

NURSES' ATTITUDE TO READING RESEARCH ARTICLES AND THEIR PERCEPTION OF RESEARCH UTILIZATION IN CLINICAL PRACTICE IN A NIGERIAN CITY.

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ABSTRACT

This descriptive study aimed at determining nurses' attitude to reading research articles and their utilization in nursing practice was conducted in University College Hospital (UCH) and Adeoyo Maternity Teaching Hospital (AMTH) both in the city of Ibadan, Nigeria. Data were collected through a 50-item-structured questionnaire using purposive sampling technique to select 240 willing participants.

Results showed that majority of the respondents, 91% and 86.2% in UCH and AMTH respectively, perceived research as very important in promoting quality nursing care. However, majority, 93(40%) of them read research articles occasionally and 99(42.5%) read monthly while only 7(3.0%) and 9 (3.9%) claimed daily and weekly reading respectively. Level of education of the nurses and years of working experience had an impact on their perception of research utilization ($p= 0.000$ and 0.05) respectively while their cadre and preference for traditional method did not ($p= 0.850$ and 0.619).

Nurses should endeavour to update their knowledge and skills throughout their career by reading research articles.

INTRODUCTION

Research according to American Nurses' Association Commission on Nursing Research is defined as "the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings¹. This could include synthesis and analysis of previous research to the extent that it leads to new and creative outcomes. Nursing as a professional practice is undergoing tremendous changes and challenges and in

order to meet these social challenges and needs, it must be research based. This is because within the nursing profession, it is expected that new information in the form of research findings will be incorporated constantly and knowledgeably into nursing practice. This becomes more important as the nurse is a critical link in bringing research-based changes into clinical practice^{2, 3}. Clinical practice without research is practice based on tradition without validation and it is less desirable in today's era of Evidence-Based Practice (EBP). This is because the ultimate goal of nursing is to provide high-quality patient care and the ability to conduct research is fast becoming an ever important skill. Closely linked with this is the ability to read research articles and utilize the findings in clinical practice.

KEYWORD: Nurses Attitude, Reading, Research articles, Perception, Utilization, Clinical practice, Nigerian city.

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Besides, nursing profession is expected to be a dynamic clinical service which is supported by unique body of knowledge that is developed through the research process, in response to changes in the environment and client's health care needs. Hence, nurses need to expand their knowledge and skills in research on a continuous basis in order to provide appropriate care for meeting the changing health needs of their clients and for autonomous clinical decision making^{4, 5}. The desire to improve nursing practice by utilising the results of systematic enquiry can therefore not be over emphasized. It can be traced to the meticulous note taking of Florence Nightingale, whose statistical analysis of epidemiological data helped to save lives during the Crimean war. Florence Nightingale made some recommendations, which were widely accepted and utilised for reforms in medical care both in the military and civilian hospitals. According to Talbot⁶, she is considered the first nurse researcher and the mother of modern nursing.

In the mid 1970s, most nurses worked at the bedside in hospitals. Presently, more nurses are finding themselves involved in nursing research⁷. Recently, with advancement in nursing education, more involvement of nurses in research, widespread availability of computers for collection and analysis of information, greater comfort in conducting research, an ever growing recognition that research is an integral part of professional nursing, as well as the move to transfer Schools of Nursing into University have shifted nursing research's focus from Education and Administration into Nursing Practice. There seems to be a universal focus of research related to care, leading to the promotion of research utilisation in nursing practice according to Polit and Hungler⁸

Most of the professional nurses involved in direct client care today have been exposed to the knowledge of research and its utilization in clients' care, either through in-service education programmes, or other post qualification educational courses. Research in nursing is as old as the profession. Hence, it is pertinent to find out how nurses perceive research and its utilization in nursing practice today. What do they do with the daily observations they make in the course of caring for their clients? With this, a change in the practice of nursing care, from rituals and trial and error to a nursing care that is research focused is expected. It therefore becomes important to assess nurses attitude to reading research articles and their perception of research utilization in clinical settings.

The aim of this study was to determine nurses' attitude to reading research articles, their perception of research utilization in nursing practice; as well as identify their level of knowledge, sources, constraints and personal involvement in research in the selected setting.

METHODOLOGY

The participants of this descriptive study consist of professional nurses in selected units of University College Hospital (UCH), and Adeoyo Maternity Teaching Hospital (AMH), both in Ibadan city, southwest Nigeria. University College Hospital is a tertiary hospital with the main focus of teaching, services and research. The bed capacity at the time of this study was 805. Adeoyo Maternity Teaching Hospital, Ibadan served as one of the clinical areas for Nursing students from the University of Ibadan. The two hospitals were chosen for this study because they are government owned hospitals with all cadres of nurses who have access to research studies.

Participants

The total population of nurses working in the randomly selected (Paediatrics, Obstetrics and Gynaecological) units of both hospitals was 252, out of which 12 were on annual/maternity leave therefore, 240 participants were purposively recruited for the study in a ratio of 1:2, 80 participants from Adeoyo Maternity Teaching Hospital, and 160 from the University College Hospital, Ibadan. Hence, 240 questionnaires were administered. Out of this number, 7 were discarded because they were not suitable for analysis. The result of this study was therefore based on the findings from 233 respondents.

Instrument

The instrument was a validated 50-item questionnaire consisting of 3 parts: Section A contains items that provide personal information about the participants. Section B tapped knowledge about nursing research while section C elicits information on nurses' reading and perception about research utilization in patient care. Twenty questionnaires were pre-tested among twenty registered nurses from nurses who did not participate in the

study. The exercise was repeated after two weeks using the same tool on the same participants. The overall scores from the test were correlated using Pearson's reliability coefficient test with a score of 0.85. Content and face validity were ascertained by experts.

Procedure

The selected units of both hospitals were visited and the questionnaires were administered face-to-face to all nurses who were available and willing to participate in the study. This took place between 2 and 4 pm, the period when nurses on morning and afternoon shifts overlap. Responses were collected on the spot and data collection lasted four weeks. Those who were on night duty were allowed to take it home and returned the following night.

Ethical considerations

Permission to carry out the study was obtained from the Ethical Committees of the University College Hospital, and Adeoyo Maternity Teaching Hospital, Ibadan following due protocols. However, their freedom to withdraw at any stage of the study was re-emphasized and no name was required.

RESULTS

Table 1. Sex distribution of respondents

Sex	Adeoyo	UCH	Total
Male	9(11.3%)	0.0(0%)	9(3.9%)
Female	71(88.7%)	153(100%)	224(96.1%)
Total	80(100%)	153(100%)	233(100%)

Table 2.Qualification of respondents

Qualification	Adeoyo Population	UCH Population	Total	χ^2	P-value
Registered Nurse	1(1.25%)	0(0.0%)	1(0.4%)	64.31	0.000
Registered Midwife	27(33.7%)	3(2.0%)	30(12.9%)		
Registered Nurse/Midwife	20(25%)	66(43.1%)	86(36.9%)		
Diploma in other nursing specialty	11(13.7%)	32(20.9%)	43(18.5%)		
No response	0(0.0%)	1(0.6%)	1(0.4%)		
B.Sc. Nursing	9(11.3%)	4(2.6%)	13(5.6%)		
B.Sc. in any other field	10(12.5%)	46(30.0%)	56(24.0%)		
M.Sc. Nursing	2(2.5%)	1(0.6%)	3(1.3%)		
Total	80(100%)	153(100%)	233(100%)		

Table 3.How nurses perceive the usefulness of research to nursing practice

		Adeoyo	UCH	Total
A. Meeting the daily challenges of clinical nursing by a nurse does not require research	Agree	24(30.0%)	26(17.0%)	50(21.5%)
	Disagree	56(70.0%)	127(83.0%)	183(78.5%)
B. In developing a Nursing care plan for clients on the ward, the use of research is not necessary	Agree	24(30.0%)	24(15.7%)	48(20.6%)
	Disagree	56(70.0%)	129(84.3%)	185(79.4%)
C. Research is more relevant in Nursing Education than in Clinical Nursing	Agree	35(43.8%)	31(20.3%)	66(28.3%)
	Disagree	45(56.3%)	122(79.7%)	167(71.7%)
D. Nursing research is not important to the clinical Nurse because the Nurse might not have authority to change Nursing care procedures	Agree	30(37.5%)	42(27.5%)	72(30.9%)
	Disagree	50(62.5%)	111(72.5%)	161(69.1%)
E. Research is very important in promoting quality nursing care	Agree	69(82.5%)	143(93.5%)	212(91.0%)
	Disagree	11(13.8%)	10(6.5%)	21(9.0%)
F. Research contributes to decision making in client care	Agree	66(82.5%)	138(90.2%)	204(87.6%)
	Disagree	14(17.5%)	15(9.8%)	29(12.4%)

Table 4. Reasons given by nurses for their lack of interest in reading research findings

	Adeoyo	UCH	Total
Non-availability	15(18.8%)	3(2.0%)	18(7.7%)
Lack of time and no free journals	11(13.75%)	30(19.6%)	41(17.6%)
Work overload	6(7.5%)	15(9.8%)	21(9.0%)
No interest	2(2.5%)	6(3.9%)	8(3.4%)
No longer in school	5(6.25%)	6(3.9%)	11(4.7%)
Journals are outdated	6(7.5%)	3(2.0%)	9(3.9%)
Not in procedure manual	1(1.25%)	0(0.0%)	1(0.4%)
No modern equipment to facilitate reading	0(0.0%)	5(3.3%)	5(2.1%)
Poor knowledge of importance of research	0(0.0%)	2(1.3%)	2(0.85%)
Nature of research	0(0.0%)	2(1.3%)	2(0.85%)

Table 5. Perceived barriers to research utilization in nursing care

Perceived barriers	Adeoyo	UCH	Total
No motivation and support to implement change	18(22.5%)	27(17.6%)	45(9.3%)
Lack of time, work overload, inability to accept change into nursing practice	1(1.25%)	7(4.6%)	8(3.4%)
In case of any problem the individual nurse is liable or responsible for it	3(3.75%)	4(2.6%)	7(3.0%)
No equipments	2(2.5%)	1(0.65)	3(1.28%)
Higher percentage of nurses are not in research institution	2(2.5%)	2(1.3%)	4(1.7%)
If the research findings are new	1(1.25%)	4(2.6%)	5(2.1%)
Fear of victimization	7(8.75%)	4(2.6%)	11(4.7%)
Too many protocol	0(0.0%)	2(1.3%)	2(0.85%)
Total	34(42.5%)	51(33.3%)	85(136.4%)

Table 6. Showing the effect of Education on Nurses' Perception of Research Utilization in Nursing Practice in both Hospitals using ANOVA

Level of Education	Mean	Std. Dev.	F-value	P-value
Registered midwife	4.94	1.46		
Registered Nurse/midwife	4.32	1.79		
Diploma in Nursing	4.19	1.92	8.473	0.000
B.Sc. Nursing	5.81	0.75		
B.Sc. in other fields	5.54	1.01		
Total	4.77	1.66		

Table 7. Showing the effect of professional cadon nurses' perception of research utilization in both hospitals using ANOVA

Professional	Mean	Std. Dev.	F-value	P-value
Staff Nurse	5.36	0.63		
Nursing Officer	4.76	1.66	0.326	0.850
Others	4.17	1.77		
Total	4.77	1.66		

Table 8. Showing the relationship between profesalonnurses' years of working experience and their personal involvement in research utilization in nursing practice

Years of working experience	Personal involvement			χ^2 value	P-value
	Yes	No	Total		
<5	30(16.9)	20(36.4)	50(21.5)		
5 – 9	55(30.9)	10(18.2)	65(27.9)		
10-14	44(24.7)	12(21.8)	56(24.0)	10.93	0.05
15-19	15(8.4)	5(9.1)	20(8.6)		
20-24	10(5.6)	4(7.3)	14(6.0)		

25+	17(9.6)	3(5.5)	20(8.6)
No responses	7(3.9)	1(1.8)	8(3.4)
Total	178(76.4%)	55(23.6%)	233(100%)

Table 9. Comparing Nurses’ preference between traditional method of nursing care and utilization of new research findings in nursing care in both hospitals using chi-square

		Adeoyo	UCH	Total	χ^2 value	P-value
I would rather carry out my Nursing Care properly as it has always been done	Yes	33(41.3%)	58(37.9%)	91(39.1%)	0.250	0.619
	No	47(58.8%)	95(62.1%)	142(60.9%)		
	Total	80(100%)	153(100%)	233(100%)		

Using chi-square at alpha level 0.05, the chi-square value is 0.250 and p value 0.619

DISCUSSION

Socio-Demographic Characteristics of Respondents

Females accounted for 71(88.7%) at AMTH with 9(11.3%) males as shown in Table 1. At the UCH, all the 153 (100%) respondents were females. This is in accordance with Donaldson and Corwley⁹ who stated that the preponderance of females followed the pattern of the nursing profession globally⁹. Table 2 shows that the participants have sound academic and professional qualifications as 3 of them had post graduate qualification - 2 (2.5%) from AMTH and 1(0.6%) from UCH. This is vital for research utilization as agreed by other authors^{10,11}. This suggests that the nurses only improved themselves academically without corresponding interest in research. It may also suggest lack of collaboration with other researchers and this is in agreement with Pringle¹⁰, who stated that:

... it is unrealistic to expect nurses, who do not feel valued or who are overworked and

underpaid, who feel their opinions do not count because they are rarely solicited, and who are increasingly recognising that to stay competitive, they must get further education (which will not increase their salary, will not improve their working conditions and will not lead to more influence in their work places) to work closely with researchers to identify significant clinical practice problems. These nurses may not be willing to participate in testing of interventions, and to pay attention to results of studies so they can learn new strategies that they can apply in patient care.

Many nurses see patient care as their main goal and view research as a separate entity irrelevant to their practice.¹²

Perception of research utilization in nursing practice

Table 3 shows professional nurses' perception of research utilization in nursing practice. As shown in Table 3, 91.0% of the nurses perceived research as very important in promoting quality

nursing care. The result suggested that nurses who participated in the study felt they can change practice and so did not agree to the listed statements. Only 30.9% agreed contrary to the discoveries in a study on *Barriers to and Facilitator of Research Utilization Among Nurses in Northern Ireland*¹³, which showed that the top barrier was that, the participants did not feel that they have enough authority to change patient care procedures. A similar discovery was made by other authors in a study: Assertiveness among Professional Nurses that nurses practicing with a diploma as their highest level of education in nursing were significantly less assertive than nurses who have baccalaureate or higher degree¹⁴. With this, 20.6% of them felt research was not necessary in developing a nursing care plan for clients on the ward, higher in AMTH (30.0%) compared to University College Hospital (15.7%). This shows that the Nurses from AMTH do not have a good knowledge of Nursing Care Plan.

Participants in this study did not read research articles regularly as majority only read monthly (42%) and occasionally (40%). According to Table 4, the topmost three reasons why nurses are not interested in reading research findings include lack of time and free journals (17.6%), followed by work overload (9.0%), and that research findings are not available (7.7%) except in schools. This is in agreement with the findings of Ofi, Sowunmi and Anarado¹⁴ in a similar study on nurses' knowledge base for research conduct, attitudes towards research and perceived barriers to research utilization in Southern Nigeria. Their findings revealed inability to understand research reports and statistics as barriers to research utilization. McGuire¹⁵ is also of the opinion that:

... because nurses do not read, they do not know about research findings, and in the absence of such knowledge they cannot be expected to change their practice^{16,17}.

In addition, this is in agreement with literature findings^{15,16} that: barriers to research utilization is communicated as lack of accessibility to research findings, the research values and skills of practitioners, time to read and implement research and organization and workplace limitations. McCurren¹⁸ has a similar opinion, that the unavailability of research findings, limited access to journals and low comfort level with using library and databases are also factors that can prevent research utilization in the practice setting. Yet, the amount of time an individual spends reading professional journals and specific research journal correlates with the adoption of nursing innovations.

Perceived barriers to research utilization on the ward

The most important obstacle as indicated by the highest proportion of the participants (24.8%) is lack of cooperation and fund from the management and senior professional colleagues Table 5. This is in agreement with the study by Ax and Kincade¹⁹ on *Nursing Students' Perception of Research: Usefulness, Implementation and Training*. The results suggested that some of the students have interesting research ideas but felt little inclined to pursue them as they felt the power exerted by more senior staff impeded any chance of carrying out or utilizing research findings. Resistance toward suggestions for change was a recurring issue throughout the interviews. This includes both students' own resistance to research as well as the resistance displayed by qualified nurses and managers at work. Walsh²⁰ in his own

study examined the perceived barriers to research use among a sample of 63 hospitals and 78 community nurses, the results identified the major barriers to be related to the clinical setting. The implication here is for managers of the service and educators to seek to promote research based practice. Leadership commitment is essential and there are clear benefits in developing a learning and professional supportive environment as well as involving nursing staff in organizational decision making.

The second obstacle indicated is lack of equipment, modern technology and time to implement the new findings (24%). This is also in agreement with Parahoo's¹³ findings. He discovered that lack of time and funds were included among the seven topmost barriers related to research utilization. Fund is needed to get modern functioning equipment to meet up with the requirements of introducing new research findings into any system. The third obstacle was the fact that there would be nobody to defend the nurse if any error occurs in the course of utilising the new findings (11.2%). This shows that these participants do not know the steps involved in incorporating research findings into practice (nursing care) as research findings will not be acceptable for clinical practice without previous trials to ensure it is not harmful and will not prolong or add to patient's discomfort. Also the nurses to implement a new research discovery are made to pass through a period of education to change from the old way of doing things and accept the new findings.

Other obstacles include the non-availability of facilities for research project (9.0%). Work overload and lack of time (12.0%), lack of support from colleagues

(6.4%) and finance (7.3%). The issue of insufficient time to implement new ideas and also that organization may be reluctant to expend resources for research utilization projects was also mentioned in Thompson²¹ in his write up: *The Meaning of Research Utilization: A Preliminary Typology*. Research utilization can become part of organizational goals only if there is a commitment on the part of managers and administrators. Strong leadership in health care organization is essential in making research utilization come true.

The first hypothesis which states that there is no significant difference between level of education of professional nurses and their perception of research utilization in nursing practice was shown in Table 6. There was a statistically significant difference observed between the educational level of the nurses and their perception of research utilization. The three tests, that is within hospital, between hospitals and the two hospitals ($p < 0.05$) showed that those who had first university degree in nursing had the highest perception mean score on research utilization being 5.81 followed by those with first university degree in other fields 5.54 and least with those who possess diploma in Nursing 4.19 only. Therefore the null hypothesis was rejected.

The effect of professional cadre on nurses' perception of research utilization is shown using ANOVA in Table 7. No significant statistical difference was observed between nurses' cadre and their level of perception of research utilization ($p > 0.05$) within each hospital and the hospitals tested jointly. However, staff nurses had the higher mean score 5.36% showing that the younger nurses who have just been exposed to research while in school have a better perception. Therefore the second

hypothesis which states that there is no significant difference between professional nurses' cadre and their perception of research utilization in nursing practice was rejected.

Tables 8 shows the relationship between nurses' years of working experience and their personal involvement in research utilization in nursing practice using chi-square test, which shows no significant statistical relationship ($p > 0.05$). This means that the younger nurses are more involved personally in research utilization. The third hypothesis therefore was not rejected.

The fourth hypothesis states that there is no significant difference between the nurses' preference for traditional method of nursing care and utilization of new research findings in nursing care. In table 9, the nurses' preference for traditional method of nursing care and utilization of new research findings in nursing care in both hospitals is shown using chi-square. No significant statistical difference was observed between nurses from both hospitals ($p > 0.05$). The null hypothesis was therefore not also rejected.

Nursing Implication and conclusion

The results of the study imply that nurses do not read wide despite academic advancement and good knowledge of nursing research. The need for every practicing nurse to update his/her professional knowledge and skills throughout his/her career is unquestionable and essential on a daily basis. Lars²², in his study on Knowledge utilization in Swedish Neonatal nursing, emphasized the importance of including both individual and organizational factors in the strategic planning for research utilization in nursing practice. He is of the

opinion that plans have to be long-term considering that change is a slow process. Leadership commitment is therefore essential.

Rapid technological advances make it necessary to inaugurate a universal system resulting from and related to knowledge explosion, which has had an impact on every field of endeavour in recent years. The impact has been so great that many professions including nursing have accepted updating of knowledge through different means. One of such ways of updating knowledge is through the internet and reading of research articles. The more nurses' knowledge is updated, the more they are equipped to meet up with new challenges in nursing and contribute to the realization of organizational goals. Nurses are therefore encouraged to update their knowledge and acquire new skills relevant to the performance of their duties via constant reading of research articles for further integration and application to improve patient care.

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