

SOURCES OF INFORMATION USED BY NURSES IN CLINICAL PRACTICE AT THE UNIVERSITY TEACHING HOSPITAL IN ZAMBIA

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Abstract

The objective of the study was to investigate sources of information that nurses use in clinical practice at the University Teaching Hospital in Zambia. A case study was adopted that utilised both qualitative and quantitative methods of data collection. It was conducted in four admission units/wards namely; Medical, Obstetrics and Gynaecology, Paediatrics and Surgery of the University Teaching Hospital. The main instrument used to collect data was the questionnaire. Quantitative data was analysed using descriptive statistics and qualitative data was analysed thematically; using a purposive sample of 60 practicing nurses. Fifty-seven questionnaires were returned giving a response rate of 95%. The results of the study show that most nurses rely on doctors 50 (87.7%) as information sources followed by fellow nurses 48 (84.2%), workshops, seminars and conferences 46 (80.7%), printed standard protocols were at 43 (75.4%), hospital information at 43 (75.4%), patients records at 42 (73.7%), printed text books at 42 (73.7%), procedure manuals 40 (70.2%), personal experience 38 (66.7%) nursing journals 34 (59.6%), leaflets 34 (59.6%), newspapers 29 (50.9%), television 28 (49.1%), radios 27 (47.4%), databases 26 (45.6%), and libraries 24 (42.1%). Conversational sources such as libraries, radios, television, nursing journals and databases/online sources were rarely used. The study concludes that there is need to promote the use of evidence-based sources of information for the nurses to use in their clinical practice.

Introduction

Nurses play a critical role in health care delivery in all countries. In developing countries this role is amplified by the fact there are not enough doctors to serve the entire population. To play this critical role, nurses require access to credible,

evidence-based and easy to access sources of information. It has been argued that “access to relevant, accurate, and current information is becoming crucial for nurses to keep their knowledge up to date and adopt evidence-based practices” in their clinical care (Majid, et al., 2011). It is, therefore, considered desirable to explore what research information sources exist for nurses to use in clinical practice to satisfy their information needs; and then feed that information in their clinical practice. These information sources include print media, colleagues, meetings, lectures, workshops, the Internet and others. However, due to time constraints, many nurses may prefer to obtain information from resources that are convenient, easy to use, and reliable (Dee & Blazek, 1993). The study investigates the sources of information that nurses use in clinical practice at the University Teaching Hospital in Lusaka, Zambia. The University Teaching Hospital is the largest referral hospital in Zambia. The hospital is “an academic medical centre/university hospital with approximately 1,800 beds. It provides a full range of primary, secondary, and tertiary health and medical services on both an inpatient and outpatient basis. The hospital supports the mission of the School of Medicine (SOM), which focuses primarily on teaching and research, as well as the School of Nursing and other teaching programmes in a number of technical areas (Purvis, 1997, p. v). As a training site, the hospital supports the University of Zambia training in various disciplines such as Anaesthesia, Internal Medicine, Nursing, Obstetrics and Gynaecology, Paediatrics, Pathology and Microbiology, Pharmacy, Physiotherapy, Public Health, Psychiatry and Surgery (University of Zambia, 2015)

Literature Review

Access to relevant, accurate, and current information is becoming crucial for nurses to keep their knowledge up-to-date and adopt Evidence Based Practice (EBP). In this context, it is, therefore, considered desirable to explore what research information sources exist for nurses to use in clinical practice to satisfy their information needs and feed into practice. These information sources include print media, colleagues, meetings, lectures, workshops, the Internet and others (Ajayi, 2005). However, due to time constraints, many nurses may prefer to obtain information from resources that are convenient, easy to use, and reliable (Dee & Blazek, 1993). The study of information sources has further been categorised by researchers into three broad categories which are; print, electronic and human sources. In an ethnographic study which examined the factors that influence nurses’ research utilisation behaviours and investigated their sources of practice knowledge, it was established that nurses categorised sources of information in four broad categories which are; social interactions, experiential knowledge, documentary sources, a priori knowledge (Estabrooks, et al., 2005). They discovered that nurses tend to prefer interactive and experiential sources of knowledge over more formal sources such as journal articles and texts. Researchers further note that, nurses most frequently used experiential knowledge

sources ahead of their initial nurse education, workplace sources, physician sources, their intuition, and then research literature (Estabrooks, 1998). A similar strong preference for humans as information sources was identified by (Thompson, et al., 2001). In studies that evaluate nurses' research use in the context of decision-making, human sources of information, in the form of nursing colleagues, specialist nurses and other healthcare professionals, have emerged as extremely important. Other people (colleagues) are regarded by nurses as the most useful and most accessible sources of information and as such, are the most preferred sources (McCaughan, et al., 2002; Nwagwu & Oshiname, 2009; Thompson, et al., 2001; Thompson, et al., 2005). Marshall, et al., (2011) in their study found what they describe as "a pervasive oral culture", with a strong preference for information from colleagues to support clinical decisions; and people as information sources were seen as most useful and accessible in the clinical setting. Priority was given to those responsible for direct patient care within the clinical area. Text and electronic resources, also seen to be less accessible, mainly because of the time required to access the information within them. Participants stated that the conventional evidence-based practice process was too difficult and time-consuming for them to undertake. Furthermore, electronic sources of information did not rate as highly as their print counterparts. The perceived usefulness of information appeared to be premised on ease of use and access rather than accuracy and completeness. Library use among the nurses within the services they investigated was almost exclusively associated with continuing professional development or formal education. Librarians were not perceived as accessible, hence the low usage of libraries to access information for clinical practice (Marshall, et al., 2011). Similarly, in a survey conducted by Sigma Theta Tau International on evidence-based practice in 2006, it was discovered that colleagues and the Internet were the two most frequently used sources, followed by books and print journals and Medical libraries were reported as being rarely used (Sigma Theta Tau International Evidence-Based Practice Task Force, 2004). In contrast, in their survey based in two English hospitals, (Gerrish, et al., 2008) found that, while a similar priority was given to information from colleagues, information obtained from the Internet was ranked low in frequency of use. Researchers recognise that it is unclear from the responses whether they reflect lack of access to computer facilities or to lack of information technology or information literacy skills to support evidence-based practice (Ebenezer, 2015).

In a study conducted by Majid, et al., (2011) in Singapore's two public hospitals on adopting evidence based practice in clinical decision making, it was found that information on diseases, medicine, treatment were mostly used, and among the printed information sources, medical reference sources were the most frequently used, closely followed by health care pamphlets and information made available by health care companies and hospitals. The use and frequency of use of textbooks and journals, which included published research articles that could be

used as evidence, was quite low. The study's findings are similar to an early study which indicated that nurses rarely visit libraries and do not read research journals unless they are engaged in further education (Blythe & Royle, 1993). Hiney (2005) examined the internet as a resource for nurses working in the Eastern Regional Health Authority in Ireland and its role in supporting their clinical practice and promoting their professional development. The researcher concluded that nurses working in Ireland did utilise the internet to varying degrees to support clinical practice and promote professional development and that geographic locations, support from services along with their length of service and internet literacy had an impact on utilisation. Among the electronic information sources, websites providing information about specific diseases were the most frequently used sources, followed by electronic information sources provided by the respective hospitals, including their hospitals. However, the reported use of Internet resources, nursing e-books, digital medical and nursing libraries, medical databases, and EBP-related blogs was quite low. The most frequently used human sources were nursing supervisors, ward or department colleague, and nursing management staff (Majid, et al., 2011). Other information which were not frequently used were information on hospital's standard operation procedures (Majid, et al., 2011). Similarly, O'Leary & Ni Mhaolrunaigh (2007) in their study found out that text-based sources of information were available to participants in various forms. Guidelines and assessment tools were frequently the only easily accessible potential source of research information and appeared to be the most regularly accessed non-human source of information. Most of the nurses had access to some nursing and medical books in their immediate work area for example; at ward level in an acute hospital; and reported referring to text when they came across something new to them and their colleagues. Majid, et al., (2011) further writes that drug databases and nursing texts were used most frequently.

Studies conducted by Scott, et al., (2011) have shown that nurses mostly use nursing newsletters reporting on projects, rather than the project publications themselves. More recent findings demonstrate that nurse decision-making is more influenced by their colleagues than research papers and they favour easily accessed, 'pre-packaged information' such as policies and guidelines over research reports (O'Leary & Mhaolrunaigh, 2012). This may be of concern, as these guidelines may or may not be research based (Bail, et al., 2009). In the case of the clinical environment, many researchers have concluded that nurses primarily use local sources of information in the context of caring for patients (Corcoran-Perry & Graves, 1990; Blythe & Royle, 1993; Thomas, 2012) These sources include co-workers such as doctors, pharmacists and other nurses. They also include laboratory results and patient records. As for information to support lifelong learning study, nurses identified journals as the most useful resource. This was followed by books, then websites, then electronic databases such as Cumulative Index to Nursing and Allied Health Literature (CINAHL) and

MEDLINE. However, Randell, et al., (2009) established that practice nurses used electronic databases, particularly Medline, CINAHL and the Cochrane Library. Approximately half of the practice nurses interviewed described having used one or more of the databases, although electronic databases were largely seen as tools to support studying, not as tools for accessing information in relation to day-to-day work.

Aim of the Study

The aim of the study was to investigate sources of information that nurses use in clinical practice at the University Teaching Hospital in Zambia.

Methodology

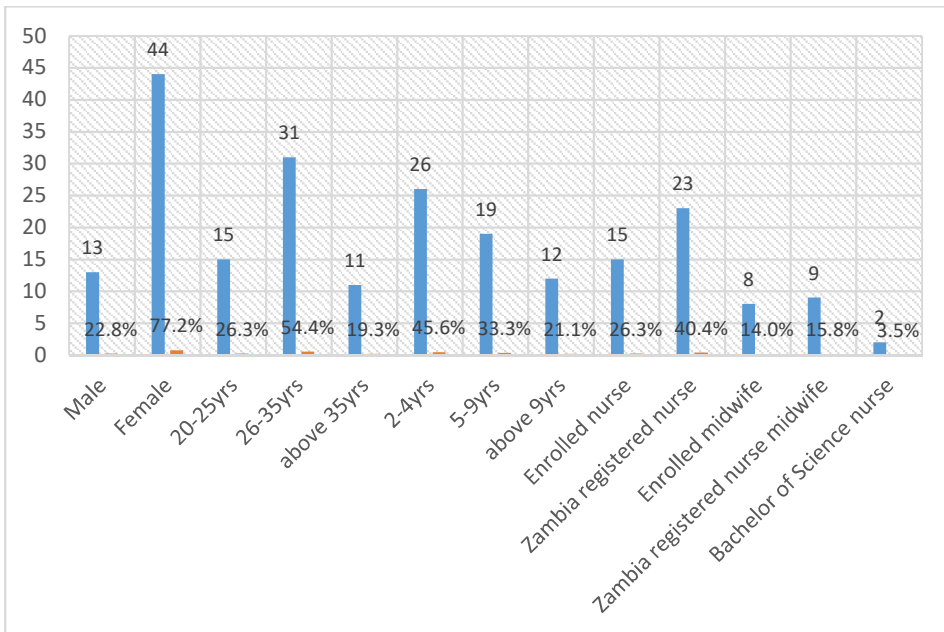
This is a case study limited to the University Teaching Hospital Medical Admission Ward, Surgical Admission Ward, Maternity Admission Ward and Paediatric Admission Wards only. A questionnaire survey was utilised to collect data from the participants. Quantitative data was analysed with descriptive statistics using the Statistical Package for the Social Sciences (SPSS) whilst qualitative data was analysed thematically.

Results of the Study

Background Characteristics of the Respondents

Of the 57 respondents, 13 (22.8 %) were male, while 44 (77.2 %) were female. Fifteen (26.3 %) respondents were aged between 20-25 years, while 31 (54.4%) respondents were aged between 26-35 years and 11 (19.3 %) respondents were aged above 35; showing that most of the nurses under investigation were aged between 26-35 years. A total of 26 (45.6%) nurses had worked for 2-4 years at the hospital; while 19 (33.3 %) of them had worked for 5-9 years and 12 (21.1%) was the number of nurses who had worked at the hospital for more than 9 years. The data further indicates that most nurses had only 2-4 years nursing experience. In terms of educational qualifications, there were only 2 (3.5%) of the nurses who had nursing degrees while 23 (40.4%) were Registered nurses, 15 (26.3%) were Enrolled nurses and 17 (29.8%) were Midwives (Figure 1).

Figure 1. Background Characteristics of the Respondents



Sources of information that nurses use in clinical practice

he results show that most nurses rely on doctors 50 (87.7%) as information sources followed by fellow nurses 48 (84.2%), workshops, seminars and conferences at 46 (80.7%), printed standard protocols was 43 (75.4%), hospital information 43 (75.4%), patients records 42 (73.7%), printed text books 42 (73.7%), procedure manual 40 (70.2%), personal experience 38 (66.7%) nursing journals 34 (59.6%), leaflets 34 (59.6%) newspapers 29 (50.9%), television 28 (49.1%), radios 27(47.4%), databases 26 (45.6%), libraries 24 (42.1%). The results in Table 1 as ranked indicate that most nurses’ preferred doctors and fellow nurses as information sources while very few (the least) nurses preferred to use libraries as sources of information.

Table 1. Information sources used by nurses

| | <i>Information sources</i> | <i>Frequency</i> | <i>Percentage</i> |
|---|----------------------------------|------------------|-------------------|
| 1 | Doctors | 50 | 87.7% |
| 2 | Fellow nurses | 48 | 84.2% |
| 3 | Workshops, seminars, conferences | 46 | 80.7% |
| 4 | Printed standard protocols | 43 | 75.4% |
| 5 | Hospital information | 43 | 75.4% |

| | | | |
|----|---------------------|----|-------|
| 6 | Patient records | 42 | 73.7% |
| 7 | Printed textbooks | 42 | 73.7% |
| 8 | Procedure manuals | 40 | 70.2% |
| 9 | Personal experience | 38 | 66.7% |
| 10 | Nursing journals | 34 | 59.6% |
| 11 | Leaflets | 34 | 59.6% |
| 12 | Newspapers | 29 | 50.9% |
| 13 | Television | 28 | 49.1% |
| 14 | Radio | 27 | 47.4% |
| 15 | Databases | 26 | 45.6% |
| 18 | Libraries | 24 | 42.1% |

As presented in Table 2, the majority 42 (77.8%) of respondents often consulted fellow nurses, with those who relied on personal experience at 42 (75.9%), doctors were consulted by 38 (70.4%) and patients' records were used by 36 (66.7) of the respondents. The least used source were libraries and nursing journals with only 5 (9.3%) of nurses indicating that they frequently used the sources. Other sources such as databases, television, hospital information, radio, procedure manuals, newspapers, printed books, standard protocols, workshops, seminars and conferences were rarely used. Table 2.

Table 2. Frequency of Use of source

| <i>Variable</i> | <i>Frequency</i> | <i>Percentage</i> |
|----------------------|------------------|-------------------|
| Nurse colleagues | 42 | 77.8% |
| Personal experience | 41 | 75.9% |
| Doctors | 38 | 70.4% |
| Patient records | 36 | 66.7% |
| Hospital information | 24 | 44.4% |
| Printed protocols | 22 | 40.7% |
| Procedure manuals | 20 | 37.0% |
| Printed textbooks | 16 | 29.6% |
| Workshops/seminars | 14 | 25.9% |
| Television | 11 | 20.4% |
| Radio | 10 | 18.5% |
| Databases | 7 | 13.0% |
| Newspapers | 7 | 13.0% |
| Nursing journals | 5 | 9.3% |
| Libraries | 5 | 9.3% |

Reason for choosing the sources used

To investigate the reason for choosing the sources used, nurses were asked to describe the reasons for choosing the sources they used in clinical practice. Most of the nurses indicated that they used fellow nurses 40 (70.2), doctors 26 (45.6%),

hospital information 19 (33.3%) and personal experience 26 (45.6%) and argued that they used them because these sources were readily available and accessible. Other sources used were patients' records, workshops, seminars and conferences, printed protocols and procedure manuals because nurses felt that these sources were easy to apply and useful, while those who used libraries and text books indicated that the sources were reliable and factual. Those who used newspapers, television, radio and databases indicated that the sources were helpful and relevant.

Nurses awareness of libraries within the University Teaching Hospital grounds

When respondents were asked to indicate whether they were aware of the information sources available within the hospital premises, 43 (75.4%) were aware about the Lusaka Nursing School Library, while 38 (66.7%) were aware about the UNZA Medical Library. This demonstrates that many nurses were aware of the available information sources within UTH.

Frequency of use of UNZA Medical Library and Lusaka Nursing School Library

However, although nurses were aware of the two libraries available within UTH, when nurses were further asked to state their frequency of use of the Medical and Lusaka Nursing School Libraries, the results indicate that only 3 (6%) frequently used the Medical Library while only 5 (10.2%) of the nurses frequently used the Lusaka Nursing School Library. The majority, 26 (52%) indicated that they never used the Medical Library and; 31 (63.3%) indicated that they never used the Lusaka Nursing School Library. These results demonstrate a very low usage of the Medical Library and Lusaka Nursing School Library respectively. See Table 3.

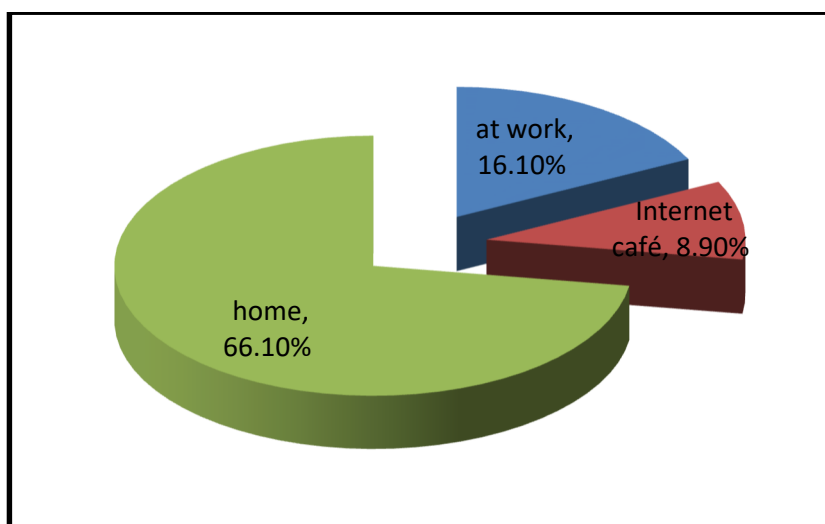
Table 3. Frequency of use of Medical and Lusaka Nursing School Library

| <i>Library</i> | <i>Response</i> | <i>Frequency</i> | <i>Percentage</i> |
|-------------------------------|-----------------|------------------|-------------------|
| UNZA Medical Library | Very often | 3 | 6.0 |
| | Often | 6 | 12.0% |
| | Sometimes | 15 | 30.0% |
| | Never | 26 | 52.0% |
| Lusaka Nursing School Library | Very often | 5 | 10.2% |
| | Often | 5 | 10.2% |
| | Sometimes | 8 | 16.3% |
| | Never | 31 | 63.3% |

Internet sources

To establish if nurses used the Internet or the World Wide Web (www) to access research information, the majority (80.7%) of respondents indicated that they used Internet. When asked to indicate where they accessed the Internet from, Figure 2 below shows that respondents had access the Internet from various places with most of the respondents indicating that they accessed the Internet from home using personal laptops/phones (66.1%) and at their work place (16.1%). Further findings indicated that some respondents occasionally accessed the Internet from an Internet café (8.1%). When the respondents were further asked other specific places where they accessed the Internet from, they indicated that they also accessed the Internet from the University of Zambia Medical Library.

Figure 2: Internet access points



The researchers further wanted to determine if there was a relationship between age of respondents and use of the Internet to access research information for use in clinical practice. Out of 57 nurses who answered this question, the results indicate (Table 4) that, most nurses regardless of their age used the Internet to access research information to use in clinical practice. Therefore, age was not a significant factor on the nurses' use of Internet.

Table 4: Age versus Internet usage

| <i>Age</i> | <i>Yes</i> | <i>No</i> | <i>Total</i> |
|-------------|------------|-----------|--------------|
| 20-25yrs | 14 | 1 | 15 |
| 26-35yrs | 24 | 7 | 31 |
| above 35yrs | 8 | 3 | 11 |

Awareness of electronic sources

When respondents were asked whether they were aware of electronic databases for health information, most nurses indicated that they were not aware of the electronic databases with the results showing that only 19 (33.3%) were aware of Medline, (13) 22.8% were aware of PubMed, 7 (12.3%) were aware of Cochrane library, 5 (8.8%) were aware of the Health InterNetwork Access to Research Initiative (HINARI) and 2 (3.5%) were aware of the Cumulative Index to Nursing and Allied Health Literature (CINAHL). On the other hand, 38 (67.9%) were not aware of Medline; 44 (78.5%) were not aware of PubMed, 50 (89.3%) were not aware of Cochrane Library, 52 (92.9%) were not aware of HINARI and 55 (98.2%) were not aware of CINAHL. The results demonstrate that many nurses at the University Teaching Hospital were not aware of most of the electronic databases listed in Table 5 below. Further respondents who were aware of these electronic databases were asked how often they used the databases. Results indicate that only 5 (8.8%) used Medline frequently, the other databases were rarely used. Table 5.

Table 5. Nurses awareness of Electronic databases

| <i>Awareness of e-databases</i> | <i>Aware</i> | | <i>Not aware</i> | |
|---------------------------------|--------------|------|------------------|------|
| | Frequency | % | Frequency | % |
| Medline | 19 | 33.3 | 38 | 67.9 |
| PubMed | 13 | 22.8 | 44 | 78.5 |
| Cochrane Library | 7 | 12.3 | 50 | 89.3 |
| HINARI | 5 | 8.8 | 52 | 92.9 |
| CINAHL | 2 | 3.5 | 55 | 98.2 |

To establish if nurses had book rooms within their wards for quick reference, respondents were asked if they had a reference / book rooms in their wards; (57.9%) indicated that they had no reference/ book room while (40.4%) indicated that they had a book room within the ward. Those who indicated that they had a reference/ book room were further asked how often they used the book room, the results indicate that the majority (26.3%) of the nurses indicated that they used it sometimes and another (26.3%) of them indicated that they never used it. Only (14%) said that they used the bookroom frequently, while (33.3) did not answer this question. Table 6.

Table 6. Frequency of use of bookroom

| | <i>Frequency</i> | <i>Percent</i> |
|-----------|------------------|----------------|
| always | 8 | 14.0 |
| sometimes | 15 | 26.3 |
| never | 15 | 26.3 |
| Total | 38 | 66.7 |

Discussion of the Findings

Information sources used by nurses

The sources of information mostly used by nurses were ranked and the findings revealed that the majority 87.7% of the nurses relied on doctors as information sources followed by fellow nurses 84.4%, workshops, seminars and conferences 80.7%. It is evident from the findings of this study that professional nurses relied mostly on interpersonal or human sources of information as compared to conversational sources such as libraries, online sources (databases) and journals, as established by the study that only 42.1% of the nurses used libraries and 45.6% used databases as a source of information. This poses a challenge; as information from fellow professionals may or may not be research based. The reason to choose human sources could probably be due to that human sources are readily available and accessible as one does not need to take time to look for human sources of information, while one may need to take time off to go to the library and search for the required information. Moreover, a nurse may need to have a computer and Internet to have access to online sources (databases). In addition, one needs to possess search skills to search from the thousands of information available online. While this study revealed that nurses mostly used interpersonal/human sources, it agrees with studies done by (Marshall, et al., 2011; Thompson, et al., 2001; McCaughan, et al., 2002; Nwagwu & Oshiname, 2009) who found a strong preference for information from colleagues to support clinical decisions. In addition, people as information sources were most useful and accessible in a clinical setting. Textbooks, libraries and electronic resources were less accessible, mainly because of the time required to access these sources.

This study also established that the most frequently used non-human sources of information were patients records (66.7%) followed by hospital information (44.4%). This is contrary to findings by (O'Leary & Ni Mhaolrunaigh, 2012) whose study established that guidelines and assessment tools were frequently the only easily accessible potential sources of research information and appeared to be the most regularly accessed non-human source of information. A further high ranked source found by Spenceley, et al., (2008) a frequently used source of information was nursing journals. This contrasts with the results of this study, as journals were ranked low by the nurses at the University Teaching Hospital as one of the sources used to access research information. The study further revealed that most of the nurses knew that a Medical Library and Nursing School Library existed within the hospital environment. However, the two libraries were reportedly not frequently used as established by the study that only 6% of nurses frequently used the Medical Library while 10.2% of nurses frequently used Lusaka Nursing School Library. These results agree with those of Thomson et al. (2004) who has posited that despite nurses' comprising (31%) of hospital employees, only about (6%) visit libraries to pursue their information needs in their clinical practice, education and research. An explanation for the low usage

of the library could be because nurses only visit the library when in need of information for formal education and not information to update clinical practice. The other reason could be lack of time to search for information due to a high workload, inadequate library skills and lack of awareness of information resources that the library offers.

On awareness of specific electronic sources, the study established that many of the nurses were not aware of electronic databases as 98.2% were not aware of CINAHL, 92.9% were not aware of HINARI, whilst 89.3% were not aware of Cochrane Library, 78.5% were not aware of PubMed and 67.9% were not aware of Medline. It may be interesting to note that CINAHL is the cumulative index for nurses and allied workers containing thousands of latest nursing information, but it is the highest ranked on lack of awareness by the nurses. The implication is that if nurses at UTH are not aware of any single electronic database available, then they may fail to access and benefit from the millions of current information which is available through online databases that they could potentially use in their clinical practice. This scenario may have an impact on the quality of care provided by nurses in clinical practice, because if information is not accessed then it cannot be used. Knowledge may be available, but if it is not known then it cannot be accessed, therefore cannot be applied in any way to the nurses' clinical practice. Accessing electronic resources enhances access to vast amounts of information and may enable nurses to satisfy their information needs and potentially impact their clinical practice

According to Wilson's model of information behaviour, one of the intervening variables which may influence information seeking, access and use are the psychological variables such as awareness and attitude and source characteristics such as quality and availability of information resources (Wilson, 1997; Wilson, 1999). Awareness of information availability was found as an influential factor by (Gosling, et al., 2004; Spenceley, et al., 2008) who found that the more people are aware, the more the use of that information. Negative attitudes toward information and unawareness or not knowing information impedes the information uses of nurses. Further, explanation for the lack of awareness of electronic databases by University Teaching Hospital nurses could be due to the negative attitude towards information seeking and probably due to the culture of wanting to do research only when a nurse is pursuing formal education to upgrade themselves. The other reason may be attributed to the fact that the highlighted electronic databases may not even be readily available to the nurses as availability is a state of near presence and ready to use of information (Thompson, et al., 2001). These findings contradict those Randell, et al., (2009) of the United Kingdom who established that practice nurses there were aware of several databases such as Medline, CINAHL and the Cochrane Library as approximately half of the practice nurses interviewed described having used one or more of these databases. This is despite the fact that the electronic databases were largely seen

as tools to support studying, not necessarily as tools for accessing information in relation to work. Only a few practice nurses had no experience of searching electronic databases and had not come across the electronic databases that were described. In addition, while the study established that most of the nurses were not aware of electronic databases, this study found that the majority (80.7%) of respondents used the Internet which many of the nurses accessed using their personal laptops/smart phones at home. The results tend to suggest that many nurses at UTH accessed the internet at home using personal laptops which may influence the usage of research information in clinical practice as it is not known what kind of information they accessed while at home. Moreover, the results seem to suggest that using the Internet at home does not guarantee the nurses' access to electronic databases, as access to electronic databases may require subscriptions and usually these are restricted to institutions that have subscriptions. The reason for accessing the internet from home could also be due to lack of time by nurses considering the nature of work they do which is very busy and also due to lack of access to computers within UTH as confirmed by (64%) of respondents that said that lack of information infrastructure at UTH hindered them from accessing information.

Conclusion

The study has established that in general, nurses mostly used doctors, fellow nurses, workshops, printed protocols, hospital information, patient's records, procedure manuals, personal experiences and textbooks as sources of information for use in their clinical practice. Additionally, people as information sources were the most used and accessible in the clinical setting. Textbooks, libraries and electronic resources were found to be less accessible, mainly because of the time required to access these sources. It is evident from the findings that professional nurses relied mostly on interpersonal or human sources of information as compared to conversational sources such as libraries, online sources (databases) and journals. It is important therefore, that medical libraries should work extra hard to ensure that they make it possible for nurses to have access to the relevant research information in a format that is accessible to them at the point care. Knowing the best sources of information for nurses in clinical practice is important so that information is made readily available to be used in nursing clinical practice.

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