Challenges Of Accessing And Seeking Research Information: Its Impact On Nurses At The University Teaching Hospital In Zambia

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Abstract: This case study seeks to discuss the challenges that nurses face in accessing and seeking research information and its impact on nurses at the University Teaching Hospital. It adopts a case study approach using descriptive statistics for the quantitative aspects of the study and thematically for qualitative data. The study established that: lack of access to information resources, poor Information Communication and Communication (ICT) infrastructure, lack of support from hospital administration, lack of time to read, lack of awareness of available information resources and poor information sharing culture were amongst the top challenges faced by the nurses when accessing and seeking information to use in clinical practice. The study recommends that the University Teaching Hospital (UTH) management should improve its Information and Communication Technology (ICT) infrastructure, hold sensitisation training/workshops on utilisation of research findings in clinical practice as well as encourage information sharing among nurses.

Keywords—Research Information, Challenges of Information Access, Nurses, University Teaching Hospital, University of Zambia.
I. INTRODUCTION

The health sector is one of the most dynamic human disciplines; its dynamism is due to a variety of reasons; characterised by extensive research, development activities, long working hours and a high disease burden. Consequently, large amounts of money are spent annually on high-quality and sophisticated research, resulting in an exponential growth in health care literature. This has resulted in growth and innovations in health care, invention of new and more effective medicines, medical devices, and procedures as well as new health literature. One major objective behind all these efforts is to help doctors, nurses, and medical technicians provide the best possible care and treatment to patients [1]. Historically, care of the patient was influenced by the experiences and opinions of those involved in providing treatment.

Research utilisation marks a shift among health care professionals from a traditional emphasis on authoritative opinions to an emphasis on data extracted from prior research and studies. This paradigm shift is now continuously referred to as Evidence Based Practice, which is, nursing practice based on evidence from practice and research. Nowadays, decision making in health care has changed dramatically, with nurses expected to make choices based on the best available evidence and continually review them as new evidence comes to light [2].

It is a global challenge for nurses to scrutinise their practices and provide healthcare informed by current scientific knowledge [3]. The capacity to provide evidence-based practice is one of five core competencies all healthcare professionals should possess to meet the needs of the 21st century healthcare system. Moreover, researchers have observed that no amount of research will make any difference to practice if it is not utilised as research information has the potential to offer solutions to or insights into clinical practice and related issues [4]; [5]. However, one major objective behind all these efforts is to help doctors, nurses, and medical technicians provide the best possible care and treatment to patients, yet, challenges exist that prevent nurses from accessing and seeking research information that could potentially improve patient health outcomes.

II. UNIVERSITY TEACHING HOSPITAL

The University Teaching Hospital (UTH) is the biggest public tertiary hospital in Zambia. UTH is in the capital city of Lusaka. Built in 1910 and in the colonial period was only meant for sick Africans who were only cared for by male orderlies as the hospital had no doctors and nurses. UTH attends to over 70,000 patients per quarter with 20,000 admissions. Further approximately 5000 babies are born in the same period.

The hospital has a high disease burden and a lot of complicated cases, health challenges and therefore, this makes it more appropriate as most information
needs for Evidence based Practice (EBP) that may be required by nurses and other professionals. It has an occupancy rate of 82%, itself a reflection of a high disease burden. The hospital has approximately 1,655 beds and 250 baby cots. It provides a full range of primary, secondary and tertiary health and medical services on both out patients and inpatients [6].

III. STATEMENT OF THE PROBLEM
Some institutions, organisations and libraries have developed extensive databases and services that are being used by health professionals, clinicians, and educators to access health information. Recognising the need for information, UTH through the University of Zambia, School of Medicine, Medical Library and the School of Nursing Library provides information to nurses and other health professionals.

Moreover, with the advancement of technology, the internet is one way which offers novel tools for providing information to health professionals. Despite all the growing availability of high quality research information and a strengthening focus on evidence based practice by policy makers the world over, nurses and other healthcare practitioners, have been slow to adopt research evidence into their daily decision-making [7]. Moreover, not much has been written about the challenges nurses at UTH face in seeking and accessing research information, this study will shed more light on the topic.

A. Objectives of the study
The main objective of this study was to investigate the challenges that nurses’ face in accessing research information in their clinical practice at the University Teaching Hospital in Zambia.

B. Rational of the Study
In order for nurses to have access to evidence based research information, it is important that the inherent challenges that prevent them from effectively seeking and accessing the information are known and addressed.

IV. METHODOLOGY
This is a case study which utilised both qualitative and quantitative methods of data collection. The study was conducted in four admission units/wards: Maternity Admission Ward, Medical Admission Ward, Paediatric Admission Ward and Surgical Admission Ward at the University Teaching Hospital. The main instrument used to collect data was the questionnaire. Quantitative data was analysed using SPSS version 20 and qualitative data was analysed using themes of a purposive sample of 60 practicing nurses, in which 57 questionnaires were returned giving a response rate of 95%.

V. RESULTS
C. Background characteristics of the respondents
Fifty-seven (57) respondents, 13 (22.8%) were male while 44 (77.2%) were female. This data shows that most of the nurses under investigation were female as shown in Table 1 below. Furthermore, regarding age distribution of the respondents, Table 1 reveals that out of the total number of respondents 15 (26.3
%) were aged between 20-25 years, while 31 (54.4%) were aged between 26-35 years and 11 (19.3 %) were aged above 35. This demonstrates that most of the nurses under investigation were aged between 26-35 years. In terms of nursing experience, 26 (45.6%) worked 2-4 years; 19 (33.3 %) worked 5-9 years while 12 (21.1%) comprised of those who had worked above 9 years. The data further indicates that most of nurses had only 2-4 years nursing experience.

Considering the nurses’ qualifications, only 2 (3.5%) had nursing degrees while 23 (40.4%) were Registered nurses, 15 (26.3%) were Enrolled nurses and 17 (29.8%) were Midwives. Most of the respondents 44 (77%) indicated that they took care of at least 20-60 patients per shift. Respondents were also asked to specify the roles they performed apart from nursing. Results indicate that the majority of respondents 40 (70.1%) were doing nursing care, while 9 (15.7) of the nurses were working as nurse supervisors, others were working as counselors. See Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Values</th>
<th>Freq (n=57)</th>
<th>%</th>
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<tbody>
<tr>
<td>Gender</td>
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<td>13</td>
<td>22.8</td>
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<tr>
<td></td>
<td>Female</td>
<td>44</td>
<td>77.2</td>
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<tr>
<td>Age</td>
<td>20-25yrs</td>
<td>15</td>
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<td>26-35yrs</td>
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<td>54.4</td>
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<td>above 35yrs</td>
<td>11</td>
<td>19.3</td>
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<tr>
<td>Work experience</td>
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<td>26</td>
<td>45.6</td>
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<td>Zambia Registered Nurse</td>
<td>23</td>
<td>40.4</td>
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<td></td>
<td>Enrolled Midwife</td>
<td>8</td>
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D. Identified Challenges

The finding revealed that the majority 50 (87.7%) of the nurses encountered challenges when seeking and accessing information to use in clinical practice. Respondents were further asked to indicate the challenges which prevented them from seeking and using research information in clinical practice at the University Teaching Hospital. The results revealed that the majority (35; 70%) of the respondents considered the lack of access to information resources as the greatest and number one challenge to their seeking and using of research information in clinical practice. The other challenge to use of information which was considered second by 32 (64.0%) of respondents was poor Information, Communication and Technologies infrastructure. The lack of support from management/administration was considered a challenge by 31 (62.0%) of the respondents while 30 (60%) of the nurses indicated lack of time to read as a challenge.

Fifty six percent (56%) of the respondents felt that poor information sharing culture among nurses prevented them from seeking and using research information in clinical practice. Furthermore, 27 (54%) of respondents indicated that lack of awareness to available resources as a barrier to information seeking and use while 25 (50%) of the nurses attributed the high cost of information
services as a challenge to information seeking and use. See Fig. 1.

![Fig. 1. Challenges nurse face](image)

**E. Overcoming the Challenges**

Respondents were asked to indicate what measures they felt the hospital management should put in place to overcome the challenges they faced. The results indicated that the majority of nurses 46 (80.7%) suggested that, there was need for management to improve on information, communication infrastructure by making available wireless Internet access around the hospital premises and provide computers in the ward premises. Some of the nurses emphasised this point and said that:

> “we need free access to computers and Wi-Fi, computers are only found in the offices at the administration, no access to online journals the hospital should provide computers and internet access in all the wards for easy access’’.

Sixty three percent (63.1%) of the nurses felt that Library management should also improve in the promotion of their services and in the way they package the information; to in format in formats which are easy to use and access. Other nurses 45.6% suggested that UTH management should train them on how to search for information to improve their information searching skills. One nurse said: “there should be equal opportunities for training and workshops because only the same people attend these workshops all the time”.

Respondents, 17 (29.8%) also suggested that management should help enhance communication skills of nurses and encourage information sharing among nurses through different platforms such as workshops, presentations were updates of new procedures and other relevant research information can be given, while, 7 (12.3%) felt that nurses should be accorded authority to change practice. Other respondents suggested that hospital administration should support information use by increasing information availability and accessibility to all members of staff. See Fig 2.
VI. DISCUSSION

It has been argued by several authors that nurses require access to evidence-based information to execute their nursing clinical duties in a professional way. However, in Zambia, this can only happen if the identified challenges in this study are resolved. These challenges have also been identified by other researchers [1, 4, 5, 8]. It was also found that “lack of confidence was a key finding in many of the studies examining the information-seeking behavior of clinical nurses as well. However, in these studies, lack of confidence was often related to weak computer skills” [8].

They further conclude that in order for nurses to “provide quality care, practicing nurses must be able to locate evidence-based information efficiently. They must also possess strong research skills to support lifelong learning and facilitate informed patient consent” [8].

Another study makes a related point, that: “lack of access to information remains a major barrier to knowledge-based health care in the developing world” [9]. In order to address this, the different levels of the health care and health information services in the ministry of health and other interested partners need to each play a distinct role in ensuring access to information, so as to achieve quality health care outcomes. Others contend that ‘providing access to reliable information for health care workers in developing countries is potentially the most cost-effective strategy for improving the quality of health care delivery’ [10]. The same argument is made by the World Health Organisation (2006) when they affirm that: “evidence shows that having information does help health workers to do their jobs better, as long as certain provisos are met: the information must be relevant to the job and available when needed, and workers must have a degree of confidence in the information’s quality” [3]. This is essentially a role that libraries have been playing and they can play very effectively to provide nurses with the clinical evidence they need.

Similarly, [11] and [12] all contend that the primary barriers to nurses accessing current research are organisational support for computer use, including access to computers; information technology (IT) and librarian support. Nurses and other health
professionals need supreme support from hospital administration in order for them to benefit from modern information technologies. Indeed, there is need for total commitment from both management and policy makers to provide the much-needed infrastructure for the staff. On the other hand, training nurses in basic computer skills, communication skills and electronic information retrieval is vital for them to develop confidence in information searching that would enable them to navigate the vast amounts of information available electronically. Equipped with these search skills they will be able to access the appropriate information which is evidence based; that is required in their clinical practice.

**Conclusion**

Zambian nurses work under difficult conditions; which is characterised by a high disease burden, more patient workload and working long shifts. In addition to these challenges, there is the additional burden of not being able to access research information to assist them in their day today nursing clinical practice. Amongst the top challenges that nurse faced were: lack of access to information resources, poor Information and Communication Technology (ICT) infrastructure, lack of support from hospital administration, lack of time to read, lack of awareness of available information resources and; a poor information sharing culture. These challenges if not attended may hinder access to the best research evidence that is critical to the success of nursing care. It is therefore important for the hospital to recognise the challenges and address them.

**Recommendations**

The study revealed the need for the University Teaching Hospital (UTH) management to improve Information and Communication Technology (ICT) infrastructure, hold sensitisation training/workshops on utilisation of research findings in clinical practice as well as encourage information sharing among nurses. These are some of the suggestions that were made by the study participants. The study further recommends that all stakeholders such as the University of Zambia Medical Library and University Teaching Hospital School of Nursing Library increase promotion and use of information resources to nurses amongst others.
REFERENCES


