

**INFORMATION SEEKING BEHAVIOUR OF UNDERGRADUATES ON COVID-19
PANDEMIC: A SURVEY OF LIBRARY AND INFORMATION SCIENCE STUDENTS
IN NIGERIAN UNIVERSITIES
BY**

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Abstract

The study investigated the information-seeking behaviour of undergraduates on COVID-19 pandemic: a survey of library and information science students in Nigerian universities. A total of 14 universities in Nigeria participated in the research. The Simple random sample was used to select 168 library and information science undergraduate students from the 14 Universities. An online questionnaire was used to gather relevant data, while percentage counts and frequencies were used for the presentation and analysis of data. The findings revealed that there were information sources on COVID-19 on the internet and social media. The findings further revealed that Internet, WhatsApp, Facebook, television and radio were the preferred and most used information sources. It also showed that undergraduate students search for information on covid-19 for up-to-date information, how to prevent it among others. More so, it revealed that undergraduate student's information-seeking behaviour was browsing the internet, checking for information on social media, and searching through databases. Too much information (unfiltered information), Poor network, erratic power supply, inadequate computers and internet-accessible phones were the major problems associated with the students' information-seeking process during covid-19 pandemic. The study, therefore, recommends that libraries, librarians, government and other information providers should regulate and be more involved in the issue of providing reliable health information and facilities that will ensure speedy access to information by undergraduate students.

Keywords: Information Seeking Behavior, Undergraduate Student, COVID-19 Pandemic, Nigeria University.

Introduction

The present era is the information era. It is a vital component of man's existence. Everyone needs information to thrive in personal, social, educational and economic matters. It is known to be the driving force of any society's growth and development. Information is defined as an experience that is recorded and can be used for decision-making (Igbokwe, 2010). The record might be in audio or print format. They are the medium through which the information is passed from one person to the other. This medium also known as information sources are channels through which information is transferred.

As a result of the information explosion, different sources of information are now made available for students to select from. Fidel et al (1999) cited in Inyang and Offem (2014) reported that the type of information and the medium in which they are presented in today's modern society has become manifold and multifaceted, providing men and women, students or faculty members as well as the general community of scholars a huge selection. The information source that an individual consults depends to a large extent on his information needs. Information need is a gap in knowledge, recognition that one's knowledge is inadequate to provide an answer to a problem at hand. Because man is not all-knowing, there must be a need for information concerning different aspects of life at every given point in time. Therefore as a result of satisfying an information need, individuals engage in information seeking which is a natural and necessary mechanism of human existence. Information seeking is a continuous and lifelong process.

Case (2002) simply defined information seeking as a conscious effort to acquire information in response to a need or gap in the knowledge of individuals. The merge of information need and information-seeking results in what is known as information-seeking behaviour Singh, Kumar and Khanchandani (2015) opined that information-seeking behaviour is a broad term that encompasses how an individual identifies his/her information needs, seeks, evaluates, selects and finally uses the information to satisfy their information need. Also, the steps taken by an individual to satisfy his information need are known as information-seeking behaviour (Makinde, Jiyane&Mugwisi, 2019). It is worthy to note however that information-seeking behaviour of individuals differs according to their varying information needs such as academics, health, business, sports, entertainment, etc.

In support of this, Ahmat and Kamarudin (2014) stressed that no two persons have the same information-seeking behaviour. This is due to the differences that are exhibited in human behaviour. Literature has revealed that information-seeking behaviour among students helps

them keep up-to-date with knowledge, polish their attitudes, develop skills and perform better practices that would make them excel in their education (Rajesh, Sivasubramaniyan & Kalpana, 2018). The advent of the novel virus referred to as Corona Virus has drastically influenced the information seeking behaviour of people all over the world. The spread of the deadly virus began in the year 2019; hence the name COVID-19 (W.H.O., 2020). The dreaded virus which has been declared a pandemic is ravaging many nations of the world and has crumbled world economies and institutions.

According to the World Health Organization (W.H.O., 2020), the coronavirus which causes the disease COVID-19 is said to have originated from animals in China. Although the first case of coronavirus was first reported in China, it has now spread to different parts of the world. According to W.H.O. (2020), the most common symptoms of COVID-19 are dry cough, tiredness and fever. However, a worst-case scenario presents symptoms such as pneumonia. The disease can be contracted from person to person by coming in contact with infected air droplets that are projected during sneezing or coughing. It can also be transmitted when people touch infected hands or surfaces that contain the virus and use the same contaminated hands to touch their eyes, nose and mouth (Africa CDC, 2020). In May, Johns Hopkins University (2020), reported that the deadly virus has infected nearly 2.5 million people, with over 166,000 dead. With the exponential growth in the number of infected persons and no vaccine currently to ameliorate the effects of the virus, there was the need for world powers to take stringent precautionary measures to avoid further spread of the deadly virus.

These measures included the shutdown of public places of gathering and total lockdown, restricting people from leaving their homes thereby causing universities to be deserted. Which is a citadel of learning and research. Undergraduate students in Nigeria are now faced with coping with the changes made in different sectors of the nation thus affecting their information-seeking behaviour. Be it as it may, the sudden outbreak of covid-19; have increased the search for information that relates to the cure, symptoms, prevention amongst others (Ebrahim, Jahrami & Buheji. 2020). There by causing a reaction in the Information searches and seeking attitudes of undergraduates in Nigeria with no definite conclusion as to whether they are rightly satisfied or not, particularly with the multifaceted, human and cumbersome information on different information sources on covid-19.

Statement of Problem

The outbreak of covid-19 pandemic in all nations of the world has led to a stipulated shutdown of universities around the globe with no exception to universities in Nigeria. With the resultant shutdown experienced in some parts of the country. The search for information regarding the pandemic in the country and other parts of the world is on the increase. This has left undergraduate students confused about how to get valid information on the cure, preventive measures, statistics, government and non-governmental involvements, etc. on the pandemic. However, the researchers observed that the outbreak of covid-19 pandemic has affected undergraduate information-seeking behaviour. It is therefore imperative to investigate the information-seeking behaviour of undergraduates during the COVID-19 pandemic: a survey of Library and Information Science students in Nigeria Universities.

Objectives of the Study

The main objective of the study is to investigate the information-seeking behaviour of undergraduates on covid-19 pandemic: a survey of library and information science students in some selected Nigerian universities. The specific objectives are to:

1. Find out the available information sources on covid-19 pandemic for undergraduates in Nigerian Universities.
2. Find out the undergraduate preferred information sources on the COVID-19 pandemic in Nigeria.
3. Determine the undergraduates' reasons for seeking information on the COVID-19 pandemic in Nigeria.
4. Investigate undergraduate student's information-seeking behaviour on the COVID-19 pandemic in Nigeria.
5. Identify the challenges encountered by undergraduate students in the process of seeking information on the COVID-19 pandemic in Nigeria

Research Questions

1. What are the information sources available on the COVID-19 pandemic for undergraduates in Nigerian Universities?

Literature Review

Health is wealth as the medical practitioners say. Students in universities are mostly made up of youths who cannot afford to ignore health information. This is because they are the vibrant generation and the posterity in any given society. The information-seeking behaviour of this set of people is determined by their Information needs, the type of information available, the format and how fast they can access it.

According to recent research conducted by Ebrahim, Jahremi and Buheji (2020), on the available information sources on covid-19. An online questionnaire in the Arabic language was used for the data collection process. Using GAD-7 scale, respondents were asked to answer how often they have been bothered by various anxiety symptoms over the last two weeks on a 4-point Likert- scale ranging from 0 (not at all sure) to 3 (nearly every day). The scale accordingly produced a total score ranging from 0 to 21. The results revealed that most information sources were associated with the source of “social media accounts of official health organizations” (3.27 0.9), followed by “health care professionals” (3.16:1.0). In contrast, the lowest respondents’ information reliance was associated with the source of “In print newspapers” (1.64±0.9).

Lee, Paik and Joo (2012) in a study on information resource selection of undergraduate students in academic search tasks categorized information resources into four (4) namely: human resources, printed resources, online resources and mass media. According to these researchers, human resources information sources accounted for 18.4% among which were colleagues and family), professors and lecturers (7%), members (1.8%). It was also discovered that print resources such as books, magazines, newspapers were less frequently used than online and human resources. It was finally concluded that online resources such as search engines, digital libraries, online news and magazines, etc. which accounted for 67.1% were most preferred information sources used by students. Wyrwicka and Mrugalska (2015) investigated the information-seeking behaviour at Poznan University of Technology. The result of the study pointed out that internet, newspapers, television, databases and radio were the major types of information sources for undertaking studies in the faculty of engineering management at Poznan University of Technology.

Oyadeyi (2014) in his study on information needs and information-seeking behaviour among the students of Ondo State University of Science and Technology, Okitipupa identified students’ most preferred information sources. According to him, the most preferred information

sources were given as follows: lecture notes, internet and textbooks, while reference materials, books, e-journals and newspapers were least preferred information sources.

Oyadeyi (2014) in his study, also found out that Undergraduate student begins their information search by browsing the internet, 'using the shelf guide on the library shelves to locate books, 'inquiring from lecturers and fellow students and searching the electronic database. These were the first point of call when they (students) wanted to start searching for information. Others with low response rates include 'seeking assistance from Librarians' and 'searching the CD-ROM database.

Ebrahim, Jahremi and Buheji (2020), in their study, discovered the Need for COVID-18 information. They found out that the most three important information subjects were first, the "proper way of doing self -quarantine"; second, the "response to a covid-19 suspected family member"; and third "COVID-19 prevention and protection measures". The two items reported with the least importance were related to "diet for promoting immune system" and "physical activity during covid-19 outbreak". Three items exhibited the highest correlation values with GAD-7, these were: "communication with children about the covid-19" ($r[304] = 0.23, p? .001$), "managing family time during the covid-19 outbreak" ($[304] = 0.20, p.001$), and "about covid19 disease" $[304]0.19. p? 01$). The investigation also reported the Obstacles to COVID-19 information-seeking behaviour which showed the "spread of rumours", "massive information about the disease". The least rating was for the obstacle of "difficulty to understand the scientific content". The obstacle of "shared information seems psychologically distressing" displayed the highest correlation value with GAD ($[304] - 0.44, p?.001$).

Methodology

The descriptive survey research design was used for the study. The population of the study consists of all library and information science undergraduate students Universities in Nigeria. However, a total number of 14 Universities took part in the study a sampling technique was used and a random undergraduate students from the universities A self-constructed online questionnaire was designed and distributed to collect the data from the Respondents. The online questionnaire was grouped into clusters which included; available information sources on covid-19 pandemic for undergraduate students in Nigerian Universities, undergraduate students' preferred information sources covid-19 pandemic in Nigeria, undergraduate students' reasons for seeking information on covid-19 pandemic in Nigeria.

Undergraduate students' information-seeking behaviour on the COVID-19 pandemic in Nigeria, challenges encountered by undergraduate students in the process of seeking information on the COVID-19 pandemic in Nigeria. A total of 176 respondents filled out the online questionnaires, but 168 were valid and useful for analysis. The use of frequency count and percentages method of data analysis was adopted for the research work.

Analysis and Discussion of Result

Demographic characteristics of the respondents

The respondents consist of 168 undergraduate students from 14 Universities in Nigeria. The results show that there were 110(65.4%) male and 34.6(58%) female undergraduate students. The result of the class level were: 56(33.3%) 100 level, 56(33.3%) 200 level, 31(18.5%) 300 level and 25(14.8%) 400 level. Also, the age ranges of the respondents were: 16-20 93(55.6%), 21-24 62(37%) and 25-30 12(22.5%).

Research Question One: What are the information sources available on covid-19 pandemic for undergraduates in Nigerian Universities?

Table 1: types of information sources available on the COVID-19 pandemic for undergraduates in Nigeria universities.

Statement	Yes	No
Internet	143 (85.2%)	25(14.8%)
Whatsapp	131 (77.8%)	37(22.2%)
Facebook	118 (70.4%)	50(29.6%)
e-book	0 (0%)	168(100%)
Pamphlet	0 (0%)	168(100)
e-journal	6(3.7%)	162(96.3%)
Institutional database	62 (37%)	106(63%)
newspapers	62 (37%)	106(63%)
Television	118 (70.4%)	50 (29.6%)
Fliers	6(3.7%)	162(96.3%)
Radio	124 (74%)	44 (26%)

Table 1 above show the Types of information sources available on the covid-19 pandemic for undergraduates'. The respondents agreed that the internet 143(85.2%), Whatsapp 131(77.8%), radio 124(74%), Facebook 118(70.4%) and television 118(70.4%) were the major information sources available on the covid-19 pandemic for undergraduate students in Nigeria Universities and they disagreed that institutional database 62(37%), newspapers 62(37%), E-journal 6(3.7%), fliers 6(3.7%), E-book 0(0%) and pamphlet 0(0%) present few and no information on covid-19 pandemic.

Research Question Two: What are the undergraduates' preferred information sources on covid-19 pandemic in Nigerian Universities?

Table 2: Undergraduates' preferred information sources on the COVID-19 pandemic in Nigeria Universities

Statement	Yes	No
Internet	137 (81%)	31(19%)
Whatsapp	137 (81%)	31(19%)
Facebook	131 (78%)	37(22%)
e-book	12 (7%)	156(93%)
Pamphlet	0 (0%)	168(100%)
e-journal	12(7%)	156(93%)
Institutional database	12 (7%)	156(93%)
newspapers	25 (15%)	143(85%)
Television	100 (60%)	68(40%)
Fliers	6(4%)	162(96.3%)
Radio	97(58%)	71(42%)

Table 2 above shows the undergraduates' preferred information sources on the COVID-19 pandemic. The respondents agreed that the most preferred information sources on COVID-19 were Internet 137(81%), Whatsapp 137(81%), Facebook 131(79%) and television 118(70%) radio 131(79%), while the least preferred were institutional database 62(37%). Newspapers 62(37%), E-journal 6(4%), fliers 6(4%), E-book 0(0%) and pamphlet 0(0%),

Research Question Three: What are undergraduates' reasons for seeking information on the COVID-19 pandemic in Nigeria?

Table 3: Undergraduates' reasons for seeking information on the COVID-19 pandemic in Nigeria

Statement	SA	A	D	SD
To get up-to-date information on the spread of COVID-19	106 (63%)	62 (37%)	-	-
To know who is most at risk for COVID-19	81 (48%)	75 (45%)	12 (7%)	-
To know the symptoms of COVID-19	87 (52%)	81 (48%)	-	-
To know how COVID-19 can be contracted	106 (63%)	44 (26%)	19 (11%)	-
To know if there is a cure for COVID-19	118 (70%)	44 (26%)	6 (4%)	-
To know how COVID-19 can be prevented	106 (63%)	50 (30%)	12 (7%)	-
To know the academic implication on the spread of Covid-19.	87 (52%)	68 (40%)	13 (8%)	-

Table 3 above shows the undergraduates' reason for seeking information on the covid-19. It revealed that variables such as getting up-to-date information on the spread of COVID-19 168 (100%), know who is most at risk for COVID-19 156 (93%), know the symptoms of COVID-19 168 (100%), know how COVID-19 can be prevented 156 (93%), know how covid-19 can be contracted 150 (88.9%), know if there is a cure for covid-19 162 (96%), know the academic implication on the spread of covid-19 155 (92%).

Research Question Four: What are undergraduates' information-seeking behaviours on covid-19 pandemic in Nigeria?

Table 4: Undergraduates information-seeking behavior on the covid-19 pandemic in Nigeria

Statement	SA	A	D	SD
I browse the internet	100 (60%)	68 (40%)	-	-
I search through electronic databases	25 (15%)	104 (62%)	32 (19%)	7 (4%)
I inquired from family and friends	9 (5%)	5 (3%)	87 (52%)	67 (40%)
I check for updates on social media	87 (52%)	81 (48%)	-	-
I seek assistance from librarians online	-	75 (45%)	81 (48%)	12 (7%)
I listen to news on radio	56 (33%)	106 (63%)	6 (4%)	-
I read newspapers	25 (15%)	56 (33%)	75 (45%)	12 (7%)

Table 4 above shows the undergraduates' information-seeking behaviour on COVID-19. Pandemic. It indicated that undergraduate students agree that they browse the internet 168(100%), search through electronic databases 129 (77%), 168 (100%), check for updates on social media 168 (100%), listen to the news on radio 162 (96%). The table also shows that undergraduate students disagreed that they inquired from family and friends 1.54 (92%). Seek assistance from librarians 93 (55%), read newspapers 87 (52%),

Research Question Five: What are the challenges encountered by undergraduate students in the process of seeking information on the COVID-19 pandemic in Nigeria?

Table 5: challenges encountered by undergraduates in the process of seeking information on the COVID-19 pandemic in Nigeria.

Statement	SA	A	D	SD
Shortage of computer system	44 (26%)	75 (40%)	37 (22%)	12 (7%)
Poor network connectivity	106 (63%)	55 (33%)	-	6 (4%)
Too much unverified information on covid-19	112 (67%)	56 (33%)	-	-
Erratic power supply	118 (70%)	44 (26%)	-	6 (4%)
Lack of internet-accessible phone	68 (41%)	62 (37%)	25 (15%)	12 (7%)
Inadequate funds	72 (43%)	78 (46%)	12 (7%)	6 (4%)

Table 5 above shows the challenges encountered by undergraduates in the process of seeking information on covid-19 pandemic and revealed that there is lack of computer systems 119 (71%), poor network connectivity 162 (96%), too much-unverified information on covid-19 168 (100%), erratic power supply 162 (96%), lack of internet- accessible phone 130 (78%), inadequate funds 150 (89%).

Discussion of Findings

From the study's findings, it was established that they were sufficiently available information on covid 19 for students. These are on the internet, WhatsApp, Facebook, television, radio. However, these findings agreed with similar studies conducted by Lee, Paik and Joo (2012) and Ebrahim, Jahremi and Buheji (2020). Also, it was discovered and established that Internet, WhatsApp, television Facebook, and radio were the most preferred and frequently used information sources against e-books, newspapers, institutional repositories, e-journals and fliers. The high preference for Internet and social media may be attributed to the spread of internet-accessible mobile phones, computers and ICT skills.

The findings further revealed the undergraduate students' reasons for seeking information on COVID-19, which were to get up-to-date information on the spread of COVID-19, know who is most at risk for COVID-19, know the symptoms of COVID-19, know how COVID-19 can be prevented, know how covid-19 can be contracted, know if there is a cure for covid-19, know the academic implication on the spread of covid-19. It tallies with the findings of Ebrahim, Jahremi and Buheji (2020) that parents and families seek information on COVID-19 to know how to prevent and protect themselves among others.

There is no doubt that undergraduates exhibit some forms of behaviour in the quest to satisfy their information needs on covid-19 pandemic. However, students approach the most common sources whenever the need to search for information arises. The findings of the study revealed that undergraduate students mostly browse the internet, search through electronic databases, check for updates on social media, and listen to the news on the radio. This could also be because of the lockdown, social distancing and stay-at-home policy. While, the respondents disagreed that they exhibit their information-seeking behaviour by inquiring from family and friends, seeking assistance from librarians and reading newspapers.

More so, the respondents indicated the challenges they face in seeking information on covid-19 pandemic. These are lack of computer systems, poor network connectivity, too much unverified information on covid-19, erratic power supply, lack of internet-accessible phones. Inadequate funds. Some of these challenges are in line with the findings of Ebrahim Jahremi and Buheji (2020), they reported that people are faced with rumours and massive or unfiltered information on covid-19, which have led to distress, uncertainty and the fear of the unknown. With the current prevalence of the pandemic, there has been a sharp shift in the usual search for information by undergraduates from academic purposes to health and safety purposes.

Conclusion

Information-seeking behaviour determines how well information seekers satisfy their information needs. The urgency, availability and the formats in which information resources appear affect the information seeking behaviour of undergraduate students with the outbreak of covid-19 pandemic there have been drastic changes in the information-seeking behaviour of students.

The study investigated the information seeking behaviour of undergraduate students on COVID-19 pandemic: a survey of library and information science students in Nigerian universities. The study revealed that information on COVID-19 is available in different sources

such as Whatsapp, Internet, Facebook among others, but students preferred to use the internet and social media rather than print information sources. It also revealed that undergraduate students seek information on COVID-19 pandemic to know the extent of the spread, symptoms and the preventive measures of the pandemic. Undergraduate students' information-seeking behaviours are browsing through the internet, checking for updates on social media, radio and television. It was also revealed that they are faced with the challenge of poor network connectivity, too much unverified information on COVID-19 among others. Hence, the study concluded that libraries, librarians, government, and other information providers should be proactive on the issue of providing reliable health information and facilities that will ensure speedy access to information by undergraduate students.

Recommendations

Based on the findings of the study, the following recommendations are made,

1. Librarians should be more involved in information dissemination activities
2. Library associations should organize a sub-group for librarians working in medical libraries. This is to ensure that there is a follow-up on the medical information.
3. Information providers should filter information they disseminate and provide sources for their information.
4. Government should ensure that network and power supply are made available during this period of COVID-19 pandemic.

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