Assessment of Information Resources Provided to Hepatitis Patients for Health Literacy by Librarians in Specialist Hospitals in North-Central, Nigeria.

Wilson Oserada University Libraries, Nasarawa State University, Keffi Oserada.wilson@nsuk.edu.ng

Oyedum Georgina Uchey Federal University of Technology Minna, Niger State

Hassan Mallam Ibrahim University Libraries, Nasarawa State University, Keffi

Abstract

The study was on the assessment of information resources provided to hepatitis patients for health literacy by librarians in specialist hospitals of a North-central, Nigeria. The study was guided by two objectives. Survey research design was adopted for the study with a total population of 1,700 hepatitis patients and twenty (20) medical librarians in the specialist hospitals studied. The sample size of the population was 313 drawn from Krejcie and Morgan (1970) sample size table for determining the sample size of a population. Questionnaire was the instrument used for data collection. Out of 313 copies of questionnaire administered, 254 copies were filled, returned and used for the analysis. Descriptive statistical tool involving frequency counts and percentages, mean and standard deviation were used to analyse the data. The findings of the study revealed that the types services provided in the specialist hospitals were library oriented services. The study revealed further that inadequate awareness of information resources and services, current information resources on hepatitis were factors affecting the level of health literacy among hepatitis patients in the study areas. The study recommended among others that the management of specialist hospitals in North-central, Nigeria should provide Internet services, use of e-mail, Short Message Services (SMS) in meeting the information needs of hepatitis patients and other users, create awareness of their information resources and services through library orientation, organising conferences, workshops, seminar and how they can be used to meet the information need of hepatitis patients.

Keyword: Information Resources, Hepatitis, Specialist hospital, Health Literacy

Introduction

Health literacy is a concept that relatively deals with possessing the ability to identify the health information needs on how to locate and use information. The World Health Organisation (WHO) (2012) refers to health literacy as the concept of an individual's cognitive and social skills which determine the motivation and ability to gain access to, understand, and use information in ways to promote and maintain good health. In this way, health literacy holds greater value beyond an ability to read pamphlets and successfully set appointments. Increased health literacy is essential for empowerment which in turn might result in liberated personal, social, and cultural development. Ultimately, this might result in enhanced health behaviours (Ajuwon, 2015).

Similarly, Ajuwon (2015) has equally revealed that there is a strong relationship between the inability to read and adequate care of one's health among patients with chronic or terminal diseases such as hepatitis. Adibe (2010) opined that hospitalised patients who had low health literacy had an increased chance of reporting poor health and were more likely to have been hospitalised compared to those patients who had high health literacy.

Libraries can be major players described as information provision (Ogunsola, 2011) rendering services that pervades all sectors of life including the provision and dissemination of information on healthy living especially on what could improve the health and wellbeing of hepatitis patients. Libraries as custodians of knowledge should be proactive in bringing to the notice of hepatitis patients information on the causes, effects, control including the current hepatitis drugs in the preventive treatment of hepatitis. For special libraries with the sole purpose of supporting and enhancing the actualisation of the goal of the parent organisations or institutions, like specialist hospitals; provides specialised information resources on a particular subject for their clienteles (Shumaker, 2011). They assist physicians, health professionals, medical students, patients and medical researchers in locating health and scientific information to improve, update, access and evaluate health care services. Uzohue and Yaya (2016) opined that special libraries in health organisations are set up to take care and to meet the information needs of professional health workers within and outside the organisations. Libraries in specialist hospitals should collaborate with health professionals in getting health information as well as provide recreational reading for patients and serve the information needs of physicians and medical staff and well-positioned to improve access to credible information, provide expert assistance in navigating health resources and regulations, and work with partners to develop and deliver relevant programs and services that boost health and wellness of hepatitis patents.

Hepatitis could be A, B, C, and D, and it spreads through contacts with infected blood. Hepatitis B is spread through contacts with infected blood, through sex with an infected person, and from mother to child during childbirth, whether the delivery is vaginal or via caesarean section. Hepatitis C is spread primarily through contact with infected blood, less commonly it can spread through sexual contact and child birth. Hepatitis D is spread through contact with infected blood, this disease only occurs at the same time as infection with Hepatitis B or people who are already infected with Hepatitis B, and Hepatitis E is spread through food or water contaminated by feces from an infected person (U.S. Department of Health and Human Services, 2011).

Nigeria has a high burden of viral Hepatitis B and C at a prevalence rate of 11.2% and 2.0% respectively (WHO, 2017). This information is in line with Nigeria Federal Ministry of Health (2018) which noted at a briefing on July 30, 2018 that the government was articulating strategies that would lead to a reduction in the number of infected person; Nigeria Federal Ministry of Health proposed that more than 22million Nigerians are infected with Hepatitis B and more than 4 million with Hepatitis C. The viral hepatitis pandemic takes a heavy toll on lives, communities and health systems. It is responsible for an estimated 1.4 million deaths per year from acute infection and hepatitis-related liver cancer and cirrhosis a tool comparable to that of HIV and tuberculosis (WHO, 2016). It is worth noting that the health of many Nigerian citizens is at stake. Many Nigerians are living with a life-threaten disease which they are not aware of due to the fact that viral hepatitis is a silent killer.

Many people are hepatitis virus carrier, but are ignorant of the symptoms, treatment, and how to manage it. In the same vein, many are aware of their current health status, but are ignorant on how to access relevant and current health information tailored to their needs (WHO, 2017). The assessment of information resources provided to hepatitis patients for health literacy by librarians in specialist hospitals in North-central, Nigeria.

Objective of the Study

- 1. The study identifies the types of information resources and services provided by librarians to hepatitis patients for health literacy in North-central, Nigeria.
- 2. It determines the level of awareness of information resources and services among patients for health literacy in specialist hospitals in North-central, Nigeria.

Literature review

Concept of Health Literacy vis-à-vis information resources

According to the WHO (2011) health literacy (HL) is the key determinant of the health and wellbeing of an individual. It is one component of various literacies mentioned in the field of health and education, for instance; cultural literacy, technology literacy, media literacy and scientific literacy (DeWitet *al*, 2017). Since the emergence of the term health literacy in 1970s, it has been defined in multiple ways with varying conceptualizations. HL is defined as the ability of a person to carry out health-related literacy (Sørensen et al, 2012);Jacobs,2017). It's the ability of a person to improve health and well-being, and make decisions related with health care (Poureslami*et al*, 2017;Kilfoyle*et al*, 2016). It is important for patients living with hepatitis to be aware of the causes and preventive measures necessary to be taken in prevent it. Berkman *et al* (2011) stressed that health information is a critical component of community system and is essential for generating and reporting data for the national level which in the long run enhances development. The World Health Organization (WHO) (2014) affirmed that health information gives clearer picture of health and sickness across an entire population and this knowledge can help prevent the spread of disease and improve individual health.

Medical librarians working in healthcare settings are often at the forefront of health literacy awareness efforts for healthcare professionals and patients generally. Online tutorials and in person workshops for physicians, nurses, medical residents, and patients have focused on understanding the needs of health literacy-challenged patients, screening for health literacy, awareness of consumer health resources, and demonstrating communication strategies to utilize in practice including plain language and active listening (Anyaoku, 2015). Duhon and Jameson (2013) opined that the health information literacy needs of patients have been described in four broad categories: consumer health information, informed consent, information literacy, and critical thinking techniques. Medical librarians have designed health literacy efforts focused on each of these needs using traditional and non-traditional approaches. Health literacy outreach to patients is traditionally delivered by medical librarians via hospital or consumer health libraries in the form of training on the use of medical databases and consultations about a variety of health topics (Osborne, 2012). Therefore Negi (2014) concluded that libraries should disseminate health information about the causative agents of hepatitis and preventive measures through brochures, leaflet, newspapers and magazines. Similarly, information services such as library websites, health information services, reference service and library orientation services were the only available services rendered in the specialist hospitals studied.

Online public access catalogues (OPAC) and networked databases

With the presence of online catalogues, hepatitis patients and other library users can retrieve and access information resources relevant to their need in a timelier manner. The present day OPACs can be accessed through the use of mobile technology such as cell phones. Library users including hepatitis patients no longer need to be within the walls of the library to access information resources relevant to their needs. They can use online OPACs and library databases at the comfort of their homes or workplaces to access information from the library. Pub-Med (2017) opined that information seekers retrieve various information sources through mobile Online Public Access Catalogues (OPACs) and mobile based databases which contain biomedical literature with more than 26 million citations which includes full-text content.

Information resources in special libraries

Personal Space/My Library: Personal space/My Library is a self-service platform where library users including hepatitis patients can manage their personalized accounts with custom-made collections. Hepatitis patients can set up and manage their profile, preferences for catalogue searches, receive alerts on reserved items, check their records, track inter-library loan request, renew borrowed items and document delivery requests (Saxena and Yadav, 2013). Liu and Briggs (2015), Prabhakaran and Kalyani (2014)

opined that Personal space/My Library platform presents new opportunities for electronic data interchange and selective information dissemination.

1. Short Message Service (SMS) Notification

It entails the use of mobile telephony systems to disseminate information in the form of text messages and multimedia content such as videos, images and audio files. Librarians in the specialist hospitals can notify their users including hepatitis patients through the use of SMS in the form of audio files, videos and images. Kumar (2014) and Verma and Verma (2014) posited that an integrated library management software is used to generate notifications on inter-library loan, renewals, provision of call numbers and outstanding fees through the use of Libsys 0.7, AIM Hack, My Info Quest, Mosio's Text a Librarian, Upside wireless-used by University of California, Los Angeles (UCLA) Libraries.

Social Media Networks: Librarians in specialist hospitals can also make use of the social media platforms for information dissemination to hepatitis patients and other users of the library on hepatitis and other diseases. Prabhakaran and Kalyani (2014), Library success (2014) opined that SMS notification can also be used through the use of social media networks such as WhatsApp and Imo and other web applications such as Google Alert, Twitter, and Facebook.

Quick Response (QR) Codes: Quick response (QR) codes are two dimensional barcodes that direct users to the desired websites (Library success, 2014). It is a time saving technology that acts as a pointer to indexed or programmed Universal Resource Locators (URLs). The barcodes contain information about items to which QR code is attached. Saxena and Yadav (2013) opined that users with smartphones can use their camera features to scan images and decode the information they need. QR codes are also known as mobile tagging tools (Verma and Verma, 2014).

Librarians in the specialist hospitals can use this technique to direct hepatitis patients and other library users to relevant or important websites, either on a certain topic or library adverts. This is another good way of improving the level of health literacy of the hepatitis patients

Mailing Lists: This is the most common method of information dissemination. Using email in library services is paramount and allows for groups of people including hepatitis patients to receive personalized information at the same time.

Information Services with focus on hepatitis

In a medical or research libraries, the provision of information resources and services is very instrumental in meeting the information needs of their users. Information services such as Current Awareness Service (CAS) and Selective Dissemination of Information (SDI) are very important services rendered to users by medical librarians. It is a statutory duty which the medical libraries provide to their diverse group of users to boost their level of health literacy and also meet their information needs. Information uzohue and Yaya (2013) defined ICT as the set of activities which are facilitated by electronic means in the processing, transmission and display of information. As stated

earlier, it is used to perform certain activities in the libraries including CAS and SDI to meet the information needs of users such as the hepatitis patients.

Oduwole, Idowu, and Ladipo (2012) was of the opinion that more dynamic, challenging and practical user-friendly services such as CAS, SDI, literature searching, Indexing and abstracting services and functional ICT services should be given priority. Uzohue and Yaya (2013) pointed out that the fast pace of technological developments has changed the way library users access and retrieve information. This is seen in the effective delivery and dissemination of information which has been made easier with the use of web 2.0 and its technologies. With the increasing need for information by hepatitis patients, medical librarians need competitive intelligence skills in utilising ICT tools and techniques in gathering actionable information that meets the needs of the users, improve their level of health literacy as well as providing information for informed decisions in their areas of interest.

Internet is vital information source that provides health professionals with numerous information resources to meet urgent needs and answers to patient cases. Due to time limitations most often, health professionals would like to seek information from sources that are reliable, convenient and easy to access. The nature of health communication is changing globally as more people are relying on the Internet for health information (Unegbu, 2013, Oluokun, 2015). According to Edem (2013). Internet has spread technological literacy and given people all over the world fast access to vast resources.

Internet provides healthcare practitioners with access to relevant and latest information resources on the diagnosis, prevention, knowledge and treatment of different ailment. Examples of these web-based health information resources are Hinari, MEDLINE, Bioline International, PubMed Central (PMC), Public Library of Science (PLOS) and Nursing Journals to mention but a few.

Methodology

The study adopted survey research design and the total population for the study comprised 1,700 hepatitis patients and 20 Librarians working in specialist hospitals in North-central, Nigeria. These specialist hospitals included: Dalhatu Araf Specialist, Lafia Nasarawa State, Kogi State Specialist, Lokoja and Plateau State Specialist Jos. The breakdown is shown in Table 1
Table 1: Population of the Study

S/N	Name of Specialist Hospitals	Medical Librarians	Hepatitis Patients
1	Dalhatu Araf Specialist Hospital, Lafia Nassarawa State	13	688
2	Kogi State Specialist Hospital, Lokoja	3	570
3	Plateau State Specialist Hospital, Jos	4	442
	Total	20	1700

Source: Hepatitis Register Book in Specialist Hospitals (2019 and 2020)

Lokoja Journal of Information Science Research	, Vol:1, N0.2, December, 2023	148
--	-------------------------------	-----

The sample size of the population was 313 hepatitis patients and all the 20 medical librarians in the specialist hospitals. Krejcie and Morgan 1970 recommended Table for determining sample size of a population. The researcher used random sampling technique to select 313 out of the 1700 target population of patients that visited the three Specialist Hospitals for the study.

The research instruments used for the study are self-designed questionnaire with adopted four (4) Likert's scale and observation instrument. The data collected were analysed using descriptive statistics such as frequency counts and percentages as well as mean and standard deviation.

RESULTS

Table 2: Response Rate by Hospitals

S/N	Name of Specialist	No. of	No. of	Percentage(s)
	Hospitals	Administered	Returned	(%)
		Questionnaire	Questionnaire	
1	Dalhatu Araf			
	Specialist Hospita	115	105	91
	Lafia Nassarawa State			
2	Kogi State Specialis			
	Hospital, Lokoja	100	83	83
3	Plateau State Specialis			
	Hospital, Jos	98	66	67
	Total	313	254	81

Statements	SA	А	D	SD	Ν	FX	x	STD	Decision
		3	2	1	254				
The librarians use textbooks on medical line to enhance my health literacy	4 115	3 102	2 27	1 10	254 254	830	3.27	0.77	Agreed
The librarians use magazines information to enhance my health literacy	39	91	33	91	254	586	2.31	0.19	Disagreed
The librarians use professional journals to enhance my health literacy	88	125	32	9	254	800	3.15	0.65	Agreed
The librarians use newspapers to enhance my health literacy	116	127	7	4	254	863	3.39	0.89	Agreed
The librarians use posters/handbills to enhance my health literacy	112	122	12	8	254	846	3.33	0.83	Agreed
The librarians use newsletters to enhance my health literacy	101	95	35	23	254	782	3.08	0.58	Agreed
The librarians use dictionaries to enhance my health literacy	63	106	43	42	254	698	2.75	0.25	Agreed
The librarians use Internet resources to enhance my health literacy	26	81	100	47	254	494	1.94	0.56	Disagreed
The librarians use medical standards and guidelines to enhance my health literacy	21	29	99	105	254	478	1.88	0.62	Disagreed
The librarians use conference proceedings to enhance my health literacy	127	103	16	8	254	757	2.98	0.48	Agreed
The librarians use encyclopaedia to enhance my health literacy	34	40	70	110	254	506	1.99	0.51	Disagreed
The librarians use manual and guides on hepatitis to enhance my health literacy	10	23	121	100	254	451	1.77	0.73	Disagreed

Table 3: Information Resources used by Librarians to Hepatitis Patients

Key: Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD).

150

Hepatitis Patients Statements	VH	Н	L	VL	N	FX	x	STD	Decision
	4	3	2	1	254				
I am aware of the various types of textbooks available in the library	117	98	21	18	254	822	3.24	0.74	High
I am aware of the professional journals available in the library	107	112	27	8	254	826	3.25	0.75	High
I am aware of Internet resources available in the library	68	19	90	77	254	586	2.31	0.19	Low
I am aware of the medical standard and guideline available in the library	32	36	86	100	254	508	2.00	0.50	Low
I am aware of the conference proceedings available in the library	91	95	45	23	254	762	3.00	0.50	High
I am aware of the newsletter available in the library	109	73	7	65	254	734	2.89	0.39	High
I am aware of the manual and guides available in the library	10	43	99	102	254	469	1.85	0.65	Low
I am aware of encyclopaedia available in the library	20	33	11 1	90	254	491	1.93	0.57	Low

Table 4: Level of Awareness of Information Resources and Services among Hepatitis Patients

Key: VH= Very High, H= High, L= Low, VL= Very Low

Discussion

The findings of the study as regards to objective 1, it is revealed there is availability of information resources such as, textbooks, Professional journals, newspapers, posters/handbills, newsletter, dictionaries and conference proceedings. The availability of these resources in specialist hospital libraries could be because they are commonly consulted information resources by various library users including hepatitis patients to satisfy their information needs. This is in line with the findings of Negi (2014) who stated that libraries should disseminate health information about the causative agents of hepatitis and preventive measures through brochures, leaflet, newspapers and magazines. Similarly, information services such as library websites, health information

Lokoja Journal of Information Science Research, Vol:1, N0.2, December, 2023 151	Lokoja Journal of Information S	cience Research, Vol:1,	, N0.2, December, 2023	151
---	---------------------------------	-------------------------	------------------------	-----

Assessment of Information Resources Provided to Hepatitis Patients ...

services, reference service and library orientation services were the only available services rendered in the specialist hospitals studied. This could be because of the limited number of medical librarians to provide and render effective services to hepatitis patients.

In response to objective 2 the study showed that the level of awareness of information resources and services among hepatitis patients for health literacy is moderate. The respondents indicated that their awareness on the availability of information resources and services help them to be aware of the various textbooks available in the library, medical journals, newsletter, dictionaries and the availability conference proceedings for health literacy, treatment and prevention of hepatitis. It is expected that hepatitis patients should be trained through library orientation Programs on how to access information resources, especially through the use of information and communication Technology (ICT) facilities to satisfy their information needs. On the other hand, the hepatitis patients' level of awareness of information resources and services on Internet resources, medical standards and guidelines, newsletters and encyclopedia were low. This could be that the medical librarians are not adequate and well equipped with current and relevant information resources and also lack the knowledge of ICT to render effective services to hepatitis patients to meet their information needs on hepatitis, its treatment and prevention. This is in contrast with the findings of Ogunsola (2011) that librarians should be well trained on how to use ICT services to access health information for combating communicable diseases.

Summary

- 1. The study revealed that the types of information resources and services available in the specialist hospitals are, textbooks on medical line, professional journals, newspapers, poster/handbill, newsletters, dictionaries, conference proceedings, document delivery Services, reference services and library orientation services to mention but a few.
- 2. The level of awareness of information resources and services among hepatitis patients for health literacy is moderate.

Conclusion

In conclusion, the findings of the study revealed that no library irrespective of the type or kind can achieve its goals and objectives of meeting the information needs of users without the provision of adequate and current information resources as well as effective and efficient service delivery. The information resources in the specialist hospitals studied were highly available, while only few information services were rendered. Other factors such as inadequate number of librarians, insufficient current information resources, lack of awareness of resources and services rendered by the specialist hospitals to mention but a few were major factors confronting the level of health literacy among hepatitis patients in the studied areas .With these factors not given adequate attention, there would be little or no effective health literacy delivery by librarians to hepatitis patients necessary for the prevention and control of hepatitis spread in the areas studied Assessment of Information Resources Provided to Hepatitis Patients ...

Recommendations

- 1. The management of specialist hospitals should provide more information resources and services such as Internet resources, current awareness services, email alerts services, document delivery services in order for hepatitis patients to be up-to-date in health information.
- 2. The management of specialist hospital libraries studied should create awareness of their information resources and services through library orientation, organising conferences, workshops and seminar to enlighten the users especially on Internet resources, medical standard and guidelines, newsletters and encyclopaedia and how they could be used to meet the information needs of hepatitis patients.

References

- Adibe M.O. (2010). Assessment of attitude and behavior of health professionals towards provision of drug information services in Enugu state. *International Journal of Drug Development and Research*, 2(3). Retrieved from http://www.ijddr.
- Ajuwon G. A., (2015). Internet Accessibility and Use of Online Health Information Resources by Doctors in Training Healthcare Institutions in Nigeria. *Library Philosophy and Practice (e-journal)*. Paper 1258. Retrieved from http://digitalcommons.unl.edu/libphilprac/1258
- Anyaoku, N.E. (2015). Evaluating undergraduate student's awareness and use of medical library resources: A study of Nnamdi Azikiwe University, Nigeria. *International Journal of Library Science* 4(3), 53-58.
- American Academy of Pediatrics (2015).*Hepatitis B. Red Book: 2015 Report of the Committee on Infectious Diseases*, (30th ed.), Elk-Grove, IL: American Academy of Pediatrics, 400-423.
- Berkman, N.D., Sheridan, S.L., Donahue, K.E., Halpern, D.J., & Crotty, K. (2011).Low health literacy and health outcomes: An updated systematic review. *Annals of International Medicine*, 155, 97–107.
- DeWit, L., Fenenga, C., Giammarchi, C., di Furia, L., Hutter, I., deWinter, A., & Meijering, L. (2017). Community-based initiatives improving critical health literacy: A systematic review and meta-synthesis of qualitative evidence. *BMC Public Health*, 18(40), 76 80.
- Duhon, L. & Jameson, J. (2013). Health information outreach: a survey of US academic libraries, highlighting a Midwestern university's experience. *Health Information and Libraries*, 30(2), 121-137
- Edem, N. (2013). Use of Information technology by Librarian is some selected Nigerian University Libraries. *Gateway Library Journals*, 11(2), 25-37.
- Focaccia, R (2013). *Tratado de Hepatites Virais e Doenças Associadas*, 3rd ed.Brazil: Atheneu São Paulo. 1320.
- Jacobs, R.J., Ownby, R.L., Acevedo, A., & Waldrop-Valverde, D. (2017). A qualitative study examining health literacy and chronic illness self-management in

Lokoja Journal of Information Science Research, Vol:1, N0.2, December, 2023 153

Assessment of Information Resources Provided to Hepatitis Patients ...

Hispanic and non-Hispanic older adults. *Journal of Multidiscipline Healthcare*, 10, 167–177.

- Kilfoyle, K.A., Vitko, M., O'Conor, R., & Bailey, S.C. (2016). Health Literacy and Women's Reproductive Health: A Systematic Review. *Journal of Women's Health*, 25, 1237–1255.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Kumar, V. J. L. (2011). Awareness about Hepatitis Disease among Youth in Coastal Areas of Colachel and Muttom, Kanyakumari District, Tamil Nadu. *I-Manager's Journal on Nursing*, 1(4), 29.
- Kumar, A. (2014). Student's opinion about the success of mobile technology in libraries: A case study of Jawaharlal Nehru University (JNU), New Delhi. *New Library World*, 155(9/10), 471 481.
- Library success (2014). *M-Libraries*. Retrieved from http://libsuccess.org/index.php?title=M-Libraries#SMS notification services.
- Liu, Y. Q., & Briggs, S. (2015). A Library in the palm of your hand: Mobile services in top 100 University libraries. *Information Technology and Libraries*, 5(2), 133-148.Doi:10.6017/ital.v34i2.5650
- Negi, D. S. (2014). Using mobile technologies in libraries and information centers. *Library Hi-tech News*, 31(5), 14-16.
- Nigeria Hepatitis Summit Report (NHSR) (2019).1st Nigeria Hepatitis Summit Report

2019.Retrieved from https://www.hepb.org/blog/journey-hepatitis-eliminatio n-nigeria

- Oduwole, A. A., Idowu, A. O. &Ladipo, S. O. (2012). Utilization of library and information and communication technology tools in medical research. *International journal of Science and Technology Education Research*, 3 (1), 1-6. DOI:10.5897/IJSTER11.04.
- Ogholikhan, S., & Schivarz, K. B. (2016). Hepatitis vaccines. Vaccines, 4(1), 6.
- Ogunsola, L. A. (2011). Libraries as tools for capacity building in developing countries. *Library Philosophy and Practice*. Retrieved fromhttp://unllib.unl.edu/LPP/og unsola.h
- Oluokun, P. O. (2015). Understanding the Roles of ICT in Special Education Service Delivery in Nigeria. In *Contemporary Issues in the Management and Administration of Tertiary Institutions in Nigeria*, edited by Adebimpe, O. A. & Ajobiewe, T. Aro, Abeokuta: Pee & Gee Press and Publishers, 14 -16.
- Osborne, M. E. (2012). *Health literacy from A to Z*. USA: Jones & Barlett publishers.
- Poureslami, I., Nimmon, L., Rootman, I., & Fitzgerald, M.J. (2017). Health literacy and chronic disease management: Drawing from expert knowledge to set an agenda. *Health Promotion International journal*, 32(2), 743–754.
- Prabhakaran, A., &Kalyani, K. (2014). The thumb generation: ICT application in libraries. *Journal of Library, Information and Communication Technology* (*JLICT*), 6(1-2), 42-47.

Lokoja Journal of Information Science Research, Vol:1, N0.2, December, 2023 154

- PubMed. (2017). *PubMed Mobile*. Retrieved from https://www.ncbinlm.nih.gov/m/pubmed
- Saxena, A., &Yadav, R. (2013). Impact of mobile technology on libraries: A descriptive study. International Journal of Digital Library Services, 3(4), 1-58.
- Shumaker, D. (2011). *Special Libraries*. In Encyclopedia of Library and Information Sciences, third edition. New York: Taylor and Francis, 4966-4974.
- Sørensen, K., Van den, S., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., & Brand, H.(2012). Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health*, 12, 80.
- Unegbu, V. E. (2013). Current Awareness Services and Selective Dissemination of Information: Needs and Techniques in this Technological Era. In Provision of Library and Information Services to Users in the Era of Globalization Issa, A. O, Igwe, K. N. and Uzuegbu, C. P. (Eds). Lagos: Waltodanny Visual Concept.
- U.S. Department of Health and Human Services (2011).*National Action Plan to improve health literacy.* Available at: http://health.gov/communication/HLActionPlan/
- Uzohue, C. E. &Yaya, J. A. (2016).Provision of Current Awareness Services and Selective Dissemination of Information by Medical Librarians in Technological Era. *American Journal of Information Science and Computer Engineering*, 2(2), 8-14.
- Verma, N. K., &Verma, M. K. (2014). Application of mobile technology in the Libraries. In M. Singh, P. K. Singh, & A. Kumar (Ed.), Libraries: Towards digital paradigm. Uttar Pradesh: Bharati Publishers & Distributers, 32 - 38.
- World Health Organization (2012). Social determinants of health and well-being among young people: Health Behaviour in School-Aged Children (HBSC) study: international report from the 2009/2010 survey. Available at: www.who.int/topics/hepatitis/factsheets/en.
- WHO (2013). Global policy report on the prevention and control of viral *hepatitis*.WC: WHO member states, 536.
- WHO (2014). Guidelines for the screening, care and treatment of persons with hepatitis C infection. Geneva: World Health Organization.
- WHO (2016). Hepatitis B. Available at: www.who.int/topics/hepatitis/factsheets/en.
- WHO (2017). The Global Hepatitis Report, 2017. Retrieved from http://apps.who.int/iris/ bitstream /handle/10665/255016/9789241565455-eng.pdf?sequence=1
- WHO (2018).*Calls for Better Monitoring of Viral Hepatitis and Liver Cancer*.http://www.

Who.int/hepatitis/news-events/hepatitis-surveillance-protocol-story/en/

155

Lokoja Journal of Information Science Research, Vol:1, N0.2, December, 2023