AWARENESS AND ONLINE HEALTH INFORMATION NEEDS OF STUDENTS OF NNAMDI AZIKIWE UNIVERSITY, AWKA

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Abstract
The paper examined the awareness, online health information needs of students of Nnamdi Azikiwe University, Awka. It adopted a descriptive survey research design. The population was 131 undergraduate students of Library & Information Science, Nnamdi Azikiwe University, Awka. The instrument used in data collection was an online survey. The findings revealed that the awareness of students about online health information was high. The major online health information needs were causes of diseases, symptoms, spread, treatment, preventive measures. They sourced the online health information from the Internet/social media, websites, databases, search engines and university portal. Challenges encountered in accessing online health information included the high cost of data, information overload, poor internet network, lack of wifi, erratic power supply and inability to identify relevant online health information. The study concluded that increased awareness and the provision of relevant online health information to meet health information needs are critical to enabling sustainable global health. The study recommended strategic awareness approaches and online health information provision as a panacea to support a healthy society.

Keywords: Awareness, online health information, information needs,Students, Nnamdi Azikiwe University

Introduction

Information is one of the most needed resources for our daily activities and functional existence. When health is added it becomes the basic need which everyone desires. There is health information for every group to become aware of diseaes, to prevent diseases, solve

problems and improve the standard of living. The changing roles of information in the globalized world brings in internet and the online health information services as an indispensable critical factor. According to Bujnowska-Fedak, Waligóra and Mastalerz-Migas (2019) the role of the Internet as a source of health information has increased, and corresponds with a growing interest in online health services. They offer seamless awareness and needs online for all groups for preventive measures. An example is the covid-19 pandemic which came with a wide array of the increasing need for digital health awareness based on information needs.

Health information needs can be seen as the desire or demand to satisfy specific pressing health issues which can be achieved by using specific contents. The needs include e-health, e-treatment, e-education, e-livelihood, and e-environment. The need for accessibility and awareness of health care became uppermost with the Internet which has promoted health campaigns and information needs (Oriogu, Subair & Oriogu-Ogbuiyi, 2017). Based on this, libraries and librarians have integrated their health information services with dissemination of information through various online platforms that have desirable formats. It is therefore not far-fetched that the Internet through the social media, create spaces for sharing online health information. It requires knowledge to understand and prevent unnecessary health related shortcomings. These are the services that online health information render.

Online health information creates the awareness and access that allows everyone to have knowledge of sustainable health . It should be noted that the internet is filled with news of diseases which usually set off panic with increased information needs and consequently awareness for safety sought for through the social media, databases, websites, library portals among other internet based spaces.This situation affects all members of the society. This grappling for information that is sparked off is also experienced by students. Students are adolescents and adults who have been admitted to read a discipline in the tertiary institutions. Most times they live in the hostels community, away from their parents. They are made up of undergraduate and post graduates. They need a lot of health information within their environment. Students make up a generation who are attuned to ICTs and electronic resources hence they are referred to as digital citizens. Moreover, with online health information, the students are in a better position to develope assertive mindsets, plan for continuous learning, and target good health by evaluating information to check against fake news as well as help in reaching out to teach others about fact checked information. The web-based health information

resources like Hinari, MEDLINE, Bioline International, PubMed Central (PMC), Public Library of Science (PLOS), and Nursing Journals are acknowledged as reliable health Internet sources (Oriogu, Subair & Oriogu-Ogbuiyi, 2017). It becomes pertinent that students understand how information is shared and disseminated through the Internet, especially during emergencies. However, because of the various online sources, it is important that one recognizes reliable online sites for health information.

The truth is that unreliable internet access and technology may likely pose challenges to students in accessing online health information. In the words of Novi, Kovacis and Orso (2024) online health information may trigger a chain reaction, because navigating vast amounts of online health information can heighten fear and anxiety. However, there are also those that are not connected to the Internet whose overall knowledge of health information may be in jeopardy. Perhaps this is the justification why De, Pandey and Pal (2020) pointed out that the pandemic has brought the world to a situation where those not connected to the internet are facing total exclusion.These challenges are more rampant among students from disadvantaged backgrounds. In Nigeria, the libraries, especially those in the academic institutions provide access to Internet for information search. This study therefore, examined the students' awareness and online health information needs.

Statement of the problem

Health is a basic resource. In other words, it is critical and the need to be aware of health information underscores the sustenance of life and survival. Hence, the online health information provides access to knowledge on health challenges, diseases, causes, treatment and preventive measures. With accurate and authentic online health information, the students stay safe and protect themselvs from diseases. They create safe environment for themselves and the people around them. However, there seems to be low awareness of online health information based on the information need of students.Moreover, the wide array of online information which may be fake, inaccurate and unauthentic may be causing more harm than good to the lives of the students, especially during an epidemic or pandemic.When this happens, the emergency situation may be difficult to manage. It becomes important to check the awareness of online health information and information needs of students of Nnamdi Azikiwe University, Awka, Anambra State, Nigeria for sustainable healthy living.

Research questions

The following research questions guided the study:

1. What are the students' awarenes of online health information in Nnamdi Azikiwe University, Awka, Nigeria?
2. What are the students' online health information needs in Nnamdi Azikiwe University, Awka, Nigeria?
3. What are the students'sources of online information used in Nnamdi Azikiwe University, Awka, Nigeria?
4. What are the challenges associated with the students' awareness of online health information and online health information needs in Nnamdi Azikiwe University, Awka, Nigeria?

Literature review

Creation of awareness and easy retrieval of online health information cannot be over emphasized. This is because with information, the spread of diseases will be slowed down. It also helps in devising initiatives for managing diseases' outbreak, increases knowledge and provides perspectives for health sustainability (Bruce, Shurong, Amoah, Egala & Sobre Frimpong, 2024; Prakasan & Prakasan, 2021; IFLA, 2024). In creating awareness, several hygienic practices are shared over the media, internet and dailies. Some hyhiene practices shared online are regular handwashing, stopping of open defeacation, maintaining cleanliness, clean environment, avoiding crowded areas, among others. The point is that these online health information can be overwhelming and may generate mixed public reactions causing confusion, with unclear and unfocused information (WHO, 2020). Thus, it becomes necessary that a high level of awareness and digital information are provided. This helps to promote and improve the narratives within the communities and among the students by exposing good practices for preventing contagious diseases, especially during emergencies like the COVID-19,Ebola and Cholera outbreaks. Since health information is important, it is has become imperative that students adequately seek for online health information for the required health knowledge needed for their well being.

Information needs are the required and desired gaps that needs to be filled up for specific things associated with one's desire. Generally, health is a basic need and in the present dispensation, the critical role of online health information, especially in health crises situations

cannot be underestimated. Students need to be empowered with sufficient and accurate online health information to be aware of new diseases, symptoms, causes, transmission, treatment, prevention and management (Almuammar, Noorsaeed, Alafif, Kamal & Daghistani, 2021). It implies that the knowledge of health information empowers individuals to better understand health concerns, facilitating improved health and management of health conditions (Novi, Kovacis & Orso, 2024). It makes sense then that everyone needs to get the skills to navigate the internet for access to dedicated sources of online health information for health sustainability.

Online health information should be easily accessible. Mumtaz, et al. (2023) defined it as instruments and services that employ information and communication technologies (ICTs) to enhance and optimize health and lifestyle management, as well as play a role in prevention, diagnosis and treatment of diseases. Therefore, the need for online health information to be made strategic for a healthy course for all groups. In a study by Ssebuufu, et al, (2020) in Uganda, it was reported that households can get information from the students and those who have shown a high knowledge about measures to observe. The point being made is that the students need to be empowered with effective online health information. For instance, sites like National Institutes of Health, Centers for Disease Control and Prevention, libraries are adjudged as safe for reliable digital informaation (National Institutes of Health, 2023). Similarly, from the library portals to the social media, websites of health institutions, medical schools, professional health organizations, hospitals, government which provide online health content, information seekers get access to their querries (National Library of Medicine, 2022). It indicates that people are expected to participate in taking measures that can protect them and their family members through online health information.

Studies have reported the use of internet and social media sources for online health issues. For instance, Almuammar, Noorsaeed, Alafif, Kamal & Daghistani (2021), Giustini, Ali, Fraser and Boulos (2018), Tsao, Chen, Tisseverasinghe, Yang, Li and Butt (2021) linked their researches on the use of social media platforms for online health information. Perhaps, it is the easiest and fastest mode of information accessibility, especially among the students. Moreover, there are the media awareness campaign, intervention from the government websites on public awareness for prevention efforts and measures which are measures for the need for online health intervention (Wogu, 2016).

Challenges associated with online information, awareness and information needs are varied. Although, it may be easy to check the mobile phones at all times, there are still instances where some students may not be connected to the wifi or internet. There are also internet accerss, digital illiteracy, technology issues (Mumtaz, Riaz, Wajid, Saqib, Zeeshan, Khan, Chauhan, Sohail & Vohra, 2023). The information explosion on social media may have brought anxiety, misinformation, malinformation, fake news with rumors and myths related to diseases (Kalantari, Valizadeh-Haghi, Shahbodaghi & Zayeri, 2021; WHO, 2020; Taiwo & Igwe, 2020). Even though several efforts were made to correct some misgivings on the information being circulated both online and offline,many people still fall victim to the erroneous information.

Methods

The study adopted descriptive survey research design. The population of this study comprised 430 registered regular undergraduate students of Library and Information science Department Nnamdi Azikiwe University, Awka campus. The researchers selected a sample of 131 through purposive sampling proceedure with more of the students from 200 and 100 levels. These students have settled and are mostly living within the hostels. The least was taken from those in 300 and 400 levels who are living in less crowded environments that are crowded. The instrument used for data collection was online survey questionnaire. The online survey was structured into two sections and the respondents were asked to click on the spaces provided with their desired answers. Section one was designed to collect demographic information of the respondents while section two elicited information based on research questions. The respondents were required to click submit at the end of the survey. The distribution and collation of the instrument took three (3) weeks. This was to enable the respondents access the online survey with adequate time frame given to the respondents who were on the various class dedicated WhatsApp platforms from 100-400 levels. The respondents were required to tick any of the options provided on each item. The researchers shared the online survey through the whatsapp groups of LIS students using the course representatives, who were the admins of the class whatsapp platforms. One hundred and thirty one respondents duly filled the online forms..

Data were collected and analyzed using simple frequencies, percentages and mean. However, a criterion mean with mid-point score of 2.50 was used as the decision rule. This means that scores above 2.5 were regarded as positive and accepted while the scores below 2.5 were regraded as negative and rejected. Hence, the average of the individual scores for response

on a 4 point rating scales of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) for the research questions were applied. The scales were assigned values which were represented as follows: SA – 4**,** A – 3**,** D – 2, SD -1 while 50% and above was regarded as accepted and 50% and below were regarded as unaccepted**.**

Results

TABLE 1: Demographic data of the respondents

Distribution of respondents

Gender	Frequency	percentage
Male	34	26.0
Female	97	74.0
Total	**131**	**100.0**

Table 1 shows that out of the 131 respondents, 34 which represented 26% were males while 97 respondents which accounted for 74% were females.

Table 2. Distribution of respondents by levels

Level	Frequency	Percentage
100 Level	42	32.1
200 Level	65	49.6
300 Level	14	10.7
400 Level	10	7.6
Total	**131**	**100.0**

Table 2 shows that most of the respondents 49.6% were 200 level students, followed by 100 level students who accounted for 32.1%. 300 level and 400 level students made up 10.7% and 7.6% of the respondents respectively.

Table 3. Distribution of respondents by age range

Age range	Frequency	Percent
20 and below	48	36.6
21-25	68	51.9
26-30	15	11.5
31 and above	-	-
Total	**131**	**100.0**

Table 3 shows that most of the respondents fall within 21-25 years of age (51.9%). This was followed by those between the ages of 20 and below (36.6%) and 26-30 years (11.5%). There was no student above 30 years.

Table 4: Students' awareness of online health information

Awareness	Frequency	Percent
Aware	98	75
Not Aware	33	25
Total	**131**	**100**

It is shown in Table 4 above that the students' level of awareness of online health information was rated at 75% as aware and 25% as not aware . This shows that the respondents are aware of online health information.

Table 5: Mean responses of the students' online health information needs in Nnamdi Azikiwe University

S/N	Online health information needs of the students	Mean	SD	Remark
1	I check for health challenges, diseases and control	3.36	.77	Agree
2	I check for symptoms and prevention	3.31	.73	Agree
3	I check for treatment	3.37	.75	Agree
4	I check for information on new epidemics and pandemics	3.44	.71	Agree
5	I use it for assignmnet on health issues	3.42	.77	Agree
6	I use it for knowledge for discussion and support to people who may need it	3.13	.95	Agree

Table 5 shows that the respondents agreed to all the six items as online health information they need. The information included: checking for health challenges, diseases and control, sympoms and prevention, new epidemics and pandemics, assignmnet and knowledge based. The mean for the six items ranged from 3.13 to 3.44 which indicated agreed as they are above the benchmark stipulated.

Table 6: Sources of online health information

S/N	Source of health information	Frequency	Percentage
1.	Social media/internet	131	100
2.	Websites	82	62
3.	Online databases	75	57
4.	Library portal/website	62	47
5.	Search engines	85	64
6.	E-newspapers/Bulletin	68	51
7.	University portals	70	53
8.	E-Journals	56	42
9.	E-books	50	38

Table 6 shows the sources of online health information by the students which were social media/internet at 100% as the highest rated, followed by, search engines (64%), websites (62%) and online databases (57%). Others were university portals (53%), e-newspapers (51%), E-journals (42%), e-book (38%) and the library portal/websites (47%).

Table 7: Mean responses of challenges that associated with online information needs of students of LIS

S/N	Challenges of accessing online information	Mean	SD	Remark
1.	Cost of data subscription	3.40	.77	Agree
2.	Difficulty in choosing authentic information on the internet	3.15	.90	Agree
3.	Poor network and internet connection	3.08	.97	Agree
4.	Lack of Wi-Fi	3.24	.91	Agree
5.	Erratic power supply for charging devices	3.37	.74	Agree
6.	Lack of awareness of reliable online health databases	2.83	1.12	Agree
7.	Information overload	3.24	.91	Agree
8.	Lack of access to library e- resources	3.15	.90	Agree

As shown in Table 7, the respondents agreed to all the seven items as the challenges that affected their online health information needs. The challenges included: cost of data subscription, difficulty in choosing authentic information on the internet, poor network and internet connection, lack of Wi-Fi, erratic power supply for charging devices, lack of awareness of

reliable online health databases and lack of access to library e- resources. The mean for the seven items ranged from 2.83 to 3.40 which are acceptable from the benchmark.

Discussion

The data on the demographic features of the respondents showed the gender, students' academic level and ages of the students. It indicated the representation of all the levels and various ages of the respondents which show inclusive participation of the students in the study. The findings which that the respondents showed awareness of online health information with 75% rate of acceptance indicated that they are aware of online health information . As awareness creates knowledge, it then implies that the students can manage their health and will not be overwhelmed by new diseases This is in line with the ideas of Bruce, Shurong, Amoah, Egala & Sobre Frimpong, 2024; Prakasan & Prakasan, 2021; IFLA, 2024. It is not surprising that the library and information science students are aware of the importance of online health information because of the impact of their professional orientation as prospective information managers who deal with information generation,dissemination, conservation and use.

It is obvious from the responses on the sources of online health information that social media/internet is mostly and wildly accessed by the students. This corroborates with the study of Msughter (2020) and Al-Dmour, Masa'deh, Salman, Abuhashesh and Al-Dmour (2020) on the influence and effects of social media in effective control of health issues. Probably, the mobile phone is handy in checking up messages on the social media platform. This could also insinuate a double edged sword of accessing fake news which is observably prevalent in online health information sharing. This contradicts the position of De, Pandey and Pal (2020) who decried a situation where those not connected to the internet may be facing total exclusion. The point is to ensure control and evaluation of the information retrieved for valuable use, otherwise, the implication is that it may be causing more harm than good in the use of social media platforms for obtaining health information.

The results from the online health information needs of the students showed high agreement with needs bordering on causes, symptoms, spread, treatment and preventive measures. The findings of the study aligns with the ideas of Almuammar, Noorsaeed, Alafif, Kamal and Daghistani (2021) and Novi, Kovacis and Orso (2024), which indicated that the knowledge of health information empowers individuals to better understand health concerns,

facilitating improved management. It simply implies that health and wellness are areas of the interests to the students. They also need online health information for knowledge, writing assignments and discussion for improved learning outcomes. It coincides with the emphasis of Compact for Young People (2020) on the importance of providing needs and response analysis for youth participation in information needs. It implies that their knowing will enhance their sharing and engaging others in strengthening sustainable health .

The revelation by the student's funding that cost of data subscription, difficulty in choosing authentic information on internet poor network and internet connection, lack of wifi, erratic power supply, information overload and lack of e-resources from the library portal is worrisome. This is inline with the studies of Mumtaz, et al, (2023) which noted that it also causes anxiety, misinformation, malinformation as well as generating fake news on diseases as pointed by Kalantari, Valizadeh-Haghi, Shahbodaghi & Zayeri,(2021). The point is that accurate and authentic online health information should be seamlessly accessed in this era where the world is a global village.

Conclusion

This study has shown evidence based report of the awareness of online health information and online health information needs of the students with reviews and empirical work. There are gaps in the principles of information which require to be filled for strategic awareness needed for sustainable health . Thus, it could be concluded that the students are aware of online health information. They need the online health information resources to check for causes, symptoms, treatment and preventive measures for diseases as well as for learning and knowledge sharing. The students access websites, Internet, social media platforms, university portals, search engines and databases fro authentic and accurate information that curbs misinformation, disinformation and fake news. In addition, they encounter challenges like lack of wifi, costly data subscription, poor internet connection, erratic power supply and inability to access library portals and relibale online health information. It is only when these students have adequate health information that they can stay safe as well as disseminate the same information to the members of their households and the community. In other words, when their needs are met via the intentional provision of dedicated ICTs driven online resources through the library, will they get value for satisfying their needs and this will translate to a more informed society that is able to meet one of the strategic SDGs –Health for all .

Implications of the study

The implication of this study is that if there is unawareness of online health information, the students will be ignorant of the health status of their environment which is a misnorm for basic existence. Moreover, the indication of unawareness of relevant online health information spaces will trigger the circulation of fake news, ms-information, dis-information and mal-information which are dangerous signs of underdevelopment. It will definitely affect the implementation of the national health policies with the youths who are the greatest population who ensures developmental sustainability. The study also revealed the fact that the library websites and portals were not being accessed as much as the social media platforms. This shows a lacuna on the provision of popular online health information media by the library. This has great implications for library management and the university policy makers. Besides, the non availability of information policies and facilities like wifi, affordable data and internet among others can create disatisfaction among students. It can also cause apathy and reduce the quest for knowledge for online health information. Consequently, this can jeopardize the library patronage. The library /university management must reinvent its services, information services provision and staffing to meet international best practices if the library must remain relevant as a source for accessing health information for the students.

Recommendations

The following recommendations were made from the study:

1. There should be more strategic awareness campaigns on online health information on campuses. The academic libraries' portal/websites should liaise themselves with other information generation sectors for this.
2. All the relevant onlne health information needs and relevant information resources should be collated and packaged in different information formats and contents for ease of retrieval by the library users by creating innovative services.
3. There is need for information literacy on reliable online health information databases so that the students will have more authentic content and online spaces to search for online health information.
4. There is need to check the activities of the online providers and subsidize their charges, and ensure equitable service delivery. The provision of wifi on campus, regular portal

with resource sharing and networking among the libraries and other agencies will reduce the challenges faced by the students in accessing online health information.

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