

Information Behaviour of Medical Doctors for Healthcare Delivery Services in Esan West L.G.A. of Edo State, Nigeria

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Abstract

Purpose: The study focused on the information seeking behaviour of medical doctors for health delivery services in Esan West Local Government Area, Edo State, Nigeria.

Design/Methodology/Approach: The study adopted a survey research design. The entire population of 45 Medical Doctors was used for the study because the population is manageable and accessible to the researcher. Thus, there were no sample and sampling techniques. The research instruments was a structured questionnaire titled "Questionnaire on Information Seeking Behavior of Medical Doctors for Health Delivery Services in Esan West Local Government Area, Edo State (QISBMDHDEW). A response rate of 43(95.6%) was recorded. Data were analyzed using frequency counts, percentages (%), mean (\bar{X}) and standard deviation (SD).

Findings: Results revealed that Medical Doctors need varied information for health delivery services and the provision of various sources of information will enhance accessibility to specific and timely information. Medical doctors also need information for a wide range of issues which include treatment of diseases, preventive medicine and trends in the health sector. Majority of medical doctors were constrained when seeking information for health care delivery services.

Implication: Medical Doctors cannot practice high quality medicine without constantly updating their clinical knowledge of managing patients' health.

Originality/Value: The paper's originality lies in its position that information and knowledge are crucial to effective delivery of health care services

Keywords: Information behavior, Medical Doctors, Health Delivery, Edo State, Nigeria

Paper type: Empirical research

Introduction

We are living in a generation where information has become the bedrock of the economy of all nations. This century has witnessed an evolution of information sources and modes of storage which has greatly affected human activities and livelihood on earth. Hence, the ways and manner information is sourced has also change. Information makes a literate and healthy society. Thus, for any society to be healthy, its citizen has to inculcate good disposition towards seeking the use of information. Ojedokun (2007) states that information is a statement of facts, figures; ideas and creative works of human intellect which are interrelated and have been communicated, recorded, published and distributed formally or informally in various formats. However, Reitz (2004) defined information as data that are presented in a comprehensible form whose meanings are attributed within the context of its use. Thus, data can be considered as information if it conveys a meaning to the person who receives it, Reliable information is necessary for building the

awareness expertise and practical strategy needed to improve the world. Thus, the health, physical, technical, mental; social and scientific development of humanity needs information. Hence, information is a vital component in developing critical thoughts and decision making. Therefore, medical practices are supported by relevant, accurate and timely information, hence, the need to provide information that meets the needs of medical doctors.

Information seeking behaviour is a broad term which involves a set of action that an individual, take to express information needs, seek information; evaluate and select information and finally use the information to satisfy information needs (Nuru & Ahmad, 2008). Ojabulu (2016) also defined information seeking behaviour as the way and manner people gather and seek information for their personal use, knowledge updating and development. Medical Doctors seek healthcare information to enhance the healthy living of their communities. The information seeking behaviour of Medical Doctors depend on their information needs

(Clarke, Belden, Koopman, Steege, Moore, Canfield & Kim, 2013).

The information needs of medical doctors are of great concern in the health sector as well as the information service delivery sector. The primary role of library and librarians in information service delivery cannot be overemphasized as they provide accurate health information and information resources to address health needs of the nation which is crucial to every society. The importance of this task is also reflected in the global agenda of the United Nations to transform our world given the sustainable development goal which is good health and well being. Thus, information provision is pertinent to ensuring good health and well being when provided to medical practitioners for effective and efficient health service delivery. However, Andualem, Kebede and Kumie (2013) opined that health professionals especially in developing countries have limited access to health information resources.

Health information resources which increases the knowledge base of Health Care Professionals (HCPs) empowers them for effective service delivery and facilitate their use of new medical technologies, handle medical procedures and proper treatment of patients, (Dubow and Chetley, 2011). This is corroborated by Mulusew, Kebede and Abera (2013) that updating knowledge with relevant information is very important for medical doctors to deliver quality and sustainable health care services. This is possible only when there is a sustainable access to health information resources (HIRs) in the libraries and related information centers. Health information improves knowledge on which evidence-based decision is made to provide health care services, facilitates use of new medical technologies, enables proficient handling of medical procedures and treatment of patients and enables health workers to have a common goal in medical and healthcare practices (Chetley, 2011).

Doctors cannot practice high quality medicine without constantly updating their clinical knowledge to manage patients. In the hospital, each doctor encounters more than 500 clinical topics yearly (Andualem, Kebede and Kumie, 2013), in the health sector, information need is much broader than that of other specialties, which may in turn lead to specific problems for HCPs searching many resources for answers. According to Vakkari (1999) information seeking is a process of searching, obtaining and using information for a purpose. Most of the information used by physicians' is obtained from trial and error, which often resulted in ineffective and dangerous health care practices. The development of medical informatics has produced systems that help physicians in their daily practices by providing them with information, but these

systems have often failed to fulfill expectations due to the lack of knowledge about the information needs of doctor (Chetley, 2011).

Moreover, preliminary observation revealed that medical doctors in Esan West Local Government Area of Edo State rely on advice from colleagues and experience through trial and error. Thus, there exists a gap between medical doctors initial information need when their information-seeking process starts and the final information need when the information-seeking process ends. Also, with the information explosion necessitated by the Internet, the medical practitioners could experience information overload which will result in exhibiting behaviours that negate the chances of meeting their information needs. Hence this study, to investigate the information seeking behaviour of medical doctors in Esan West Local Government Area, Edo State.

Purpose of the study

The primary objective of this study is to examine the information seeking behaviour Medical doctors for effective primary healthcare services delivery in Edo State. Specific objectives are to:

1. identify information needs of medical doctors for health delivery services in Esan West Local Government Area Edo State, Nigeria.
2. examine the sources of acquiring information by medical doctors for health delivery services in Esan West Local Government Area Edo State, Nigeria.
3. identify the purpose of information seeking behavior by medical doctors for health delivery services in Esan West Local Government Area Edo State, Nigeria.
4. examine the constraints that affect information seeking behavior of medical doctors for health delivery services in Esan West Local Government Area Edo State, Nigeria

Research Questions

In view of the aforementioned, the following research questions were raised to guide the conduct of this study:

1. what are the types of information needed by medical doctors in Esan West Local Government Area Edo State, Nigeria?
2. what are the sources of acquiring information by medical doctors in Esan West Local Government Area Edo State, Nigeria?
3. what are the purposes of information seeking behaviour by medical doctors in Esan West Local Government Area Edo State, Nigeria?

4. what are the constraints that affect information seeking behaviour of medical doctors in Esan West Local Government Area Edo State, Nigeria ?

Literature Review

Medical Doctors need relevant and current information to meet the healthcare of their communities. Wilson (2000) perceives information seeking behaviour as the purposive seeking for information as a consequence of need to satisfy some goals. Thus, in the cause of seeking, individuals interact with several information sources available. Boyol (2006) found that information seeking is situation dependent activity where a seeker's action are influenced by access to information perceived quality and trust in the information sources. Information seeking behaviour is expressed in various forms, from reading printed materials, to ask friends or colleagues. Information seeking behaviour describes the multifaceted relationship of information in the lives of human beings. The relationship can include both active searching through formal information channels and a variety of other attitudes and actions. Razak et al (2010) posits that information seeking behaviour is a complex activity requiring access to diverse information resources to deal with work related, personal and social information problems.

Furthermore, information seeking behaviour can be described as the way an information user conducts himself or acts when looking for, receiving or acquiring information; the utterance, gesture, anger, anxiety, eagerness, reluctance, zeal or any other attributes displayed by an information user in his effort to purchase, acquire or receive news, data, stories or anything that may inform or misinform his knowledge or understanding of something constitute seeking behavior (Uhegbu, 2007). Igwe (2012) also described information seeking behaviour as an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating and development. It is also referred to as the way people search for and utilize information. Information seeking behaviour involves active or purposeful information as a result of the need to prepare for discussions, seminar papers / conference paper or research etc. Besides, in the process of seeking information; problems are encountered for instance, in some cases a user actual needs may not eventually tally with what is practically available due to constraints.

Studies have examined the information needs of doctors in term of questioning behaviour context (Gorman and Helfand 1995, Green, Ciampi and Ellis 2000, Seol et al 2004, Ely et al. 2005, Coumou and Meijman 2006). Most of these studies described the information-seeking behaviour of doctors in terms of the process when doctors ask and get an answer to clinical questions. This

process was explained by Ely et.al. (1999) who identifies five stages: a) realizes uncertainty; b) formulates a question; c) pursues an answer to a question; d) finds an answer for a question; and e) applies the answer to patient care. The percentage of asking and answering clinical questions by doctors was different from one study to another. Some of these studies indicated that doctors asked a large number of clinical questions when communicating with a patient for healthcare, many of which go unanswered. For instance, the literature review conducted by Coumou and Meijman (2006) found that primary care doctors seek answers to only a limited number of clinical questions. Similarly, the previous study conducted by Gorman and Helfand (1995) indicated that although primary care doctors generate many questions when they communicate with patients, they pursue only about 30% of them. Green, Ciampi and Ellis's (2000) study supports that and found that only 80 of a total of 277 questions identified by residents were pursued. Gonzalez-Gonzalez et al. (2007) investigated different patterns of primary care doctors' information seeking. They examined the most frequently asked questions by doctors and confirmed the sources most frequently used to answer them. The doctors asked a total of 635 questions. 84 (13.2%) of the questions were pursued after the consultation to seek for answers. Also, 61 (9.6%) were pursued during the consultation and 490 (77.2%) of the questions were not pursued at all. Doctors found answers for the majority (75%-100%) of the pursued questions.

The introduction of Information and Communication Technology (ICT) in the healthcare environment has opened up new ways of studying doctors' information-seeking and their use of different types of ICT resources (Casebeer et al. 2002, Magrabi et al. 2004, Boissin, Doci and Bernard 2005, Bennett et al. 2006, Ranson et al. 2007 and Ajuwon 2006). Most of the studies focused on the frequency of accessing and using ICT resources, the time doctors spend in searching online and the obstacles they may encounter when they search for the information they need. Ajuwon (2006) in his study, Use of the Internet for health information by physicians for patient care in a teaching hospital in Ibadan, Nigeria concluded that the majority of the doctors relied on the Internet for information because it has a lot to offer. Due to funding constraints, paper-based libraries in Nigeria are no longer able to meet the needs of users as new books and current journals are few and in some cases not available at all. Also, most of the libraries in Nigeria, particularly health science libraries, have few if any subscriptions to online journals and databases. As a result, users depend on the free resources that are readily available on the Internet,

some of which are meant for people in developing countries. The availability of these free information sources may explain why virtually all the respondents in this study used the Internet as a source of health information.

There are many sources that can affect or set the information seeking behaviors of doctors. One of the things that effect on doctors' information seeking behavior is the rapid growth of literature. According to Wyatt and Sullivan (2005) amount of medical literature gets double after every 20 years. With this huge amount of growth in literature, it is impossible for doctors to keep abreast with all the latest and updated information in the context of patient management, thus doctors can enhance their knowledge to keep abreast by utilizing various information sources. Multiple types of information sources exist which provide information, but the most important type of the sources are formal sources and informal sources; formal sources include print and electronic sources and informal sources include personal communications.

McGettigan et al (2011) reported that discussions with pharmaceutical representatives and hospital consultants are the most useful source of seeking the information on new drugs. Ramos, Linscheid and Schafer (2003) ascertained a huge number of human sources are used by resident doctors to seek the clinical information to answer their clinical questions. Tan et al. (2006) find out that doctors preferred to consult with seniors or colleagues to whom they think are more knowledgeable in order to seek information regarding the clinical case, in which they feel unsure and unfamiliar about the patient case management. Similarly, Dawes and Sampson (2003) found that when doctors received difficult cases, they confer with colleagues or experts for knowledge and information regarding diagnosis or treatment choices. Cullen (2002) conducted a survey on the use of the internet to seek clinical information and reported that internet was mainly used to seek information about rare diseases. Similarly, Casebeer et al. (2002) reported that patient's problem was the main reason to seek information from internet. Bennett et al. (2004) found that respondents use the internet to seek the latest and the most recent information regarding disease. Many studies concluded that the internet is the most used tool among doctors to seek the information for patient education, patient care and to solve the clinical problems (Dorsey and Detlefsen, 2005; & Nail-Chiwetalu and Ratner 2007).

Nwafor-Orizu and Onwudinjo(2014) noted that despite the established importance of health information in medical practice, it had been observed that medical doctors in the teaching hospitals do not seem to make frequent or optimal use of health information resources

for current knowledge as expected and this resulted in obvious preventable medical errors (a mistake of commission) and malpractices that harm the patients as often witnessed in the teaching hospitals. Better healthcare delivery can only be achieved through proven and clinically effective practices, arising from unhindered use of health information resources by the doctors. Bennett, Casebeer, Kristofco and Strasser (2004) found out that poor searching or navigating difficulties hinders the retrieval of the required evidence. Also Renwick (2005), found that the ability to use electronic resources efficiently depends on basic computer skills, knowledge of what is available and how to use it, and ability to define a research problem. Verhoeven, Boerma and Meyboom-de Jong (1995)also found that converting clinical questions to a searchable strategy for an information resource is a crucial skill, difficult to master.

Bergus and Emerson (2005) found out that question formation skill did not improve as doctors progressed in their clinical training. This lack of skill, according to Sanders and Delmer (2005) is compounded when the doctors believe search failed because of lack of relevant evidence, rather than realizing the problem was the errors in their search strategy. Unsuccessful attempts at retrieving information from a search discourage doctors from such attempts in future. Information overload is another barrier severally featured in the literature. The concept of information overload occurs when the volume of information received becomes a hindrance rather than a help (Bawden, Holtham and Courtney, 1999). Wilson (2001) states that information overload is the flow of information associated with work task that is greater than can be managed effectively, and a perception that overload in this sense creates a degree of stress for which his or her coping strategies are ineffective. Moreover, Benneth et al (2005)identified barriers to utilization of information resources by medical professionals to specific information not available, system being too slow, software incompatibilities and difficulty down-loading information.

Ochieng (2000) identified inappropriate contents, language barriers, high illiteracy rate and inappropriate infrastructure as factors militating against information utilization in Africa. Some other barriers articulated by Chiwetalu and Ratner (2007)in their assessment of the information – seeking abilities and needs of practicing speech – language pathologists, include inability to get full access to desired information, like full text instead of abstract, lack of clinically relevant information and interpreting retrieved information. This inability to interpret the evidence found was earlier reported by Coumou and Meijman (2006).

Methodology

The entire population of 45 Medical Doctors total enumeration was used for the study because the population is manageable and accessible to the researcher. Thus, there were no sample and sampling techniques. The research instruments was a structured questionnaire titled “Questionnaire on Information Seeking Behavior of Medical Doctors for Health

Delivery Services in Esan West Local Government Area, Edo State (QISBMDHDEW). A response rate of 43(95.6%) was recorded. Data collected were analyzed using frequency counts, percentages (%), mean (\bar{X}) and standard deviation (SD).

Results

Table 1: Frequencies and Percentages of Types of Information Need of Medical Doctors

Types of Information Need		YES Freq (%)	NO Freq (%)	Remark
1	Information about patient	43(100%)	0(0%)	Yes
2	Information for control of polio	37(86%)	6(14%)	Yes
3	Information for control of malaria	43(100%)	0(0%)	Yes
4	Information for control of Tuberculosis	43(100%)	0(0%)	Yes
5	Information for control of HIV/AIDS pandemic	43(100%)	0(0%)	Yes
6	Information for control of family planning & birth control	34(79%)	9(20%)	Yes
7	Information for control of good hygiene and sanitation	43(100%)	0(0%)	Yes
8	Information for emergency health service during conflict and natural disasters.	12(27.9%)	31(72%)	No
9	Information on family health care	34(79%)	9(20%)	Yes
10	Information about surgery	28(65%)	15(34%)	Yes
11	Information about diagnosis	43(100%)	0(0%)	Yes
12	Information about physical symptoms	43(100%)	0(0%)	Yes
13	Information about disease conditions	43(100%)	0(0%)	Yes
14	Information about treatment	43(100%)	0(0%)	Yes
15	Information about drugs	43(100%)	0(0%)	Yes
TOTAL/AVERAGE		36(89.1%)	7(16.3%)	Yes

Table 1 shows the frequencies and percentages of responses on types of information needed by medical doctors. Results revealed that the frequencies and percentages of medical doctors' information need ranges from 28(65%) to

43(100%). The results indicate that the average percentage types of information needs is 36 (83.7%) greater than 50% as the mean score. Therefore, Medical Doctors need varies information for health delivery services.

Table 2: Mean and Standard Deviation of Sources of Acquiring Information by Medical Doctors (N=43)

S/N	Sources of Acquiring Information	Mean	SD	Remark
1	Medical library/research institutes information resources	1.34	0.14	Disagreed
2	Print and electronic books	2.89	0.28	Agreed
3	Current issues of print and electronic Journals	2.92	0.29	Agreed
4	Reference books	3.05	0.31	Agreed
5	Proceedings	1.78	0.19	Disagreed
6	Professional newsletter	3.55	0.35	Agreed
7	Newspapers (print and online)	2.82	0.28	Agreed
8	Professional conferences, seminars and workshops	2.91	0.29	Agreed
9	Discussions with colleagues	2.61	0.26	Agreed
10	Online databases	2.15	0.19	Disagreed
11	General Medical Websites	2.90	0.34	Agreed
12	Specialists websites	2.62	0.25	Agreed
13	Professional Organization website	2.84	0.27	Agreed
14	Publishers' catalogues	2.01	0.18	Disagreed
15	Media: TV and radio	2.56	0.23	Agreed
16	Current awareness services of libraries like CAS, SDI & Content Page Service	1.19	0.12	Disagreed
17	Abstracting and indexing tools	1.19	0.19	Disagreed
18	Email alerts (Listserv)	1.25	0.25	Disagreed
19	Personal Contact	2.71	0.27	Disagreed
20	Professional colleagues and friends	2.61	0.26	Disagreed
	Cluster mean	2.52	0.24	Disagreed

Table 2 shows the mean and standard deviation of responses on sources of acquiring information by Medical Doctors. Results revealed that sources of information consulted by Medical Doctors ranges from $\bar{X} = 3.55-2.61$ and $SD = 0.35$ to 0.26 . This

shows that $\bar{x} = 2.52$ is greater than the criterion mean of $\bar{x} = 2.50$. This indicates that the provision of various sources of information enhance accessibility to specific and timely information.

Table 3: Mean and Standard Deviation of Purpose of Information Seeking by Medical Doctors (N=43)

S/NO	Purpose for seeking information	Mean	SD	Remark
1	Diagnosis	2.84	0.28	Agreed
2	Treatment of diseases	2.89	0.29	Agreed
3	Preventive medicine	2.92	0.33	Agreed
4	Surgery	3.05	0.29	Agreed
5	Treatment of injury	2.78	0.27	Agreed
6	Delivery	1.55	0.16	Disagreed
7	Drug therapy	2.62	0.24	Agreed
8	Improve on work roles/duties	2.11	0.21	Disagreed
	Carrying out administrative assignment	2.11	0.21	Disagreed
10	Updated on current trends/development in the health sector	2.75	0.26	Agreed

11	Execute a specific task	2.10	0.34	Disagreed
12	Respond to emergency/difficult situations	2.12	0.25	Disagreed
13	How to use modern ICTs in handling health issues	2.84	0.27	Agreed
14	Writing consultancy/technical reports	2.50	0.25	Agreed
15	Writing scientific papers for promotion	2.68	0.23	Agreed
16	Professional advancement	2.91	0.12	Agreed
17	Problem solving	2.19	0.12	Disagreed
18	Research	2.85	0.12	Agreed
19	Writing a book or article	1.71	0.25	Disagreed
20	Entertainment and pleasure	2.61	0.29	Agreed
21	Business related issues	1.12	0.09	Disagreed
22	Political issues	1.12	0.09	Disagreed
23	Religious issues	1.34	0.12	Disagreed
24	Legal issues	1.73	0.19	Disagreed
Cluster mean		2.55	0.22	Agreed

Table 3 shows the mean and standard deviation of responses on purposes for which medical doctors seek information. Results revealed that the purposes for which medical doctors seek information ranges from $\bar{X} = 3.05-2.50$ and $SD= 0.29$ to 0.26 . This shows that $\bar{x} = 2.55$ is greater

than the criterion mean of $\bar{x} = 2.50$. This revealed that medical doctors need information for a wide range of issues which include treatment of diseases, preventive medicine and trends in the health sector.

Table 4: Mean and Standard Deviation of Constraints Affecting Information Seeking Behaviour of Medical Doctors

(N=43)				
S/NO	Constraints of Information Seeking	Mean	SD	Remark
1	Lack of information search skills	2.21	0.22	Disagreed
2	Delays in accessing desired information from existing systems	2.67	0.25	Agreed
3	Lack of awareness on existing information sources	2.89	0.28	Agreed
4	Information is scattered in too many sources	3.01	0.29	Agreed
5	Required material not available	2.30	0.21	Disagreed
6	High cost of information sources	2.13	0.20	Disagreed
7	Nonchalant attitude of Librarians	2.75	0.26	Agreed
8	Lack of power supply in the Library	2.67	0.25	Agreed
9	Library environment not conducive	2.10	0.19	Disagreed
10	Lack of current materials in the library	3.32	0.31	Agreed
11	Information sources are located far away	2.01	0.19	Disagreed
12	Lack of time for searching	3.54	0.33	Agreed
13	Non availability of electronic resource (e-journals and databases)	3.02	0.30	Agreed
14	Lack of fund to purchase library materials	3.02	0.30	Agreed
15	Lack of training in electronic resources/products	2.87	0.26	Agreed

16	Library staff are incompetent or not well-trained	2.63	0.26	Agreed
17	Lack of computer hardware or software	2.14	0.21	Disagreed
18	Lack of technical support	2.89	0.27	Agreed
19	Lack of knowledge in using the library	2.13	0.21	Disagreed
20	Language barrier (most materials are in foreign languages)	1.19	0.10	Disagreed
21	Irregular working hours of hospital library	1.43	0.14	Disagreed
Cluster mean		2.52	0.24	Agreed

Table 4 shows the mean and standard deviation of responses on the constraints militating against information seeking behavior of medical doctors. Results revealed that the constraints of information seeking behaviour of medical doctors range from $\bar{X} = 3.54-2.63$ and $SD=0.33$ to 0.26 . This shows that $\bar{x} = 2.52$ is greater than the criterion mean of $\bar{x} = 2.50$ which indicates that medical doctors are faced with constraints when seeking information for health care delivery services.

Discussion of Findings

Types of Information Needs by Medical Doctors

Result revealed that Medical Doctors in Esan West Local Government Area Edo State need information about patients, control of malaria and tuberculosis control of HIV/AIDS pandemic as well as control of good hygiene and sanitation; diagnosis, physical symptoms, disease conditions, treatment and drugs, control of polio, family health care/family and planning/birth control. This implies that most Medical Doctors need varied information for health delivery services. The result of findings of this study agrees with the findings of Igwe (2012) that the type of information needed by Medical Doctors is dependent on many factors, including topic or issue in question, knowledge base of health professional, awareness of information sources, associated costs of acquiring information, and the purpose for which the information will be used. Similarly, the findings of this study correspond with that of Fieldman and Etington (2010) that Medical Doctors select their information needs based upon values, interest and characteristics.

Sources of Acquiring Information by Medical Doctors

Results revealed that the sources of information consulted by Medical Doctors were: Professional newsletters, Reference books, Current issues of

print and electronic Journals, Professional conferences, seminars and workshops, General Medical Websites, Print and electronic books, Professional Organization website, Newspapers print and online, Personal Contact, Specialists websites, Discussions with colleagues and Professional colleagues and friends, Media: TV and radio. This indicates that the provision of various sources of information enhance accessibility to specific and timely information. Professional newsletters and reference books constitute the major means through which Medical Doctors extract information from sources. The result is in line with the findings of Tan *et al.* (2006) that medical doctors relied heavily on reference books, professional newsletter, proceedings from conferences and workshops as well as general medical websites as their sources of information. However, findings of this study contradict the findings of Thompson (2007) that medical doctors do not rely on newspaper publications for their information needs.

Purpose of Information Seeking by Medical Doctors

Results revealed that there are varied purposes of seeking information by medical doctors. These include surgery, preventive medicine and professional advancement, treatment of diseases, research and diagnosis and use modern ICT in handling health issues, treatment of injury,

updated on current trends/development in the health sector, writing of scientific papers for promotion, drug therapy, entertainment and pleasure. The result of this finding agrees with the findings Mulusew, Kebede and Abera (2013) that there are different purposes for which Medical Doctors seek information. Thus, Medical Doctors seek information for primary purpose of surgery, preventive medicine and professional advancement, treatment of diseases, research and diagnosis and use modern ICT in handling health issues, treatment of injury, updated on current trends/development in the health sector, writing of scientific papers for promotion, drug therapy, entertainment and pleasure. Meanwhile, Revere *et al.* (2007) agreed that medical doctors need information for a wide range of issues which include treatment of diseases, preventive medicine and trends in the health sector.

Constraints Affecting Information Seeking Behaviour of Medical Doctors

Results revealed that medical doctors are constrained by a lot of factors when seeking information among which are: lack of awareness on existing information sources, lack of current materials in the library, lack of technical support, incompetent library staff, lack of fund to purchase library materials, non availability of electronic resource (e-journals and databases), lack of time for searching and lack of training in electronic resources/products. This is in line with the findings of Ogbomo (2012) who found that the major challenges medical doctors face in information seeking include lack of finance to

procure information materials on the part of libraries, outdated materials and lack of time for consulting information resources due to very tight schedules.

Conclusion and Recommendations

Health information and knowledge are crucial to the effective delivery of health care services and as such, the way medical doctors conduct themselves in seeking information is of high importance. The information required by medical doctors varies greatly and so are the sources to meet their information needs. The medical doctors in Esan West Local Government Area, Edo State, Nigeria are also constrained when seeking information for health care services.

Recommendations

The following recommendations are made based on the findings of the study:

- i. Libraries should ensure the provision of easy access to medical information resources that meet the needs of medical doctors.
- ii. Internet connections should be improved to facilitate instant information search and retrieval by medical doctors.
- iii. Provision of equipment's such as computers, printers, scanners and photocopiers should be made available in health care centres.
- iv. Libraries should provide training and retraining on computer usage and searching skills to ensure proper utilization of information resources by medical doctors.
- v. Government and parent institution of libraries should provide sufficient funding to equip medical libraries.

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