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COVID 19 INFORMATION SEEKING BEHAVIORS OF NIGERIAN HEALTH PRACTITIONERS: A STUDY OF MEDICAL DOCTORS IN DELTA STATE

By

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Abstract

This study is focused on exploring COVID 19 information seeking behavior of Nigerian health practitioners using medical doctors in Delta state Nigeria as a case study. The study adopted a descriptive survey design. Four objectives were laid down for the study and a structured questionnaire was used to elicit information from the respondents. The findings revealed that the COVID 19 information needs of medical doctors in Delta state in the top rank are causes of COVID 19 virus, COVID 19 symptoms, COVID 19 test procedures, how COVID 19 spread/transmission levels, COVID 19 preventive measures, COVID 19 cures, age groups more vulnerable to COVID 19 attack, COVID 19 patients' isolation/quarantine procedures among others. The study clearly indicates that the sources of COVID 19 information for the respondents are Internet, World Health Organization (WHO) website, Daily newspapers, Nigerian Centre for Diseases Control (NCDC) website, Network News and colleagues (medical doctors) from other states. The study revealed that the major use of COVID 19 information by respondents was to identify COVID 19 symptoms; know the isolation/quarantine procedure and practice for COVID 19 patients; know COVID 19 treatment procedure and to know the drug dosage for the treatment of COVID 19 patients among others. It is clear from the study that large amount of COVID 19 incredible information on the Internet; lack of access to library resources on COVID 19; poor power supply in Delta state and too many sources of COVID 19 information were the barriers to information COVID 19 information seeking and access among the medical doctors in Delta state. Recommendations were put forward to enhance access to COVID 19 information by medical doctors in Delta state so as to prepare adequately for the treatment of any patient should the case arise.

Keywords: COVID 19, Information Seeking, Medical Doctors, Corona Virus, Health Practitioners, Information Use.

Introduction

Universal access to information for health professionals is a need to achieve “health for all strategy worldwide.” A large proportion of individuals in health professionals in developing countries such as Nigeria have limited access to health information as a result of the problem of limited resources ravaging developing countries. Andualem, Kebede and kumie (2013) asserted that qualified health care professionals (HCPs) have vital roles in achieving health goals of a given country and therefore needs to update knowledge with relevant information in other to deliver quality and sustainable health care services to their patients.

The study of information seeking behaviour tends to incorporate an awareness of all the kinds of information a person seeks. “People get information not just from paper sources, not just from other people, but also from the physical layout of their workspaces, from the design, not just the content, of informational genres, and above all, from the interaction of these various factors in a real situation (Salman, Ahmed & Khan, 2013). Information behaviour on the other hand is a sub-discipline in the discipline of library and information science which explains “how people need, seek, manage, give and use information in different contexts” (Savolainen, 2007).

Access to and use of health related information, among medical doctors is important to provide a high quality of health services and to solve various health issues. In their medical practices, “doctors and nurses experience very specific information needs, in relation to which precision, reliability and promptness are fundamental aspects” (Norbet & Lwoga, 2013). The need to satisfy health professionals with the right information at the right time is paramount especially in the era of Covid 19. Although aware of over 400 diseases that are regularly encountered in clinical practice, doctors and nurses in the Nigerian scenario may not have the complete knowledge of uncommon diseases such as the Novel Coronavirus code named COVID 19. According to the World Health Organization (WHO) (2020), Coronaviruses are a large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold, cough to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

As asserted by the WHO (2020), the most recently discovered virus causes coronavirus disease popularly called COVID-19. The WHO has responded to the emergence of this Virus COVID 19 which originated from the City of Wuhan in China by stating that they are continuously monitoring and responding to the outbreak of this virus with characterized symptoms of fever, tiredness, and dry

cough. Some patients may have aches and pains, nasal congestion, runny nose, sore throat or diarrhea. Physicians' i.e. medical doctors and nurses in Nigeria need to access information in response to suspected or confirmed cases of COVID 19 needs as they arise. Searches for information on this virus by Nigerian doctors and nurses are often being conducted online because the outbreak of this virus which has become a global threat. The search for information on COVID 19 is therefore to help in preventing the spread of the virus and to also help in reducing medical errors and ensuring quality health care services for Nigerians. Nigerian doctors and nurses like their counterparts in other nations of the world being affected by the spread of the COVID 19 requires information to solve their day-to-day challenges of the spread of the virus. This study is therefore aimed at determining the COVID 19 information seeking behaviour of doctors and nurses in Nigeria, in particular with a view to improving their searching skills, identify the challenges they face while searching for information on COVID 19 and proffer possible solutions to them.

Objective of the Study

This study is aimed at achieving the following objectives:

- To identify COVID 19 information needs of doctors in ;
- To identify the sources of COVID 19 information among doctors in;
- To know the purpose for which doctors in use COVID 19 information and
- To identify factors that poses as barriers to COVID 19 information access by doctors in

In order to guide the researchers in this study, the following questions were designed in line with the objective of the study:

- What are the COVID 19 information needs of doctors in?
- What are the sources of COVID 19 information available to doctors in?
- For what purpose do doctors in use COVID 19 information?
- What are the barriers to COVID 19 information access by doctors in?

Literature Review

The study of information needs and seeking behaviour dates back to 1948 when Bernal and others presented a paper on scientific information at the 1948 Royal Society conference (Bernal, 1960 as cited by Ijiekhuamhen & Omosekejimi, 2016). However, during the past 30-40 years or so, a considerable body of literature has been produced dealing with information needs and information-seeking behaviour of both individuals and groups in a variety of contexts (Anwar, Al-Ansari & Abdullah, 2004 as cited by Ijiekhuamhen, Edewor & Emeka-Ukwu, 2016). The role of information

seeking has always played a very significant part in all kinds of jobs performed by doctors and nurses, whether it is treatment of a patient or overall management of the hospital. According to Salman, Ahmed and Khan (2013) "information seeking is a process of searching, obtaining and using information for a purpose". Seeking health information is important to improve knowledge based on which evidence-based decision is made to serve the clients of health facilities. However, in the course of seeking, the individual may interact with manual information systems (such as newspapers or libraries), or with computer-based systems such as the World Wide Web (Wilson, 2000).

Access to health information on the other hand facilitates the use of new medical technologies and helps to handle properly the necessary medical procedures and treatment of patients. Andualem, Kebede and Kumie (2013) asserted that the health information management brings health workers (doctors and nurses) to act harmoniously in a similar manner on medical and health practice. The literature shows that there is a need for a well-coordinated information system that delivers relevant information to fulfil the needs of health practitioners (Revere et al. 2007). Information needs of the public health workforce had become more urgent and mandatory due to the emergence of new infectious diseases like severe acute respiratory syndrome (SARS), Asian bird flu, HIV/AIDS, malaria, tuberculosis and most recently coronavirus popularly known as the COVID 19. Various studies have demonstrated this scenario. A recent review of the literature on doctors and nurses' information needs in high income countries revealed that doctors mainly needed information in the following areas: clinical care, Continuing Professional Development (CPD) and patient information (Younger 2010). Information on diagnosis and treatment were also major information needs of primary care physicians in Spain (Gonzalez-Gonzalez, Dawes, Sanchez-Mateos, Riesgo-Fuertes, Escortell-Mayor, Sanz-Cuesta, & Hernandez-Fernandez, 2007). Information on patient care was also a major information need of physicians in Ireland (Flynn and McGuinness, 2011) and the United Kingdom (Bryant 2004). The information needs in low-income countries were broadly the same. For instance, the major information needs of physicians in Brazil were related to drug therapy (Martinez-Silveira and Oddone 2008); in Uganda they were associated with specific medical details (Ocheibi and Buba 2003). These studies demonstrate that the information needs of physicians may fall into two categories, as illustrated by Wilson and Walsh (1996), which include cognitive (factual information about disease prevention, detection, and/or treatment) and affective (information that deals with disease emotionally).

Norbert and Lwoga (2013) asserted that medical practitioners around the world use a variety of information sources to fulfil their information needs, while revealing that they first rely on their colleagues and medical textbooks or journals. As indicated by Callen Buyankhishig & McIntosh (2008); Coumou and Meijman (2006), studies from high-income countries indicated that physicians

often seek information to answer a limited number of clinical questions, about which they first consult colleagues and printed materials. Another source confirmed that doctors used colleagues as their first source of information (Younger 2010). Studies from low-income countries also showed that colleagues remained the major source of medical information for health professionals in Uganda (Kapiriri and Bondy 2006; Tumwikirize et al. 2009) and Brazil (Martinez-Silveira and Oddone 2008). Colleagues were used at a high rate due to their availability, affordability, and reliability. However, with the development of technology, the practice has started to change through the years. Some recent studies have reported Internet or electronic resources as popular sources of information for physicians (Norbert & Lwoga, 2013).

Similarly, a study by Jackson, Baird, Davis-Reynolds, Smith, Blackburn & Allsebrook (2007) on the information-seeking behaviours of health and social care professionals in Barnsley, England, showed that the Internet had high use among professionals, followed by informal networks such as verbal queries to colleagues, libraries or written resources. However, other studies have reported printed materials as the dominant sources of information to physicians. In developing country like Nigeria, study have shown that medical doctors preferred to access information from publishers' catalogues, followed by consultation with colleagues (Ocheibi and Buba 2003). It is obvious that colleagues, the Internet or electronic resources, and textbooks or journals remain the major sources of information for physicians, depending on various factors. Andualem, Kebede and Kumie (2013) while commenting on the use of health information asserted that the use of health information may vary depending on circumstances and the need reaches pick during emergencies. The authors further highlighted that the use of health information resources is: to understand the nature of diseases; to know the ways of preventing them; to understand the treatment of every diseases varying from fever, typhoid etcetera; to understand types of drugs to prescribe at every given time depending on the condition of the patients and others.

There are numerous barriers that physicians encounter in an effort to fulfil their information needs. Various authorities have demonstrated these issues. Literature from 1996 to 2006 on the information-seeking behaviour of doctors found that the major barriers that limited the use of e-resources were related to issues with online resources or information technology (IT), followed by lack of time, limited search skills, lack of basic IT skills, and irrelevant materials (Davies 2007 as cited by Norbert & Lwoga, 2013). The major barriers that inhibited physicians from seeking information in other high-income countries were related to time constraints (Coumou and Meijman 2006; Flynn and McGuinness 2011; Masters 2008), insufficient access to resources (Flynn and McGuinness, 2011), inadequate search skills (Coumou and Meijman 2006; Masters 2008), workload, cost, too much

information, and liability issues (Masters 2008). The major barriers that inhibited physicians from seeking information in other high-income countries were related to time constraints (Coumou and Meijman 2006; Flynn and McGuinness 2011; Masters 2008), insufficient access to resources (Flynn and McGuinness, 2011), inadequate search skills (Coumou and Meijman 2006; Masters 2008), workload, cost, too much information, and liability issues (Masters 2008). The same also applies to low-income countries. For instance, irregular supply, lack of time, and high access costs were the main barriers for physicians in Uganda (Tumwikirize et al. 2009).

Methodology

A descriptive survey method was adopted for the study. A questionnaire was the instrument used for data collection. The population of the study is made up all the one hundred and forty six (146) including trained and volunteer doctors who have been slated for duty in the fourteen COVID 19 isolation/treatment centres available across. The isolations/treatment centres are: University Teaching Hospital (Delsuth), Oghara; Federal Medical Center, Asaba; Specialist Hospital Asaba; Central Hospital Warri; General Hospital Okwe; General Hospital, Ogwashi-Uku; General Hospital, Ughelli; General Hospital, Warri; General Hospital, Bomadi; General Hospital, Sapele; General Hospital, Kwale; General Hospital, Ekpan; General Hospital, Oleh; General Hospital, Agbor and Eku Baptist Hospital. As at the time of this study, as confirmed by SaharaReporters (2020) Delta has three records of confirmed COVID 19 patients and 1 death. In the wake of this development, there are 132 statutorily slated medical doctors and 14 others who volunteered to help treat and prevent the spread of the virus in case of any confirmed cases. The researchers trained two (2) research assistant that joined in the distribution and retrieval of the questionnaires to ease the questionnaire gathering process. This study adopts total enumeration sampling technique due to the small and manageable size of the population. The entire questionnaire administered were duly completed, retrieved and found usable, thus, there was 100% response rate. The data collected was analysed using tables, percentages and frequency distribution.

Result and Discussion of findings

Table 1: Age Distribution of the respondents

S/N	Age Group	Frequency	%
1	25-34	32	22
2	35-44	81	55
3	45-54	33	23

4	55 and above	00	00
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Table 1 shows that the majority of the respondents 81(55%) are within the age bracket of 35-44 years of age, followed by 33 (23%) of them who are within the age bracket of 45-54 years and 32(22%) of them are within the age bracket of 25-34 years while none of them indicated being above 55 years of age. This means that majority of the respondents are within the age bracket of 35-44 years of age.

Table 2: Gender Distribution of the respondents

S/N	Gender	Frequency	%
1	Male	92	63
2	Female	54	37

Table 2 reveals that majority 92 (63%) of the respondents are male, while 54(37%) are female. This means that there are more male respondents in this study than their female counterparts.

Table 3: Distribution of Respondents by Work Experience

S/N	Years of Experience	Frequency	%
1	1-5	00	00
2	5-10	26	18
3	11-15	82	56
4	16-20	38	26
5	21 and above	00	00

Table 3 shows that the majority 82(56%) of the respondents are highly experienced as they have between 11-16 years of experience as medical doctors followed by 38(26%) of them who have 16-20 years of experience and 26(18%) of them have between 5-10 years of experience as medical doctors while there is none of the respondents with 1-5 as well as 21 years and above years of work experience. This means that majority of the respondents are highly experienced as they have at-least between 11-15 years of work experience.

Table 4: COVID 19 Information Needs of Respondents

COVID 19 Information Needs	No of Respondents	Percentage
Information on causes of COVID 19 virus.	146	100

Information on COVID 19 symptoms.	146	100
Information on COVID 19 test procedures.	146	100
Information on how COVID 19 spread/transmission levels.	146	100
Information on COVID 19 preventive measures.	146	100
Information on COVID 19 cures.	146	100
Information on age groups more vulnerable to COVID 19 attack.	146	100
Information on COVID 19 patients' isolation procedures.	146	100
Information on drug combination for COVID 19 treatment.	146	100
Information on drug dosage for COVID 19 treatment.	146	100

Table 4 revealed that 146 (100%) representing all the respondents indicated that they need information on causes of COVID 19 virus, COVID 19 symptoms, COVID 19 test procedures, how COVID 19 spread/transmission levels, COVID 19 preventive measures, COVID 19 cures, age groups more vulnerable to COVID 19 attack, COVID 19 patients' isolation procedures, drug combination for COVID 19 treatment as well as drug dosage for COVID 19 treatment. This means that all the medical doctors in , Nigeria need information on causes of COVID 19 virus, COVID 19 symptoms, COVID 19 test procedures, how COVID 19 spread/transmission levels, COVID 19 preventive measures, COVID 19 cures, age groups more vulnerable to COVID 19 attack, COVID 19 patients' isolation procedures, drug combination for COVID 19 treatment as well as drug dosage for COVID 19 treatment.

Table 5: Sources of COVID 19 Information for Respondents

COVID 19 Information Source	No of Respondents	Percentage
Internet.	146	100
World Health Organization (WHO) websites.	146	100

Daily newspapers.	146	100
Colleagues in other States.	89	61
Books from Libraries.	00	00
Libraries, Journals.	00	00
Medical Bulletins.	00	00
Nigerian Centre for Diseases Control (NCDC) website.	146	100
Network News, e.g. NTA, AIT, BBC, TVC, Sahara Reporters etc.	146	100
Social Media	23	16

Table 5 shows that 146(100%) indicating all the respondents indicated they get their information from the Internet, World Health Organization (WHO) website, Daily newspapers, Nigerian Centre for Diseases Control (NCDC) website and Network News. While 89(61%) of the respondents indicated that they get their information from colleagues in other states, 23(16%) indicated that they get information from social media and none of the respondents indicated that they get information on COVID 19 from library books, library journals and medical bulletins. This means that the major sources of COVID 19 information to doctors in, Nigeria are the Internet, World Health Organization (WHO) website, Daily newspapers, Nigerian Centre for Diseases Control (NCDC) website, Network News and colleagues (medical doctors) from other states.

Table 6: Usage of COVID 19 Information by the Respondents.

COVID 19 Information Use	No of Respondents	Percentage
For COVID 19 symptoms identification.	146	100
For COVID 19 patients isolation/quarantine procedures and practices.	146	100
For COVID 19 treatment procedure.	146	100
For drug dosage for COVID 19 patient treatment.	146	100
For research on possible	146	100

COVID 19 vaccines.		
For self protection from Contracting COVID 19	146	100

Table 6 revealed that 146(100%) indicating all the respondent unanimously indicated that they use COVID 19 information for its symptoms, identification, for COVID 19 patient isolation/quarantine procedure and practices, for COVID 19 treatment procedure, for drug dosage for the treatment of COVID 19 patients, for research on possible COVID 19 vaccines and for self protection against being infected by COVID 19 patients. This means that the major use of COVID 19 information is to: identify COVID 19 symptoms; know the isolation/quarantine procedure and practice for COVID 19 patients; know COVID 19 treatment procedure; know the drug dosage for the treatment of COVID 19 patients; carry out research on possible COVID 19 vaccines and for self protection against being infected by COVID 19 patients.

Table 7: Barriers to COVID 19 Information access by the Respondents

Barriers to COVID 19 Information Seeking and Access	No of Respondents	Percentage
Large amount of COVID 19 incredible information on the Internet.	146	100
Poor telecommunication networks in Nigeria.	56	38
A poor internet speed.	45	31
Lack of funds to subscribe to data.	32	22
Lack of access to library resources on COVID 19.	146	100
Poor power supply.	146	100
Too many sources of COVID 19 information.	146	100

Table 7 revealed that 146 (100%) representing all the respondents indicated that a large amount of COVID 19 incredible information on the Internet, lack of access to library resources on COVID 19, poor power supply in and too many sources of COVID 19 information are the barriers to their COVID 19 information seeking and access. However, only 56(38%) of the respondents indicated that poor telecommunication networks in Nigeria are a barrier, just 45(31%) of them indicated that

poor internet speed is a barrier and 32(22%) of them indicated that lack of funds to subscribe to data is a barrier to them when seeking and accessing COVID 19 information. This means that the major barriers to seeking and accessing COVID 19 information among medical doctors in are: large amount of COVID 19 incredible information on the Internet; lack of access to library resources on COVID 19; poor power supply in and too many sources of COVID 19 information.

Discussion of Findings

Table 1 reflected the distribution of the medical doctors' under study by age, and it was revealed that among the 146 respondents, 81(55%) are within the age bracket of 35-44 years of age, 33(23%) of them are within the age bracket of 45-54 years and 32(22%) of them are within the age bracket of 25-34 years while none of them indicated being above 55 years of age. This means that majority of the respondents are within the age bracket of 35-44 years of age. **Table 2** shows the gender distribution of the respondents and it was revealed that 92(63%) of the respondents are male while 54(37%) are female. This means that majority of the respondents are male. **Table 3** indicated the years of experience of the medical doctors under study and it was clearly revealed that 82(56%) of the respondents have between 11-16 years of work experience as medical doctors, 38(26%) of them have 16-20 years of experience and 26(18%) of them have between 5-10 years of experience as medical doctors while there is none of the respondents with 1-5 as well as 21 years and above years of experience. This means that majority of the respondents are the highly experienced one with 11-15 years of work experience. **Table 4** validated the COVID 19 information needs of medical doctors in and it was revealed that all the medical doctors in Nigeria needs information on causes of COVID 19 virus, COVID 19 symptoms, COVID 19 test procedures, how COVID 19 spread, COVID 19 preventive measures, COVID 19 cures, age groups more vulnerable to COVID 19 attack, COVID 19 patients' isolation procedures, drugs combination for COVID 19 treatment as well as drug dosage for COVID 19 treatment and this finding agrees with WHO (2019) in their COVID 19 situation report that preventive measures for COVID 19, treatment of COVID 19 patients, detecting and isolation procedures, contact tracing and quarantine procedures, measures to stop the spread of COVID 19 cases are the most vital information that should be made available to doctors and nurses who are working in any health facility in all the nations affected by the spread of the virus all over the world.

Also, **Table 5** vividly indicates that the major sources of COVID 19 information to doctors in, Nigeria include: Internet, World Health Organization (WHO) website, Daily newspapers, Nigerian Centre for Diseases Control (NCDC) website, Network News and colleagues (medical doctors) from other states among others. This is also in agreement with UNICEF (2020) who highlighted that trusted sources that individuals can get COVID 19 information from the WHO website, UNICEF website,

certified newspapers as well as network news among others. To further corroborate this finding, Younger (2010) found that one of the sources that doctors used in getting information about existing or new disease is through colleagues and they often rely on this source as their first source of information when dealing with a disease that is relatively new to them. **Table 6** shows that the major use of COVID 19 information is to: identify COVID 19 symptoms; know the isolation/quarantine procedure and practice for COVID 19 patients; know COVID 19 treatment procedure; know the drug dosage for the treatment of COVID 19 patients; carry out research on possible COVID 19 vaccines and for self protection against being infected by COVID 19 patients. This is in agreement with Andualem, Kebede and Kumie (2013) who found that the use of health information resources by medical practitioners vary from understanding the nature of diseases of knowing the ways of preventing them; understanding the treatment of every disease such as fever, typhoid etcetera; understanding the types of drugs to prescribe at every given time depending on the condition of the patients and others. **Table 7** revealed that the major barriers to seeking and accessing COVID 19 information among medical doctors in are: large amount of COVID 19 incredible information on the Internet; lack of access to library resources on COVID 19; poor power supply in and too many sources of COVID 19 information. This is in alignment with the study of Norbet and Lwoga (2013) who found that the major constraints that physicians faces while trying to access information were all related to poor ICT infrastructure, followed by lack of access to a computer, frequent power cuts and lack of time.

Conclusion and Recommendations

It is no gainsaying that doctors all over the world knows the importance information and needs it to survive, treat infected patients and prevent mass casualty in this period of the wide spread of COVID 19 all over the world and in their attempt to lay hands on useful information on the virus, they make use of WHO website, UNICEF website, Network news, Nigerian Centers for Disease Control (NCDC) and colleagues (doctors) from other states as their sources for getting COVID 19 related information. The medical doctors use the information they get for a number of purposes such as to identify COVID 19 symptoms, know the isolation/quarantine procedure and practice for COVID 19 patients, know COVID 19 treatment procedure and know the drug dosage for the treatment of COVID 19 patients among others. Despite the urgent need of medical information by medical practitioners in this period of the emergence of the pandemic (COVID 19 all over the world, medical doctors face lots of barriers in their effort to access information to help curb the spread of the virus and to help treat infected patients. Some of the barriers are: lack of access to library resources on COVID 19; poor power supply in and too many sources of COVID 19 information among others.

Conclusively, regardless of the barriers to COVID 19 information access among medical doctors in, they still seek and access useful information on COVID 19 through websites, Network News and colleagues so as to be able to effectively treat patients who have contracted the disease should the case arise as there is no confirmed case of COVID 19 patients in at the time of this report.

In view of the foregoing, the following recommendations were made:

- The federal government should mandate the NCDC to compile all necessary information on COVID 19 and pass them across to each state through the Minister of Information so that all the medical doctors working in all the isolation and treatment centres can be armed with the necessary information on the development of COVID 19 across the world.
- The libraries (academic, public, school and special) should at this time rise up to their responsibility of rendering selective dissemination of information service on COVID 19 related information to the doctors and individuals around them who may be seeking for such information.
- Strong collaboration should be encouraged among the medical doctors in Nigeria as this will afford them the platform to share knowledge, ideas and information on how to treat infected patients and at the same time prescribe drugs that will help non infected patients to build their immune system so as to build of body system immunity capable of resisting the devastating effect of the virus in case of eventual contraction.
- The government at every level should make power supply available at this period so that medical doctors will be able to utilize ICT facilities that will enable them to access needed information on COVID 19 as these devices cannot be operated without electricity to power and to keep them charged.

References

- Andualem, M., Kebede, G., & kumie, A. (2013). Information needs and seeking behaviour among health professionals working at public hospital and health centres in Bahir Dar, Ethiopia. Andualem et al. *BMC Health Services Research*, 13, 534.
- Anwar, M. A., Al-Ansari, H., & Abdullah, A. (2004). Information seeking behaviour of Kuwaiti journalists. *Libri* 54(4), 228-236.
- Bryant, S. L. (2004). The information needs and information seeking behavior of family doctors. *Health Information and Libraries Journal*, 21(2), 84–93.
- Callen, J. L., Buyankhishig, B. & McIntosh, J. H. (2008). Clinical information sources used by hospital doctors in Mongolia. *International Journal of Medical Informatics*, 77, 249-255.
- Coumou, H. C. H., & Meijman, F. J. (2006). How do primary care physicians seek answers to clinical questions? : A literature review. *Journal of the Medical Library Association*, 94(1), 55-60.
- Flynn, M. G., & McGuinness, C. (2011). Hospital clinicians information behavior and attitudes towards the Clinical Informationist: An Irish survey. *Health Information and Libraries Journal*, 28(1), 23–32.
- Gonzalez-Gonzalez, A. I., Dawes, M., Sanchez-Mateos, J., Riesgo-Fuertes, R., Escortell-Mayor, E., Sanz-Cuesta, T., & Hernandez-Fernandez, T. (2007). Information needs and information-seeking behaviour of primary care physicians. *Annals of Family Medicine* 5(4), 345-352.
- Ijiekhuamhen, O. P., & Omoisekemi, A. F. (2016). Rural women and their information seeking behavior. *Library Philosophy and Practice (e-journal)*. 1396. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1396>
- Ijiekhuamhen, O. P., Edewor, N., & Emeka-Ukwu, U. (2016). Elderly people and their information needs. *Library Philosophy and Practice (e-journal)* 1332. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1332>
- Jackson, R., Baird, W., Davis-Reynolds, L., Smith, C., Blackburn, S., & Allsebrook, J. (2007). The information requirements and information-seeking behaviours of health and social care professionals providing care to children with health care needs: a pilot study. *Health Information and Libraries Journal* 24(2):95–102.
- Kapiriri, L., & Bondy, S. J. (2006). Health practitioners and health planners information needs and seeking behavior for decision making in Uganda. *International Journal of Medical Informatics* 75(10-11), 714–721.
- Martinez-Silveira, M. S., & Oddone, N. (2008). Information-seeking behaviour of medical residents in clinical practice in Bahia, Brazil. *Journal of the Medical Library Association (JMLA)*, 96(4), 381-384.
- Masters, K. (2008). For what purpose and reasons do doctors use the Internet: A systematic review. *International Journal of Medical Informatics*, 77(1), 4–16.
- Norbert, G. L., & Lwoga, E. T. (2013). Information seeking behavior of physicians in Tanzania. *Information Development*, 29(2), 1-12.

- Ocheibi, J. A., & Buba, A. (2003). Information needs and information gathering behaviour of medical doctors in Maiduguri, Nigeria. *Journal of Education Media and Library Sciences*, 40(4), 417-427.
- Sahara Reporters (2020). Delta records third case Of COVID-19. Retrieved from <http://saharareporters.com/2020/04/11/breaking-delta-records-third-case-covid-19>
- Salman, S. B. N., Ahmed, S., & Khan, A. (2013). Information seeking in primary care: a survey of doctors working in remote government health facilities in Pakistan. *Library Philosophy and Practice (e-journal)*. 1009. Retrieved from <https://digitalcommons.unl.edu/libphilprac/1009>
- Savolainen, R. (2007). Everyday life information seeking: Approaching information seeking in the context of 'Way of Life'. *Library and Information Science Research*, 17(3), 259-294.
- Tumwikirize, W. A., Ogwal-Okeng, J. W., Vernby, A., Anokbonggo, W. W., Gustafsson, L. L. & Lundborg, C. L. (2009). Access and use of medicines information sources by physicians in public hospitals in Uganda: A cross-sectional survey. *African Health Sciences*, 8(4), 220–226.
- UNICEF (2020). *Coronavirus (Covid-19): UNICEF urges public to seek information from trusted sources*. Retrieved from <https://www.unicef.org/nigeria/press-releases/coronavirus-covid-19-unicef-urges-public-seek-information-trusted-sources>
- Wilson, T. D. (2000). Human information behaviour. *Informing Science*, 3(2), 49–56.
- Wilson, T. D., & Walsh, C. (1996). *Information behaviour, an interdisciplinary perspective*. University of Sheffield, Department of Information Studies. Retrieved from <http://informationr.net/tdw/publ/infbehav/> .
- World Health Organization (WHO) (2020). *World Health Organization. Infection prevention and control during health care when COVID-19 is suspected*. Retrieved from [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)
- Younger, P. (2010). Internet based information seeking behaviour amongst doctors and nurses: A short review of the literature. *Health Information and Libraries Journal*, 27(1), 2-10.