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Accessibility and Use of Internet Health Information Resources by Medical Students in Igbinedion University, Okada, Edo State

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Abstract
This study investigated accessibility and use of internet health information resources by Medical Students in Igbinedion University, Okada, Edo State. Descriptive survey design was employed, the population of the study was 212 Medical students of the university, total enumeration sampling technique was adopted while questionnaire was used for data collection. Out of the two hundred and twelve (212) copies of the questionnaire administered, 193 copies were retrieved and analysed using frequency count, simple percentages and arithmetic mean (x) where appropriate. Findings revealed that majority of the respondents can locate, access and download electronic health information resources on the Internet (x = 3.26), use mobile devices for searching the Internet (x = 3.31), can access social networking websites for health information (x = 3.23) amongst others, all to a very high extent. Findings showed that for their health information needs, majority of the respondents use YouTube (91.2%), internet search engines (88.6%), social networking sites (59.1%), reference materials online (58%), health-focused websites (55.4%), Wikipedia (55.4%) and health-based mobile applications (50.3%). Findings also revealed that the respondents use internet search engines (x = 3.28), Wikipedia (x = 3.41) and YouTube (x = 3.43) to a very high extent, health-focused websites (x = 2.86) as well as reference materials (x = 2.86) to a high extent. Furthermore, it was found that the purpose for which majority of respondents use internet-based health information include for developing competence in their field of study (62.7%), for self-improvement (62.2%) and for the purpose of keeping up with current developments in the medical profession (56.5%) amongst others. Finally, the key challenges faced by majority of the respondents in their use of internet for seeking health information are lack of awareness of relevant health information resources on the Internet (67.9%), information overload (58.5%) as well as lack of information literacy skills (56.5%). Recommendations include that universities should strengthen the students' knowledge of use of internet for qualitative health information by incorporating health information literacy into a compulsory first year course, or as part of a general studies text, as well as through seminars and workshops.
Keywords: *Accessibility, Use, Health Information Resources, Medical Students*

1.1 Introduction

The Internet provides volumes of health information for consumer health education and it has been argued that it possesses the potential for improving individual health (Zarea, Mohan, Sattari & Aliparasti, 2016).

According to Ryan, Sheehan, Marion and Harbison (2020), Internet offers online health information and service delivery through various different formats, including text-based health information, e-mails, chatrooms, listservs, etc. With the increasing availability, accessibility and growing acceptance and utilization of online information resources, the Internet today can be said to be constantly revolutionizing access to useful health information (Obasola & Agunbiade, 2016). Today, the Internet has proven to be an almost unending source of information for all aspects of life.

On the web, one can find information on just about any topic and health information is on top of the list. In fact, one of the primary uses of the Internet is as a source of health information for both consumers and healthcare providers. It has been widely regarded as a critical vehicle for shifting healthcare practices all over the world (Ajuwon, 2015). No doubt, the Internet is also making substantial inroads in patient care and dissemination of health care information. It is changing the way health professionals obtain information. Findings from various studies show that medical practitioners and students in medical fields of study use the Internet and electronic resources to do things like accessing medical records, providing remote patient care through telemedicine facilities, accessing health care literature, and so on.

More than ever before, the sources of information available via the Internet are increasing exponentially. According to Ryan et al. (2020), the Internet grants users access to vast amounts of current, relevant healthcare information at an unprecedented volume. That the Internet has become an integral tool for the 21st Century physicians further means that medical doctors who are not willing or ready to accept and use this technology will be missing valuable information relevant to their daily practice. The same will be the case of students in various medical fields of studies, as the present age is one in which the Internet as an essential source of health information and education cannot be overemphasized. Although, expert say that the benefits and shortcomings of online health information seeking should be taken into consideration, medical students can actually use online health information to take several important decisions and actions concerning their own health and use health information resources for their academics.

As Ajuwon (2015) pointed out, the Internet is an effective and efficient tool for accessing information. Anyaoku, Nwafor-Orizu and Oguaka (2015) argued that the Internet is an important learning tool in medical education by providing access to latest evidence anytime and anywhere. Ogungbeni et al. (2016) described the Internet as a global network that enables computers and other communication gadgets to communicate directly and transparently. According to Apuke and Iyendo (2018), the Internet is a network of hundreds of thousands of computers all over the world, connected in a way that lets other computers access information from them. That is, if a computer is connected to the Internet, in principle, it can be connected to any other computer on the network. Today, the Internet comprises tens of thousands of regional, national and international networks, which connect more than 30 million people in over 200 countries. The networks include organizations, schools, universities, companies, governments, groups and individuals (Adekunmisi, Ajala & Iyoro, 2013).

The Internet began in 1969 as ARPANet (Advanced Research Project Agency Network) by the United States Department of Defense to share military intelligence and research with university sources. The Internet has since the 1990s become a widely-used civilian tool for communication, research, entertainment,

education and advertisement (Asibey, Agyemang & Dankwah, 2017). Obasola and Agunbiade (2016) quoted Shitta (2002) that "the Internet is a communication super highway that links, hooks and focuses the entire world into a global village, where people of all races can easily get in touch, see, or speak to one another and exchange information from one point of the globe to another". The scholars further noted that it is the largest network in the world that allows computer users to communicate and access electronic databases with ease.

The history of the Internet has long been linked to university education. This is because the adoption of the Internet in university system has intensified access to information and communication by providing un-reserved access to e-mail messages, web boards, online services and e-publications. In practice, much of the recent focus of technological development in Nigerian Universities has been concerned with promoting the use of the Internet as a teaching and learning tool. Internet is appealing to universities for a number of reasons: it reduces the time lag between the production and utilization of knowledge; it promotes international cooperation and exchange of opinions; it furthers the sharing of information; and promotes multidisciplinary research.

Internet allows wide range of materials to be accessed by people across the globe irrespective of their location. According to Onyi and Itopa (2018), the internet is an information resource medium that allow access to a wide range of materials from around the world to a local machine. It is also a publishing medium which allows access to a large pool of information which was not possible in the past, thereby reducing the information gap between the students in developed and developing countries. It is user friendly, fast and enable access to information from anywhere around the world with no time limitation. Apart from using internet to obtain academic information, it also allows students to socialize with friends and family. Today, internet has become a device that many students cannot do without because they can read and listen to news, watch video, chat with family and friends, send and receiving mails and do many other things.

Although, the Internet is used mostly in obtaining information and there are other benefits that are derivable from its use such as social networking, interaction, collaboration, file sharing and transfer, etc., its major functional advantage stems from the willingness its users to share information with one another so that everyone might benefit. Ajuwon (2015) maintains that an observable trend in the Internet is that more and more resources are moving to it and in some cases being made available only in the Internet. This trend makes it impossible for students of tertiary institutions to succeed in their academic pursuit without ever needing the internet to a large extent.

1.2 Statement of the Problem

In the twenty-first century, students are armed with invaluable learning and research opportunities due to the Internet, which is proving to be an exceptional resource. Every form of relevant information is available online both current and historical. Many of the medical education and health research tools have been made available online, especially for medical students. Subject databases, academic and professional websites are filled with educational resources that feature e-books, e-journals, and other electronic resources.

The Internet hosts a tremendous amount and variety of health-related information that can be accessed at convenience, anonymity, and relatively low cost. Many health-related websites provide consumer-oriented health information and additional features like a forum (or message

board), support groups, and recommended links. Information seekers, therefore, can obtain health information and explore other services (Zhang, 2021). In the study carried out by Asibey et al. (2017) it was revealed that almost three-quarter of the sampled university students in Ghana sought for health information or support, online. This result compares with other studies globally, including a study on predictors of online health seeking behaviour among Indian medical students which shows that Internet was the main source for health information (Khan, Modak & Khan, 2021). However, a careful review of existing literature indicated that there is scarcity of literature on the subject matter with regards to medical students in Nigerian universities. More specifically, the accessibility and use of Internet health information resources by medical students in private universities in Edo State, Nigeria is not known. This is the perceived gap in knowledge that informed the decision to carry out this study.

1.3 Objectives of the Study

The general objective of this study is to investigate accessibility and use of internet health information resources by Medical students in Igbinedion University, Okada, Edo State. The specific objectives are to:

I. ascertain the extent of Internet accessibility for health information by Medical students
ii. identify the Internet-based health information resources used by Medical students
iii. determine the extent of use of Internet-based health information resources by Medical students
iv. determine the purposes for which Medical students use Internet-based health information
v. identify the challenges faced by Medical students in their use of internet for seeking health information

1.4 Research Questions

i. What is the extent to which Medical students can access the Internet for health information?
ii. What are the Internet-based health information resources used by Medical students?
iii. To what extent do Medical students use Internet-based health information resources?
iv. For what purpose do Medical students use Internet-based health information resources?
v. What are the challenges faced by Medical students in their use of Internet for seeking health information?

2.1 Literature Review

Today, students may feel more comfortable using electronic information sources and thus gain more from using them. Key among these sources is the Internet. Generally, due to increased level of Internet access, electronic resources have exploded in popularity and use. Muruganadham et al. (2015) noted that it is true that due to the needs of medical professionals for high quality and timely information, medical libraries have been early adopters of electronic resources to provide information and services. According to Khademian, Montazer and Aslani (2020), health information includes information for healthy living, preventing and managing diseases, making decisions about health products and health services and making other decisions related to health and health care. However, Ajuwon (2015) believes that as regards information resources, there are factors which precedes use. Among these factors is accessibility.

As Ajuwon (2015) avers, information is worthless if it is not used. The scholar further stated that "availability of information is one thing, access to and use of the available information is another". Meanwhile, available

evidence indicates that access to the Internet is increasing among tertiary institution students in Nigeria (Asibey et al, 2017; Ahmed and Al-Reyaee, 2017; Owusu-Acheaw & Larson, 2015), Asibey et al. (2017) stated that the availability of e-resources has changed what users actually read and use; they tend to use what is easily accessible. Ahmed and Al-Reyaee (2017) believes that ease of access to is a key determining factor as far as undergraduates' preferred choice of information resource is concerned. A study carried out by Owusu-Acheaw and Larson (2015) revealed that more than half of all participants have access to, and use the Internet in obtaining health information and support (among other uses), specifically finding information about illnesses and interacting with health professionals on medical websites, Wikipedia, Facebook pages, etc.

Ashkanani et al (2019) found that students mostly use web-based sources to get health information to read about causes and symptoms of an illness, followed by finding information to decide if a visit to the doctor is needed. The scholars found that on the contrary, web-based resources are used least to contact doctors on the Web. In addition, most students reported that they actually find health information through Web-based resources, compared with a few who did not. Results from the study further revealed that just 14.6% of respondents used the internet to find information after an appointment with a health professional. In addition, the results also showed that 65.2% of the students reported finding the desired health information through Web-based resources. Meanwhile, Onyi and Itopa (2018) found that most (30%) of the health information sought was for personal health and medical information, whereas 28% of the health information was sought for leisure while 22% of health information was for school research on health issues. Owusu-Acheaw and Larson (2015) discovered that a good percentage (67.7%) of the respondents use Internet for different purposes especially for seeking information. This indicates that students know the importance of seeking and using information on the Internet.

Studies have shown that there exist certain challenges or barriers facing the use of internet for health information seeking. For example, analyses of data from the study by Onyi and Itopa (2018) as regards lack of access to internet as barrier to health information resulted in a mean response of 3.57, a value close to 4.0, which is indicative of overall perception of the lack of access to internet as a barrier to obtaining wide scope of health information. In clear terms, this finding means that lack of access to the internet is a major barrier students face while seeking health information. The study also found that poor knowledge and skills for internet search is a barrier in accessing quality health information.

Despite the evidence from existing literature on the use of Internet for information seeking, there is scarcity of literature on the extent to which the Internet is accessible to, as well as used by medical students in Nigerian universities for health information purposes, together with the challenges they face while seeking health information on the internet. This perceived gap in knowledge makes the present study necessary.

3.1 Methodology

Rajasekar, Philominathan and Chinnathambi (2013) defined research method as the various procedures, schemes and algorithms used in research. That is, all the methods, plans, strategies, etc. employed by the researcher(s) in the execution of the research is what is termed 'research method'. In order to achieve a comprehensive result, this study was carried out using the descriptive survey method because it involves

a systematic and comprehensive collection of data or information about the opinions, attitude, feelings and behaviours of people. According to Shuttleworth (2019), descriptive research is a scientific method which involves observing and describing the behaviour of a subject without influencing it in any way.

The population for this study comprised the 212 Medical students in Igbinedion University, Okada, Edo State. Total enumeration technique was used to cover all the two-hundred and twelve (212) Medical students in the university under study. This sampling technique was adopted due of the small and manageable size of the population. The instrument adopted by this study for the collection of data was a questionnaire titled "Accessibility and Use of Internet Health Information Resources by Medicine"

Students in Igbinedion University Okada, Edo State" and which was divided into Sections. Section A contains questions relating to the demographic characteristics of the respondents such as age, gender, marital status, etc., while the other sections were designed to elicit information from respondents in line with the research objectives. Sections B deals with extent of internet accessibility for health information by medical students, Section C treats internet-based health information resources used by medical students, Section D focuses on extent of use of internet-based health information resources by medical students, Section E deals with purpose for which medical students use internet-based health information while Section F is aimed at eliciting responses on the challenges faced by medical students in their use of internet for seeking health information.

3.2 Validity of the Instrument

Validity of the instrument is the extent to which an instrument measures what it is supposed to measure and performs as it is designed to. The validity of the research instrument was done by the researcher's project supervisor and another lecturer in the Department of Library and Information Science, who identified areas of weakness, grammatical constructions all of which were duly corrected to strengthen the validity of the questionnaire and in other to ensure that the instrument was suitable for the collection of data for this study.

3.3 Method of Data Collection and Analysis

Copies of the questionnaire were personally administered by the researcher to the respondents and upon completion, the questionnaire were collected. This was done to ensure high response rate of the returned questionnaire. The method of data analysis used in this project was simple percentage (%) and frequency counts as well as arithmetic mean with the criterion mean score of 2.5.

4.1 Results

This section is concerned with the presentation and analysis of data. The raw data were analyzed critically to extract useful information for making inferences and conclusions. Frequency count, simple percentage and arithmetic mean were used for data analysis, with a mean score of 2.5 or above taken as 'agreed' and a mean score of less than 2.5 taken as 'disagreed'. Out of the two hundred and twelve copies of the questionnaire administered to medical students in Igbinedion University, Okada, one hundred and ninety-three (193) copies were filled, returned and were considered good for analysis. This represented 96.5% return rate. This is clearly shown in Table 1 below.

Table 1: Analysis of Returned and Unreturned Questionnaire

S/N	Returned/Unreturned Questionnaire	Frequency	Percentage (%)
1.	Returned Questionnaire	193	96.5
2.	Unreturned Questionnaire	7	3.5
	Total	212	100

Source: Field Survey, 2021

Table 2: Gender Distribution of Respondents

S/N	Gender	Frequency	Percentage (%)
1.	Males	117	60.6
2.	Females	76	39.4
	Total	193	100

Source: Field Survey, 2021

Table 2 shows the gender distribution of the respondents. As can be seen in the table, 117 (60.6%) respondents are males while 76 (39.4%) respondents are females. Therefore, it can be concluded that are more females among the respondents than males.

Table 3: Age Distribution of Respondents

S/N	Age	Frequency	Percentage (%)
1.	15 – 20 years	21	10.9
2.	21 – 25 years	71	36.8
3.	Above 25	101	52.3
	Total	193	100%

Source: Field Survey, 2021

Table 3 shows the age distributions of the respondents. The table show that 23 (10.9%) respondents are between the age of 15 and 20 years, 71 (38.8%) are between the ages of 21 and 25 years, while 101 (52.3%) respondents are above the age of 25. Therefore, it can be concluded that majority of the respondents are above 20 years of age.

Table 4: Level of Study of Respondents

S/N	Level of Study	Frequency	Percentage (%)
1.	100 Level	65	33.7
2.	200 Level	53	27.5
3.	300 Level	44	22.8
4.	400 Level	13	6.7
5.	500 Level	11	5.7
6.	600 Level	7	3.6
Total		**193**	**100%**

Source: Field Survey, 2021

Table 4 shows the levels of study of the respondents. Data from the tables indicates that 65 (33.7%) respondents are in 100 level, 53 (27.5%) are in 200 level while 44 (22.8%) are in 300 level. The figures from the table also show that 19 (9.8%) respondents are in 400 level while only 12 (6.2%) are in 500 level. It can be concluded therefore that majority of the respondents are in the lower classes.

Table 5: Extent of Internet Accessibility for Health Information by Medical Students

S/N	Internet Accessibility	VHE	HE	LE	VLE	Mean	Decision
1.	On the Internet, I can access a wide range of health informatio n resources irrespective of my location	45	118	21	6	3.06	Very High Extent
2.	I can locate, access and download electronic health information resources on the Internet	78	92	14	7	3.26	Very High Extent
3.	I have access to online forums and discussion boards for health matters	29	85	52	25	2.62	High Extent
4.	I use mobile devices for searching the Internet and as such, I can access the Internet for health information on-the-go	71	113	3	4	3.31	Very High Extent
5.	I can navigate different pages of a health - focused website for the information I need	43	102	39	5	2.97	High Extent
6.	I can access the Internet for health information any time of the day	78	92	14	7	3.26	Very High Extent
7.	I can access social networking websites for health information	65	115	6	7	3.23	Very High Extent
8.	I can download electronic health information resources and use them offline	33	99	34	26	2.72	High Extent
9.	I can access electronic databases that contain health information resources	12	37	69	74	1.93	Very Low Extent

Source: Field Survey, 2021

Table 5 shows mean ratings on the extent of internet accessibility for health information by Medical students. The results from the table show that the mean ratings for Items 1, 2, 4, 5, 6, 7 and 8 were 2.50 or more while the mean ratings for Item 9 was less than 2.5, which is the criterion mean. It can be concluded therefore that majority of the respondents can access a wide range of health information resources irrespective of their locations, can locate, access and download electronic health information resources on the Internet, use mobile devices for searching the Internet and as such, they can access the Internet for health information on-the-go, can access the Internet for health information any time of the day, can access social networking websites for health information, all to a very high extent. It can also be concluded that majority of the respondents have access to online forums and discussion boards for health matters, can navigate different pages of

a health-focused website for the information they need and can download electronic health information resources and use them offline, all to a high extent.

Table 6: Internet-based Health Information Resources Used by Medical Students

S/N	Internet-based Health Information Resources	Frequency	Percentage (%)
1.	Full-text health journal articles	49	25.4
2.	eBooks	67	34.7
3.	Internet search engines	171	88.6
4.	Internet-based health journals	13	6.7
5.	Social networking sites	114	59.1
6.	Wikipedia	107	55.4
7.	Online health encyclopedia	4	2.1
8.	YouTube	176	91.2
9.	Hospital websites	12	6.2
10.	Health-focused websites	107	55.4
11.	Health-based mobile applications (such as HealthTap)	97	50.3
12.	Online health magazines	17	8.8
13.	Continuing medical education websites	3	1.6
14.	Electronic databases	41	21.2
15.	Conference proceedings	4	2.1
16.	Essential Health Links	0	0
17.	Scopus	8	4.2
18.	African Index Medicus	15	7.8
19.	Reference materials online	112	58.0
20.	Professional Association Websites	3	1.6

Source: Field Survey, 2021

Table 6 shows the internet-based health information resources used by Medical students. The results from the table show that more than 50% of the respondents in each case, that is, 176 (91.2%) use YouTube, 171 (88.6%) use internet search engines, 114 (59.1%) use social networking sites, 112 (58.0%) use reference materials online, 107 (55.4%) use health-focused websites, as well as Wikipedia, while 97 (50.3%). Also, the results show that the respondents who indicated that they use the other listed health information resources are not up to 50% of the total number of respondents in each case. It can be concluded therefore that for their health information needs, majority of the respondents use YouTube, internet search engines, social networking sites, reference materials online, health-focused websites, Wikipedia and health-based mobile applications.

Table 7: Extent of Use of Internet-Based Health Information Resources

S/N	Internet-Based Health Information Resources	VHE	HE	LE	VLE	Mean	Decision
1.	Full-text health journals articles	21	31	98	41	2.17	Low Extent
2.	eBooks	24	36	104	27	2.30	Low Extent
3.	Internet search engines	103	59	14	17	3.28	Very High Extent
4.	Internet-based health journals	3	9	114	65	1.74	Very Low Extent
5.	Social networking sites	11	27	117	37	2.06	Low Extent
6.	Wikipedia	109	63	12	9	3.41	Very High Extent
7.	Online health encyclopedia	0	3	162	27	1.88	Very Low Extent
8.	YouTube	105	71	9	7	3.43	Very High Extent
9.	Hospital websites	4	5	119	63	1.74	Very Low Extent
10.	Health-focused websites	52	81	39	20	2.86	High Extent
11.	Health-based mobile applications (such as HealthTap)	14	22	149	7	2.22	Low Extent
12.	Online health magazines	3	9	114	65	1.74	Very Low Extent
13.	Continuing medical education websites	0	3	162	27	1.88	Very Low Extent
14.	Electronic databases	5	19	73	95	1.66	Very Low Extent
15.	Conference proceedings	1	2	98	91	1.55	Very Low Extent
16.	Essential Health Links	0	1	134	58	1.70	Very Low Extent
17.	Scopus	1	5	129	57	1.74	Very Low Extent
18.	African Index Medicus	2	7	142	42	1.84	Very Low Extent
19.	Reference materials	52	81	39	20	2.86	High Extent
20.	Professional Association Websites	1	1	151	40	1.81	Very Low Extent

Source: Field Survey, 2021

Table 7 shows mean ratings on extent of use of internet-based health information resources. The results from the table show that the mean ratings for Items 3, 6, 8, 10 and 19 were 2.50 or more while the mean ratings for Items 1, 2, 4, 5, 7, 9, 11, 12, 13, 14, 15, 16, 17, 18 and 20 were less than 2.5, which is the criterion mean. It can be concluded therefore that majority of the respondents use internet search engines, Wikipedia and YouTube to a very high extent, health-focused websites as well as reference materials to a high extent.

Table 8: Purpose for which Medical Students Use Internet-Based Health Information

S/N	Purposes	Frequency	Percentage (%)
1.	Seminar presentation	104	53.9
2.	Preparation for school examinations	118	61.1
3.	Research	62	32.1
4.	Patient care	4	2.1
5.	Preparation for certifying (fellowship) Examinations	14	7.3
6.	To develop competence in their field of study	121	62.7
7.	To keep up with current developments in the medical profession	109	56.5
8.	General knowledge	113	58.5
9.	For self-improvement	120	62.2
10.	To aid further professional qualification	14	7.3
11.	For personal healthcare	171	88.6

Source: Field Survey, 2021

Table 8 shows purpose for which Medical students use internet-based health information. Results from the table show that over 50% of the respondents in each case, that is, 171 (88.6%) indicated that they make use of internet-based health information resources for their personal healthcare, 121 (62.7%) for developing competence in their field of study, 120 (62.2%) for self-improvement, 118 (61.1%) use of internet-based health information resources in preparation for school examinations, 113 (58.5%) for general knowledge, 109 (56.5%) for the purpose of keeping up with current developments in the medical profession, while 104 (53.9%) respondents use internet-based health information for seminar presentation. The responses for the other listed purposes were less than 50% in each case. It can be concluded therefore that the purpose for which majority of respondents use internet-based health information include for seminar presentation, developing competence in their field of study, for self-improvement and general knowledge, preparing for examinations, for the purpose of keeping up with current developments in the medical profession as well as seminar presentation.

Table 9: Challenges Faced by Medical Students in their Use of Internet for Seeking Health Information

S/N	Challenges	Frequency	Percentage (%)
1.	Internet connection problems	51	26.4
2.	Time constraints	15	7.8
3.	High cost of Internet subscription	117	60.6
4.	Lack of Internet-enabled devices	14	7.3
5.	Difficulty in navigating web pages	42	21.8
6.	Poor Internet search skills	12	6.2
7.	Information overload (too much information on the web and not able to select the relevant ones among so many)	113	58.5
8.	Language barrier	2	1.0
9.	Lack of information literacy skills	109	56.5
10.	Lack of awareness of relevant health information resources on the Internet	131	67.9

Source: Field Survey, 2021

Table 9 shows the challenges faced by medical students in their use of internet for seeking health information. Results from the table show that is, 131 (67.9%) respondents indicated lack of awareness of relevant health information resources on the Internet as the challenge they face, 117 (60.6%) indicated high cost of Internet subscription, 113 (58.5%) indicated information overload, while 109 (56.5%) indicated lack of information literacy skills as the challenges they faced in the course of using internet to seek health information. Results from the table also reveal that 51 (26.4%) indicated internet connection problems, 42 (21.8%) indicated difficulty in navigating web pages, 15 (7.8%) indicated time constraints, 14 (7.3%) indicated lack of Internet-enabled devices, 12 (6.2%) indicated poor internet search skills while 2 (1%) respondents indicated language barrier. It can be concluded therefore that the key challenges faced by majority of the respondents in their use of internet for seeking health information are lack of awareness of relevant health information resources on the Internet, high cost of Internet subscription, information overload as well as lack of information literacy skills.

5.1 Discussion of Findings

From the analyses carried out on the retrieved questionnaire, findings revealed that majority of the respondents have access to online forums and discussion boards for health matters, can navigate different pages of a health-focused website for the information they need and can download electronic health information resources and use them offline, all to a high extent. This finding is in line with those of Onyi and Itopa (2018) who found that majority of the respondents accessed the internet to a high extent as the results from that study showed that 69.5% used the internet at least once a day. Ryan et al. (2020) found that majority of medical students have access to the Internet generally, and take part in forums and discussion boards, visit pages of health websites every week with ease and always download resources to use offline. Owusu-Acheaw and Larson (2015) found that students' access and use of social media for health information is high.

Findings showed that for their health information needs, majority of the respondents use YouTube, internet search engines, social networking sites, reference materials online, health-focused websites, Wikipedia and health-based mobile applications. This finding reflects the opinion of Alabdulwahhab et al. (2021) who noted that the introduction of Wikipedia and YouTube as ancillary aid to medical resources has shifted medical learning to a new level. They further noted that although, studies conducted in recent times have shown that the information contained in these online resources may not always be accurate and authentic, there is no denying the fact that they gave become go-to sources of health information for many persons.

This finding however while in line with those of Khan et al. (2021) who found that 91% of respondents use search engines for seeking health information, it contrasts another finding from their study which revealed that 61% medical college students use e-journals the most as their sources of health information. According to Asibey et al. (2017), Internet as the first place they go for health information. In a systematic literature review on the use of social media for retrieving health information by patients and healthcare consumers, it was revealed that there is a high use of social media by patients and healthcare consumers in retrieving health-related information. Also, it was discovered that majority of the respondents use internet search engines, Wikipedia and YouTube to a very high extent, health-focused websites as well as reference materials to a high extent. The finding however, contrasts

those of Khan et al (2021) who found that respondents use e-journals to a high extent.

Furthermore, findings revealed that the purpose for which majority of respondents use internet-based health information include for their personal healthcare, for seminar presentation, developing competence in their field of study, for self-improvement and general knowledge, preparing for examinations, for the purpose of keeping up with current developments in the medical profession as well as seminar presentation. Asibey et al (2017) found that the students just like other young people rely heavily on online health information to take several important decisions and actions concerning their health. Ajuwon (2015) found that the respondents use internet health information resources for preparation of seminar presentation (98.8%), examination (94.5%), and research (93.1%). The scholar also found other reasons for use of internet health information resources to include patient care (88.5%).

Finally, it was found that the key challenges faced by majority of the respondents in their use of internet for seeking health information are lack of awareness of relevant health information resources on the Internet, high cost of Internet subscription, information overload as well as lack of information literacy skills. The study by Ajuwon (2015) revealed that the following factors pose as constraints to use of internet health information resources by the respondents and they include internet connection, slow speed of Internet connection, low bandwidth, time constraints, high cost of access as well as too much information on the Internet (information overload). Chakroborty (2014) found that problems faced by the users in surfing the internet include overload of redundant information on the Internet. The scholar found that respondents find it difficult to get the relevant information from the Internet due to the problem of electricity failure in the medical colleges.

Conclusion and Recommendations

The present study examined the accessibility and use of internet for health information using medical students as a case study. The findings from the study underscore the need for educating the students on the enormous benefits of the internet for personal health information and research. The findings also showed that the perception of internet as a useful tool for accessing wide range of health information both for personal healthcare and for academic purposes, is shared by majority of the respondents. The finding is in tandem with the popularity of the internet as a good source of health information. In conclusion, this study suggests that Medical students in Igbinedion university Okada, are active in the use of internet for health information, the students have a moderate knowledge of search engines and health websites for qualitative health information. The health information sought online is mainly personal health and for academic research. The majority of students perceive lack of access to internet and poor knowledge and skills for accessing quality health information as barriers in accessing health information through the internet.

The findings from the study identify gaps in the depth of knowledge on the part of the students, of the usefulness of electronic journals and databases for health information. In order to address these gaps, it is important for the university to strengthen the students' knowledge of use of internet for qualitative health information. This could be by mainstreaming the techniques for accessing information on the internet generally, and health information specifically in compulsory first year course, or as part of a general studies text. To this end, seminars and workshops may also be used to further address this gap. On a wider perspective and in line with the opinion of Onyi and Itopa (2018), electronic

health should be strengthened in universities and beyond to promote quality health information through the internet, both for personal healthcare and for academic purposes.

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