)
11	Lack of funding impedes the progress of research utilization.	232(93.9%)	15(6.1%)

Average

221(89.4%) 26(10.5%)

Table 2 depicts barriers to conducting nursing research in clinical setting. It expressed that, all 247(100%) of the respondents opined that, lack of knowledge of research publications is a barrier to clinical research. Most of them claimed that insufficient time on the job to implement new ideas 232(93.9%); physicians lack of cooperation 202(81.8%); reluctance of patients to participate in research 229(92.7%) and lack of funding 232(93.9%) are among the reasons why research is not being carried out in clinical setting. Of the 247 respondents, 63(25.5%) disagreed that reports/articles are not published fast enough.

Table 3: Showing Challenges to utilization of research in clinical setting

S/n	Item	Yes	No
12	The lack of sufficient time for reading the studies	220(89.1%)	27(10.9%)
13	The lack of adequate facilities to implement the ideas	236(95.5%)	11(4.5%)
14	Nurses' little interest in conducting studies	222(89.9%)	25(10.1%)
15	Lack of authority to change the methods and patterns of care.	196(79.4%)	51(20.6%)
16	Inadequate policies to foster the implementation of research findings.	241(97.6%)	6(2.4%)
17	Heavy workload during shift duty hinders nurses from applying results of research works.	233(94.3%)	14(5.7%)
Average		224(90.9%)	22.3(9.03%)

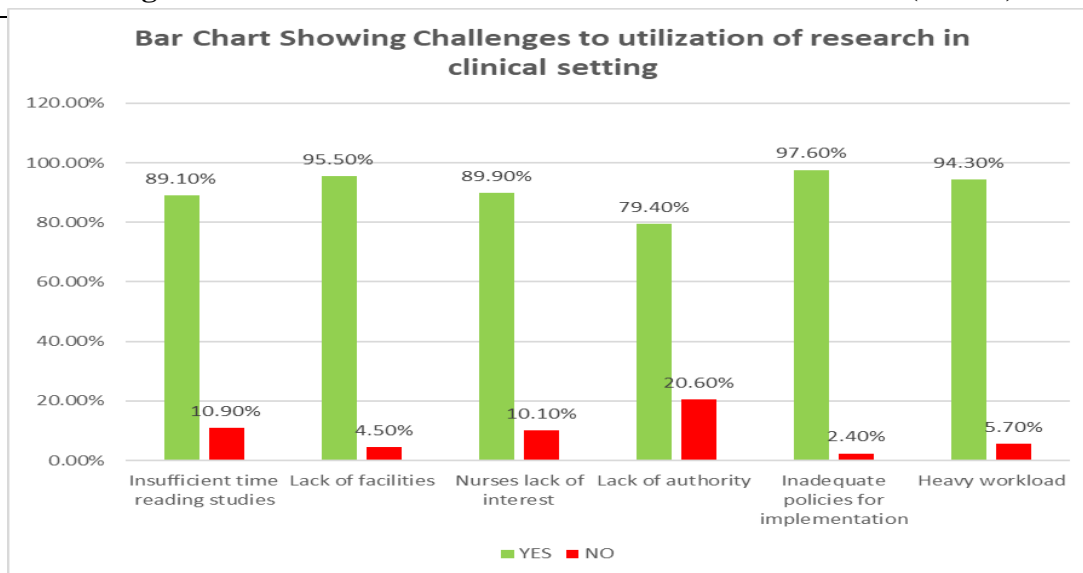


Fig. 4.2: Bar chart showing challenges to utilization of research in clinical setting

Table 3 and Fig 1 represents the challenges of utilization of research in clinical setting in Port Harcourt Teaching Hospital, Port Harcourt, Rivers State. The findings depicted that, lack of adequate facilities to implement the research ideas 236(95.5%); lack of authority to change the methods and patterns of care 196(79.4%); inadequate policies to foster the implementation of research findings 241(97.6%); heavy workload during shift duty 233(94.3%) hinder the utilization of research findings in clinical settings in University of Port Harcourt Teaching Hospital, Rivers state.

Table 4: Showing Measures aimed at improving nurses' participation in research

S/n	Item	SA	A	D	SD	Mean	Std Dev
18	Managerial support.	182(73.7%)	65(26.3%)	0(0.0%)	0(0.0%)	3.73	.44
19	Nurses to advance in education.	167(67.6%)	80(32.4%)	0(0.0%)	0(0.0%)	3.67	.46
20	Increase time for reviewing research findings.	107(43.3%)	135(54.7%)	5(2.0%)	0(0.0%)	3.41	.53
21	Cooperation of patients to research.	112(45.3%)	135(54.7%)	0(0.0%)	0(0.0%)	3.45	.49
22	Establishing panel to evaluate researches.	159(64.4%)	88(35.6%)	0(0.0%)	0(0.0%)	3.64	.47
23	Funding of research works.	151(61.1%)	67(27.1%)	29(11.7%)	0(0.0%)	3.49	.69
24	Development of standard measures and robust well-designed studies.	130(52.6%)	117(47.4%)	0(0.0%)	0(0.0%)	3.52	.50
Grand Mean						3.55	0.51

Criterion mean = 2.50. Decision: <2.50 is poor, ≥2.50 is good

Table 4 shows measures that are aimed at improving nurse's participation in research in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State. They respondents strongly agreed that managerial support 182(73.7%); nurses advance in education 167(67.6%); increase time for reviewing and implementing research findings 107(43.3%); cooperation of patients to research 112(45.3%); research funding 151(61.1%) among others are the measures that can improve nurses participation in research. None of the respondents strongly disagreed to these factors while very few 29(11.7%) just disagreed that these measures will improve nurses participation. This is confirmed as the overall result gave a criterion mean of 3.55 ± 0.51 showing that the measures are good enough.

Table 5: Chi-square test showing relationship between the age of nurses and the utilization of research in clinical setting

Age in years	Utilization		Total	df	X ² -value	P-value	Decision
	Yes	No					
15 – 24yrs	21(56.8%)	16(43.2%)	37(15.0%)	4	47.17	0.00	H ₀ Rejected
25–34yrs	55(91.7%)	5(8.3%)	60(24.3%)				
35-44yrs	78(100%)	0(0.0%)	78(31.6%)				
45-49yrs	42(91.3%)	4(8.7%)	46(18.6%)				
50yrs &above	20(76.9%)	6(23.1%)	26(10.5%)				
Total	216(87.4%)	31(12.6%)	247(100%)				

Significant, p<0.05

Table 5 shows the Chi-squared test of relationship between age and the utilization of research in clinical setting among nurses in University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State. The findings of the study shows that the age of the nurses has significant relationship with the utilization of research findings as the p-value = 0.00 is lesser than 0.05 (X²-value = 47.17, df = 4, p<0.05). Thus, the null hypotheses which states that there is no significant relationship between the age of nurses and the utilization of research in clinical setting is rejected.

Discussion of Findings

The findings of this study showed that all 247(100%) of the respondents opined that, lack of knowledge of research publications is a barrier to clinical research. Most of them claimed that insufficient time on the job to implement new ideas 232(93.9%); physicians lack of cooperation 202(81.8%); reluctance of patients to participate in research 229(92.7%) and lack of funding 232(93.9%) are among the reasons why research is not being carried out in clinical setting. This was in agreement with the study of Bahadori et al., (2016) in their study on barriers to the application of the research findings from the nurses' perspective, they stated in their findings that, lack of sufficient time for reading the studies," "the lack of sufficient time to implement the new ideas," "the lack of adequate facilities to implement the ideas," "nurses' little interest in conducting studies," and "the lack of authority to change the methods and patterns of care", respectively, 85%, 84.6%, 83.8%, 83.4%, and 80.5% were the most barriers to application of research findings from the studied nurses' perspective. Also in alignment with this study is that of Fen Zhou et al., (2015), Jabonete & Man (2021) which revealed that insufficient time at work in implementing new ideas was perceived as the top barrier in research utilization in nursing. Though Lingcon (2018) claimed the above factors, the percentages of their results showed that their findings were at variance with this study as the result showed lack of authority (15.7%), followed by the lack of time (13.4%) and language barrier (15.0%).

The result showed that lack of adequate facilities to implement the research ideas 236(95.5%); lack of authority to change the methods and patterns of care 196(79.4%); inadequate policies to foster the implementation of research findings 241(97.6%); heavy workload during shift duty 233(94.3%) hinder the utilization of research findings in clinical settings in University of Port Harcourt Teaching Hospital, Rivers state. The result agreed with that of Fen Zhou et al., (2015) in a study on barriers to research utilization among Registered Nurses in Traditional Chinese Medicine Hospitals in China. Their result said that lack of time on the job, lack of knowledgeable colleagues and by overwhelming research publications. Clinical experience, working pressure, job

satisfaction, and research experience could be identified as associated factors for barriers to research utilization. In the study of Dagne & Tebeje (2021), limited support for nurses' and midwives' experience of research utilization decrease nurses' and midwives' confidence to utilize research in clinical practice. Knowledge, attitude, time mismanagement, and the lack of motivation were perceived barriers to research utilization. The lack of training and access to systematic review and meta-analysis research findings limited the research utilization in clinical practice.

On the measures that are aimed at improving nurse's participation in research the overall result gave a criterion mean of 3.55 ± 0.51 showing that the measures are good enough. According to Oluwatosin (2014), supporting factors for research utilization, attitude, self-efficacy in research utilization skills, hospital's level of healthcare and nursing/midwifery work index were found to be statistically significant predictors of research utilization.

Conclusion

In conclusion, there should be an enabling environment to help research studies thrive in the clinical settings. This include additional knowledge on research writing, reporting and implementation of findings, enough funds, manpower, equipment and time to implement it and policies that will make change easy in the hospital settings. The patients that will be involved in research studies should be duly compensated.

Recommendations to:

The Government

They should encourage research studies by giving grants to those who embark on research in clinical areas.

Should make education and health a priority in nation building. This will encourage research studies.

The Hospital Management

Should ensure that grants given to researchers gets to the final destination and that it served its purpose.

They should enact policies that will allow for implementation of research findings and allow positive changes.

The Nurses

They should be courageous and develop interest in taking up research studies in clinical settings.

They should liaise with other para medics in carrying out research studies

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