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Library Services for Students with Visual Impairment in Selected Universities in Nigeria

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Abstract

This study explored library services for students with visual impairment in Nigerian universities. The study had four objectives. Survey designs were employed on a census of 341 students from six federal universities. Data collection from students was through a questionnaire. Twenty-four librarians were purposively selected from the universities, and interviews were used for data collection. Data from the questionnaire were analysed using frequency counts and percentages while the data from the interviews were transcribed, coded, sorted, with relevant themes identified. The findings showed that library policy and technical and personnel factors affect library services delivery to students with visual impairment. The study recommended amongst others that university libraries should conduct user-satisfaction studies regularly to ensure that their services meet clients' expectations.

Keywords: Library services, Nigeria, Universities, Visually impaired students.

Introduction

The provision of library service for visually impaired students in tertiary institutions has been a pertinent issue in the field of special education, as well as library and information science. Library services can best be described as the services a library offers to its users. Majinje (2014) defined it as facilities provided by a library to all users including the visually impaired individuals, as well as those in wheel chairs. Studies have shown that students with visual impairment in tertiary institutions need as much access to information, ideas, theories, and facts as their abled counterparts to conduct meaningful research and do well in academics (Katz, 2013; Spungin, Ferrell and Monson, 2017).

The concept 'visual impairment' is used to define a wide range of vision loss, which includes those with total blindness and those whose levels of vision loss are less severe (Zimmerman and Zebehazy, 2011). Visual impairment affects the educational performance of a child to such an extent that he or she requires an adaptation in the teaching methods and the material needed for learning. Visually impaired students include those with low vision and those with no vision. Fakoya-Michael and Fakoya (2015) noted that these students experience varying degrees of sight loss that may necessitate diversity in the level of their information needs and type of library resources required.

Delivering appropriate library services could enhance the academic performance of these students (Wong and Webb, 2011), increase their reasoning skills (Megan, 2015; Kumar and Rajmma, 2016), and increase their thinking capacity to remember facts (Soria, Fransen and Nackerud, 2013). Studies also show that academic libraries support at-risk students through personalised instruction, provision of network services, and adaptive technology devices (New York Comprehensive Center, 2011; Gavigan and Kurtz, 2010). Specifically, providing library services to students with visual impairment in modes that are appropriate to them gives them convenient access to

books and other learning resources. Unfortunately, when the library system is put in place, little or no consideration is made for this group of students, especially in developing countries (Phukubje and Ngoepe, 2017). This widens the information gap between students with visual impairment and some of their sighted counterparts.

To bridge the gap, various international bodies have come to the aid of visually impaired students or individuals by developing policies on equal library services to all learners irrespective of their forms of disability (International Federation of Library Associations (IFLA), 2015). Hill (2013) observed that the Australian Library and Information Science Association has guidelines on library standards for individuals with disabilities. Hill further observed that there is a human rights law in Canada that prohibits discrimination of people with disabilities. The UNESCO Salamanca statement and framework for action on special needs education also advocates for the inclusion of learners into mainstream classrooms irrespective of their disabilities (Chireshe 2013; Samkange, 2013). In Nigeria, the National Policy on Education (Federal Republic of Nigeria, 2008) noted that students with disabilities (including the visually impaired) should be provided with equal access to educational opportunities in an inclusive setting. This policy was meant to bridge the gap in the educational experiences of students with disabilities and those without disabilities.

Nevertheless, studies have revealed that Nigerian university libraries, as well as those located in most developing countries, demonstrate disparity of library facilities provided for students with visual impairment and those without disabilities (Ekwelem, 2013, Eskay and Chima, 2013). Although research evidence shows the need to provide library services for students with visual impairment, only a few of these studies have attempted to confirm from the recipients that services are actually being provided, so as to identify gaps in the service provision. Studies, conducted in other countries (Heather, 2014; Kitchen, 2011), have documented the expectations of students with disabilities regarding library services. However, in Nigerian university libraries, there is still a lack of empirical studies on the expectations or the needs of visually impaired students. The recent rise in the number of students with visual impairment in Nigerian public universities (Eskay and Chima, 2013; Zaid, 2017) has made such a study necessary to provide proper guidance on the services to offer to these students.

Statement of the Problem

Students with visual impairment require access to university libraries for research, reference purposes, and completion of class assignments. Research evidence, however, showed that these students get restricted access to library services that meet their unique needs. Access to library resources available in Nigerian university libraries is not easy for these students because they are not in the right format. The necessary assistive technologies are not available, and library staff are not adequately trained to serve the students (Adetoro, 2011; Ekwelem, 2013). Moreover, the few library services provided to students with visual impairment are based on assumptions about their needs (Zaid, 2017), placing some doubts on the quality of services offered to these students. Providing services for visually impaired students based on assumptions may not entirely satisfy their needs. There is therefore need to ascertain from these students if the library services they are provided with are in line with their expectations and needs. Such an investigation will help to determine the needs of the students, and establish whether they are satisfied with the current services they are receiving. The findings of the study will also point out areas that may have been neglected, which require urgent attention in order to improve the students' access to learning material.

Research Questions

i. What are the services provided to visual impairment students in university libraries?

ii. What are the technological devices available to enable access to information for students with visual impairment in libraries?

iii. What are the expectations of the visually impaired students regarding library services in university libraries?

iv. What are the factors affecting provision of library services to visually impaired students?

Objectives of the Study

The objective of this study is to explore library services delivery to students with visual impairment in selected Nigerian universities.

Specifically, this study examined:

i. the services provided to visually impaired students in university libraries.

ii. technological devices available to enable students with visual impairment to access information in libraries.

iii. the expectations of students with visual impairment concerning library services in university libraries.

iv. factors affecting provision of library service to visually impaired students.

Literature Review

University libraries are designed to disseminate knowledge and information for scholarship and research purposes to all students, lecturers, and researchers, irrespective of any form of disability (Eze and Uzoigwe, 2013). To fulfil this purpose, there are essential services the libraries must provide for their patrons. General services that should be provided in a library include literacy instruction, book loan, internet services, provision of materials for research, and access to required knowledge (Umenwa, Agbo and Onyekweodiri, 2016). Not only should these services be provided to "normal" people, but also to those with visual challenges.

Essential services for students with visual impairment include large-print books, talking books, audio magazines and newspapers, large-print magazines and newspapers, computer files of text, braille books, audiobooks, and videos (Rayini, 2017, Ayiah, 2017). Abu-Doushi, Barry- Mohammed, Ali and Al-Betar (2013) included standard books, journals, and audio-visual collections as other essential services to be provided for students with visual impairment. In addition, university libraries should also provide visual impairment students with an easy way get familiar with the books, bibliographies, and other materials available in the library through printed catalogues and booklists which are either tape recorded or transcribed into Braille. Katz (2013) and Dewan (2013) also suggested competent readers' advisory services, which ensure that a librarian who is knowledgeable and qualified will be available to explain, discuss, and recommend books to the students. Zaid and Zaid (2017) added that university libraries should also provide these students with additional services such as extended loan periods, waive late return fines, extended reserve periods, library cards for proxies, books by mail, reference services by email, home delivery service, remote access to the Online Public Access Catalogue (OPAC), remote electronic access to library resources, volunteer readers, volunteer technology assistants, and radio reading services.

There are different types of technological equipment that libraries can provide to users who are visually impaired. Such equipment enable the students to have access to information in print using braille printers, braille embosser, tape duplicators, Kurzweil reader (a text-to speech reading machine with synthesised speech output), closed-circuit televisions for magnifying regular text, PCs with CD ROMS, Power Macs with CD ROMS, large print typewriters, special track tape recorders, and computers that have adaptable equipment such as voice eyes (Ayiah, 2017; IFLA, 2015).

Despite the catalogue of services and equipment available in libraries, students usually have an expectation of what they need from the library. A study by Heather (2014) conducted at the Manchester Institute of Technology shows that students would like large library spaces that will support a variety of activities such as group study rooms, spaces to learn and create, places to reflect and take a break, a café with coffee and snacks, and places to enjoy art exhibitions and collections, with an environment that is inviting, comfortable, and easy to navigate. The library space should also support technological equipment by integrating multi-media services and support media creation tools such as design software, video and recording capabilities, and printers. Beard and Dale, cited in McNamara (2011), further observed that in order to promote learning in libraries and accommodate the diverse needs of learners, library spaces need to be flexible.

Certain factors affect the delivery of expected services to visual impairment students. One such factor is that a lot of institutions do not see any reason to invest so much money on them because they are considered a minority group with high cost essential

resources required to meet their needs (Adetoro, 2011). Okewale and Adetimirin (2011) noted that some technological factors that hinder students from using the library include insufficient availability of information technology (IT) resources in the library, poor knowledge of how to use available IT resources, constant power outages, and cost of purchasing information and communication technology (ICT) resources in the library. The authors observed that inadequate orientation of students on the use of library systems and overpopulation of students at the OPAC section are some of the other factors that can create a barrier for visually impaired students to have easy access to library materials. Foley and Ferri (2012) also observed that a lack of accessibility to the Internet and other digital resources is a major barrier to accessing information by students who are dependent on adaptive technology.

The attitude of library staff can also affect the type of library service delivered to students with visual disability. Peter, Otike, and Rotich (2015) noted that one of the factors that affect the provision of good quality library service is staff attitude. Some library staff drive their users out of the library through poor human relations and excessive adherence to policies. Research has established that the hostile disposition of the staff is a strong factor that inhibits effective provision of service (Iwhiwhu, 2012). Eskay and Chima (2013) attributed the barriers to limited financial and human resources, lack of reading materials in the right format, lack of adequately trained staff, architectural barriers, and the feeling that people with visual impairment or disabilities are abnormal and have no need for information. Sequel to the above, the researchers' interest was roused to investigate the services that are provided to students with visual impairment in Nigerian universities, the factors that could affect delivering best service, and the expectations of the students from the libraries.

Methodology

This study employed a survey design with the triangulation method, which involves both qualitative and quantitative approaches. Ary, Jacobs, Sorensen, and Razavieh (2010) defined survey research as a research that describes the way things are. The six federal universities included in the study had a total of 341 visually impaired students among them. Due to the small number, the researchers decided to take a census, rather than a sample from the 341. Twenty-four (24) librarians were purposively sampled from the six federal universities. Thus, the study respondents totaled 365.

Each university selected represents a geopolitical zone. A geopolitical zone is a combination of geographical and political factors that contribute to the distribution of both power and resources in a nation. In Nigeria, there are six geopolitical zones (Sampson, 2014). The choice of one university from each of the geopolitical zones was purposively done by considering universities that had the highest number of visually impaired students as at the 2015/2016 academic session. Another factor used was availability of an Association of Students with Visual Impairment (National Association of Students with Disabilities, 2015).

Based on the geopolitical zones, the selected universities and the number of students with visual impairment in each university are as follows: South East - University of Nigeria, Nsukka (UNN, 76); South-West — University of Ibadan (UI, 80); South-South — University of Calabar (UNICAL, 6); North-West -- Bayero University Kano (BUK, 61); North-East –Tafawa Balewa University Bauchi (ATBU, 57); and North-Central — University of Jos (UNIJOS, 61) (Student Affairs Department of each of the Universities (2015) and National Association of Students with Disabilities). A questionnaire and interviews were used to generate data. Three hundred and forty-one copies of the questionnaire specifically meant for the students were mailed to three research assistants in each of the universities to administer to the students with visual impairment. The questionnaire had four clusters, which addressed the four research objectives of this study. The research assistants read the questionnaire items and ticked the answers based on the choices made by the students. Out of the 341 copies of the questionnaire administered, 293 (86%) were correctly filled and returned. The researchers were informed that some of the students were indisposed to complete the questionnaire due to examination pressures, illness and absence from the university campus. Data generated from the questionnaire were analysed using frequency counts and percentages.

An interview guide prepared by the researchers was used to elicit information from 24 librarians working in public services division of the university libraries. Four librarians were interviewed in each of the universities, and they include the public service librarian, circulation librarian, serials librarian, and reference librarian. These librarians were chosen because they work in direct contact with library users, including students with visual impairment. Interviews instead of questionnaires were adopted for the librarians since they are few and scattered in various universities. The interview questions addressed objectives one, two and four (library services provided to students with visual impairment, technological devices available to help the students access information from libraries and factors that affect library services to the students). The librarians were contacted through phone calls during which convenient days were arranged for the researchers to conduct the interview. Twenty-four interview sessions were conducted with the librarians between February 15 and April 28, 2015. They were interviewed in their offices during office hours. Each interview took about 30-40 minutes, and each interview session was taped and later transcribed verbatim, coded, and relevant themes were identified. Below is presented the demographic information of the students (Table 1) and the teachers (Table 2), as well as other pertinent information regarding data collection.

Table 1: Demographic information of the students (students with visual impairment)

Univer-sity	No of Std	Gender		Degree of VI		Age				Mode of study		Faculty				Questionnaire		
		M	F	PS	B	20-24	25-29	30-34	35-39	FT	PT	Arts	Soc Sc.	Edu	Law	QD	QR	%
UNIJOS	61	43	18	21	40	23	29	7	2 .	61	-	7	39	11	4	61	53	87
UNN	76	57	19	34	42	36	25	11	4	76	-	17	29	25	5	76	66	87
UI	80	65	15	30	50	30	42	6	2	80	-	22	43	10	5	80	68	85
ATBU	57	55	2	13	44	19	26	9	3	57	-	10	36	10	1	57	49	86
BUK	61	59	2	14	47	21	30	3	7	61	-	19	33	7	2	61	51	84
UNICAL	6	5	1	0	6	3	2	1	0	6	-	1	3	2	-	6	6	86
TOTAL	341	284	57	112	229	132	154	37	18	341	0	76	183	65	17	341	293	86

Note: Std= student, LV = Low vision, B=Blind, FT= Full Time, PT= Part Time, Soc. Sc. = Social -Science, Edu. = Education, QD= Questionnaires Distributed, QR= Questionnaires Retrieved

Table 2: Demographic information of the librarians

University	Librarians					Highest Qualification		
	No	Prin. Lib	Snr.Lib.	Lib. 1	Lib. 11 .	PhD.	MLS	BLS
UNIJOS	4	1	1	1	1	1	2	1
UI	4	1	1	1	1	2	1	1
ATBU	4	1	1	1	1	1	2	1
BUK	4	1	1	1	1	1	2	1
UNI. CAL	4	1	1	1	1	1	1	2

The Findings of the Study

Table 3: Library services provided for students with visual impairment in selected Nigerian universities

Library services	UNIJOS (53)		UNN (66)		UI (68)		ATBU (49)		BUK (51)		UNICAL (6)	
	Yes	%	Yes	%	Yes	%	Yes	%	Yes	%	Yes	%
Online literature search	48	91	54	82	61	90	42	86	32	63	5	83
Online reference	49	92	51	77	37	54	38	78	47	92	4	67
Lending service	48	91	62	94	49	72	31	63	42	82	3	50
Current content	0	0	2	3	1	1	0	0	0	0	0	0
Content page service	0	0	7	11	0	0	0	0	0	0	0	0
Scribe services	49	92	65	98	0	0	0	0	0	0	0	0
Waiver for late return fines	51	96	0	0	0	0	6	12	37	73	0	0
Information literacy education	42	79	47	71	51	75	41	84	49	96	6	100
Extended loan periods	0	0	0	0	0	0	49	100	0	0	4	67
Home delivery	0	0	0	0	0	0	0	0	0	0	0	0
Reader service	45	85	65	98	68	100	49	100	28	55	4	67
Inter-library loan	2	4	0	0	0	0	0	0	0	0	0	0
Face-to-face reference service	53	100	58	88	68	100	49	100	46	90	6	100
Library card proxies	37	69	42	64	0	0	32	65	31	61	6	100
Electronic access to library resources	53	100	53	80	68	100	38	78	43	84	5	83
Braille book	48	91	0	0	0	0	0	0	0	0	0	0
Large print books	0	0	0	0	0	0	0	0	0	0	0	0
Audio books	0	0	0	0	0	0	0	0	0	0	0	0
Large print newspapers	0	0	0	0	0	0	0	0	0	0	0	0
Large print magazines	0	0	0	0	0	0	0	0	0	0	0	0

Table 3 shows that some of the provided services are common to all the universities while some services are peculiar to some universities. Among the library services that exist in all the universities are online literature searches, online reference services, lending, information literacy education, reader services, face-to-face reference and electronic access to library resources. Conversely, content page service, current contents, home delivery and inter-library loan services are not provided for students with visual impairment in any of the universities.

So, it means that specialised information sources such asprovision of large print books, large print newspapers, audiobooks, and magazines cannot be accessed. Braille books exist only in UNIJOS (91%). Scribe service exists in UNIJOS (92%) and UNN (98%). Waiver for late returns exists in UNIJOS (96%) and BUK (73%) while extended loan periods exist in ATBU (100%) and UNICAL (67%). UNN and UI do not extend loan period for students with visual impairment neither do they waive late return fines. Library card proxy exists in every other library except UI. Interviews from the librarians to some extent confirmed the information collected from the questionnaires. Interviews with librarians from UNN and UI show that current content and content page services are available to students and staff who apply for them in writing and are willing to pay for the administrative cost of such services. Librarians from UNICAL also mentioned that extended loan periods are available on request.

One librarian from ATBU said, "*If a student with visual impairment requests an extended loan period, we extend the loan period but if they don't, we assume that the time given to them was enough*."

One other librarian from UNN asked, "*Which one is home delivery service? We do not provide home delivery service. Any library service the students require must be in this library not at their homes*."

Table 4: Technological devices to help students with visual impairment to access information in Nigerian academic libraries

Technological devices to access information from the library	UNIJOS (53)		UNN (66)		UI (68)		ATBU (49)		BUK (51)		UNICAL (6)	
	Yes	%	Yes	%	Yes	%	Yes	%	Yes	%	Yes	%
Braille embosser	51	96	0	0	0	0	0	0	0	0	0	0
Tape duplicator	0	0	0	0	0	0	0	0	0	0	0	0
Screen reader	0	0	0	0	0	0	0	0	0	0	0	0
Closed circuit television	0	0	0	0	0	0	0	0	0	0	0	0
Large print typewriters	0	0	0	0	0	0	0	0	0	0	0	0
Accessible computer	0	0	0	0	0	0	0	0	0	0	0	0
Books in CD	0	0	0	0	0	0	0	0	0	0	0	0
Optical scanner	0	0	0	0	0	0	0	0	0	0	0	0

Table 4 shows that the only technological device that is available to help students' access information from UNIJOS is a Braille Embosser. None of the other universities has any technological equipment to help students with visual impairment to access information. Interviews with librarians from all the universities show that students with visual impairment provide themselves with magnifying glasses, computers, and reading software such as Jaws. Interviews with librarians further indicated that some books procured in libraries have CD copies which are made available to users on demand. However, at UNN, a librarian raised this concern, "*We have books in CDs, but we cannot make them available to students for fear that they might misplace them [the CDs]*."

Data on Table 5 indicate that the students expected libraries to have a clean environment, space for individual study, comfortable seating arrangements, e-books, screen readers, e-journals, books in CD format, restrooms, walkways free from bumps, knowledgeable staff and a separate section for students with visual impairment.

Table 5: Visually impaired students' expectations from university libraries

	UNIJOS (53)		UNN (66)		UI (68)		ATBU (49)		BUK (51)		UNICAL (6)	
The students expect the library to have:	Yes	%	Yes	%	Yes	%	Yes	%	Yes	%	Yes	%
Clean environment	53	100	62	94	62	91	44	90	49	96	6	100
Space for group study	33	62	51	77	43	65	41	84	42	82	1	17
Space for individual study	53	100	60	91	66	97	36	73	5	100	5	83
Relaxation space	46	87	32	48	64	94	33	67	36	71	4	66
Comfortable seating arrangement Technology	51	96	62	94	61	90	42	86	47	92	6	100
compliant												
environment	52	98	64	97	65	96	49	100	50	98	6	100
Rest room	51	96	56	85	64	94	47	94	51	100	5	83
Walk ways free from bumps	53	100	66	100	68	100	46	94	51	100	6	100
Good lighting	31	58	52	79	45	66	36	73	46	90	2	33
Friendly staff	52	98	58	88	62	91	42	86	'48	94	6	100
Knowledgeable staff	53	100	46	70	62	91	49	100	46	90	6	100
Separate section in the library for students with visual impairment	34	64	60	91	55	81	46	94	41	80	4	66
Good signage	36	68	15	23	28	41	28	57	7	14	2	33
Volunteer readers	14	26	11	17	16	24	18	37	23	45	2	33
Separate section in the library for special convenient access to reading materials	40	75	37	56	40	59	40	82	41	80	4	66
Enter the library with their bags to enable them carry their reading aids	49	92	51	77	37	54	38	78	47	92	4	67
Media creation tools like:												
Design software	26	49	13	20	8	12	4	8	6	12	1	17
Recorders	44	83	18	27	62	91	49	100	24	47	3	50
Printers	2 1	40	13	20	9	13	17	35	18	35	1	17
E-books	43	81	64	97	43	65	46	94	48	94	5	83
Screen readers	41	77	56	85	52	76	48	98	48	94	5	83
Large monitors	32	60	49	74	64	94	42	86	45	88	5	83
E- journals	37	70	52	79	64	94	46	94	49	96	5	83
Books in CD	51	96	48	73	59	87	42	86	47	92	5	83
Braille books	9	17	21	32	21	31	18	37	9	18	2	33
Computers	38	72	24	36	64	94	42	86	43	84	4	66
Scanners	17	32	43	65	13	19	27	55	18	35	2	33

The students further expected that they should be permitted to enter the library with their bags. In all the libraries, the students did not expect the library to have media creation tools such as printers, design software, braille books and volunteer readers. Specifically, students of UNICAL did not expect the library to have good lighting, as well as space for group study. The students of UNN did not expect the library to have space for relaxation and computers. Recorders were not expected in the library by students of UNN and BUK while students of UNIJOS and ATBU expected good signage. Only students of UNN and ATBU expected scanners.

Table 6: Factors affecting the delivery of library services to students with visual impairment

Factors affecting Library services delivery	UNIJOS(53) Yes	%	UNN (66) Yes	%	UI (68) Yes	%	ATBU(49) Yes	%	BUK(51) Yes	%	UNI CAL (6) Yes	%
Negative attitude of staff	30	57	6	9	35	51	29	59	37	73	2	33
Lack of staff knowledgeable in disability issues	39	74	11	17	38	56	32	65	43	84	3	50
Lack of electric outlets	38	72	47	71	46	68	28	57	39	76	4	66
Inaccessible university websites	40	75	44	66	53	78	37	76	40	78	3	50
Power outage	51	96	56	85	48	71	40	82	39	76	5	83
Too few IT equipment/resources	47	89	60	91	37	54	45	92	46	90	6	100
Fluctuating internet connectivity lack of materials	50	94	47	71	49	72	42	86	50	98	5	83
in required format	47	89	52	79	43	63	47	96	47	92	5	83
Inability to operate available library IT equipment	40	75	37	56	40	59	40	82	41	80	4	66
High cost of the equipment	27	51	35	53	38	59	23	47	21	41	1	17
No separate library section for students with disabilities	43	81	1	01	44	65	38	78	43	84	4	66
Irregular time of accessing the library	50	94	46	70	38	56	42	86	40	78	4	66

Table 6 shows that lack of staff knowledgeable in disability issues, lack of electricity outlets, inaccessible university websites, power outages, too few IT resources, fluctuating internet connectivity, lack of materials in required format, and inability of students with visual impairment to operate library IT equipment and irregular time of accessing the library are some of the factors affecting library services to students. The absence of a separate library section for visually impaired students is a problem in all the universities except UNN. Negative attitudes of staff are also part of the factors affecting library services to these students in the six universities except at UNN. Students from UNICAL (17%), BUK (41%) and ATBU (47%) did not consider the high cost of equipment as a factor that affected library services. Their colleagues from UNIJOS (51%), UNN (53%) and UI (59%) agreed that the high cost of equipment was a factor that affects providing them with the best library services.

Interviews with the public services, circulation, reference and serials librarians were very revealing. At the University of Nigeria, Nsukka (UNN), responses to interview questions show that lack of materials in required format, lack of budget for the special needs section, and nonchalant attitude of the university administration towards the plight of students with visual impairment were some of the factors affecting provision of library services to students. The conclusion from the UI, UNIJOS and UNICAL responses shows that lack of a separate library section for students with visual impairment, inability of the students to operate available library IT equipment and high cost of equipment needed for delivering library services to students were some of the factors that affected library services for the students with visual impairment. At ATBU and BUK, responses show that the factors affecting library services include inaccessible library catalogues, insufficient staff to cope with the demands of the students, and the inability of the students to operate available library IT equipment. In none of the universities did the librarians agree that poor attitude of staff affected library services to the students. Instead, their responses dwelt on lack of materials in an accessible format and the high cost of equipment needed for service delivery to students with visual impairment. One librarian from UNN raised this concern: "*We do not have enough library staff that can work with the students from 8:00 am to 10:00 pm when the library usually closes, so we close by 4:00 pm.*"

Another librarian from BUK said, "*A major factor that affects our delivery of appropriate library service is lack of assistive technology devices. It is difficult for us to provide appropriate library services for these visually challenged students as we do not have scanners, Braille embossers, screen readers and other technological devices they require.*"

Discussion

Many services that are common to the university libraries were used in this study. Among them were online literature search, online reference, information literacy education, lending, reader services, face-to-face reference, and electronic access to library services. It should be noted that these are general services that can be found in any library. There are also other important services that Rayini (2017) opined should be provided for students with visual impairment in an appropriate mode to facilitate their access to information. The results show no evidence of uniformity in essential services for students with visual impairment. Each university offers services that are convenient to them. Special services such as a waiver for late return fines exists in UNIJOS and BUK, while extended loan periods exist only in ATBU and UNICAL. Library card by proxy exists in every other university except UI. Unfortunately, UNN with the highest number of student respondents did not offer any special service such as information repackaging, extended loan periods and home delivery services.

The findings also show total negligence of the guideline provided by IFLA (2015) and Hill (2013) on essential library services for users with visual impairment in all the universities that were used for this study. These services include the provision of large print books, talking books, audio magazines and newspapers, large print magazines, large print newspapers, braille books, and audio books. The availability of e-books, journals and newspapers made possible by campus-wide networks may explain the reason for the negligence. Other services such as home delivery service, current content and content

page services did not exist in almost all the university libraries. In UNN, there was a variation in the responses of the students and the library staff on the availability of extended loan period, current content and content page services. While the staff agreed that these services were available on request, the students, on the other hand, who are the recipients of the services, were not aware that such services existed or were available to them. Furthermore, asking students to pay for the use of scanners may stop students from using the facilities considering that many of them may not be able to afford it.

Technological equipment is very vital in delivering information to visually impaired students. Unfortunately, the only technological equipment that students had access to is a braille embosser at UNIJOS. Clearly, university libraries in the study are not going beyond expectations to provide what is an essential technology. Ayiah (2017) and Majinge and Stilwell (2013) maintain that libraries should provide technological equipment such as braille printers, tape duplicators, Kurzweil reader, closed-circuit televisions for magnifying regular text, PCs with CD ROMS, power macs with CD ROMS, large print typewriters, special track tape recorders and computers that have adaptable equipment such as Voice eye to enable the students to have access to information in the library.

From the interviews conducted, the librarians attributed the non-existence of these important equipment to high cost of equipment and lack of budgets for the provision of the services needed by students with disabilities. The researchers were of the view that cost of equipment was used as a camouflage for marginalising the students. This is because other library equipment, which are also costly, are provided for sighted students. This is in line with the assertion by Adetoro (2011) and Zaid and Zaid (2017) who pointed out that one of the factors that could affect the delivery of library services to students with visual impairment is the fact that a lot of institutions consider them as a minority group.

Students with visual impairment have some expectations from the university libraries. Responses from the students in all the universities in the study show that they expect the university libraries to have a clean environment, scanners, space for individual study, e-books, screen readers, large monitors, books in CD, walk-ways free from bumps, staff knowledgeable in the use of computers and other assistive technology, and a separate section in the library. This finding is a bit similar to that of Heather (2014) who found that students need libraries that are well lit, have reading tables and chairs, as well as places for art exhibitions and collections. The results also show that there are few similarities in the expectations of the sighted and the students with visual impairment. However, students with visual impairment have more expectations. They expect equipment and facilities that will enable them to have equal access to information like their sighted counterparts.

It is not surprising that students in UNN and BUK no longer expected the provision of recorders which used to be a specialised service sought after in libraries. Likewise, books in braille format and volunteer readers were not expected by students of any university. This may not be unconnected with the abundance of e-resources in libraries, which have made access to information much easier and richer. It is also probable that the availability of screen reader software, which the students provided for themselves, has made the services of volunteer readers obsolete. The students in all the universities expected the libraries to possess computers for clients' use except UNN. This may be as a result of the university policy that each new student must possess a laptop. Students of UNICAL did not expect the library to have good lighting since all six students from the university were totally blind.

The students also expected to have a separate section in the library. This will enable them to study without earphones since they complain that earphones destroy eardrums. It will also lessen much of the noise in libraries generated by screen readers. They expected that the separate section of the library would have a technology-compliant environment with the necessary assistive technologies such as braille embosser, tape duplicators, text-to-speech reading machines with synthesized speech output, closed-circuit televisions for magnifying regulartext, large print typewriters, and computers. This finding, to a large extent, is consistent with the findings of Beard and Dale cited in McNamara (2011) who observed that to promote learning in libraries and accommodate the diverse needs of learners,library space needs to be flexible.

The results show that technological factors and personnel and policy issues affected the delivery of library services to visually impaired students in Nigerian universities. Among the technological issues raised by the students were lack of electrical outlets to plug in assistive technologies, inaccessible university websites, power outage, limited ICT equipment, fluctuating Internet connectivity, and a lack of materials in accessible format. It should be noted that a lack of an electrical outlet to plug learning equipment is a major challenge in many academic libraries, as some of the libraries were built long before the Internet revolution. These challenges agree with the technological challenges which Okewale and Adetimirin (2011) observed as hindering students with visual impairment from accessing the library resources.

It is also important to note that low Internet bandwidth in Nigeria has resulted in poor internet connectivity in many Nigerian universities, and this has affected learning for all students. It is not a surprise that the students mentioned inaccessible university websites as one of the technological factors hindering their access to library services, as almost all university websites in Nigeria were constructed without considering accessibility principles or the interest of students with disabilities (Zaid and Zaid, 2017). Adetoro (2011) noted that students with disabilities were a marginalized group within the university community, and their interests were most often not considered in making policies.

The responses of the students imply that library staff who have little or no knowledge of what visual impairment entails may not appreciate the challenges the students go through and may treat them like sighted students without considering their peculiar needs. This is consistent with the findings of Eskay and Chima (2015) who identified a lack of appropriate staff training and negative attitudes of staff as part of the issues encountered by students with visual impairment in accessing library services. Iwhiwhu (2012) also noted that staff that went through traditional and non-digital training hid their weaknesses through hostility and unfriendly behaviour. For UNN, where there is an exception in the attitudes of staff, it could be that staff in separate sections of the library for students with disabilities had received some training on disability issues. Furthermore, some of the staff who worked in the special section of the library in UNN were also visually impaired, and these staff were more likely to understand the unique needs of the students.

Contrary to students' view that the attitudes of staff and lack of specialised skills impeded students' use of the library, the results show that the librarians attributed students' inability to use the library to non-availability of required materials in the library and lack of understanding by these students that librarians have no capacity to change library rules to suit them. This view is consistent with that of Peter, Otike and Rotich (2015) who opined that one of the hardest barriers to break in library use was the human attitudes and bureaucratic inertia.

Policy issues such as not permitting the students to take bags into the library were affirmed by students from all the universities used in the study.This is a serious issue in Nigerian university libraries, and the policy could be as a result of the many incidents of suicide bombing and terrorism in Nigeria over the past ten years. This is likely to deter many students with visual impairment from using the library, as they may find it difficult to carry all the materials they may need into the library with one hand and then use the other hand to hold their canes. They may also fear that if they drop their bags outside the library, some of their valuable materials could get lost. Another policy issue that affects delivery of library service delivery to visually impaired students is the irregular time of accessing the library. An interview with one of the librarians shows that on weekends, the library operates for nine hours on Saturdays (9:00am -- 6:00pm) and four hours on Sundays (2:00pm — 6:00 pm) and does not open at all on public holidays. They equally noted that when there is a power outage, the library will be shut down before closing time. Hence, students cannot access the library at any time they wish to. The implication is that the library services may not be available to students every time they have the need.

Conclusion

This study on library services delivery to students with visual impairment in selected Nigerian universities revealed that small services such as online reference services, face-to-face services, online literature search, lending services, and information literacy education are available to the

students. The findings show that the services provided did not meet the expectations of students with visual impairment in Nigerian universities, as there were some essential services which were not provided to the students such as home delivery service, book loan by mail, inter-library loan, and large print books.

The study also showed that certain factors such as personnel, technological and policy issues affected the delivery of library services to students with visual impairment. Specifically, the service delivery was affected by the unavailability of materials in accessible formats and lack of electrical outlets to plug in assistive technologies, amongst others. Despite the challenges encountered by students with visual impairment in accessing library resources, the library is still very crucial to their educational attainment. University libraries, therefore, should make every effort necessary to make information available to students with visual impairment. In the light of these, the researchers made some recommendations.

Recommendations

Based on the findings of the study, the researchers recommend the following:

1. The National Universities Commission should develop a policy statement or guideline, which will stipulate the services that must be provided for students with visual impairment in Nigerian universities. This will enable university libraries to integrate more essential services for students with visual impairment such as information repackaging, extended loan periods and home delivery services.
2. Each university should make special budgetary allocation for the provision of services to students with visual impairment. This will ensure that the libraries procure state-of- the-art assistive technology devices so that students with visual impairment can access information in a mode that is appropriate to them.
3. There is a need to conduct user satisfaction studies in academic libraries to ensure that the services delivered meet the needs of clients. They should also devise means of marketing their services to ensure that the university community is aware of the services that are available.
4. University librarians should form advocacy groups to pressurise the government to make it compulsory that every published book in Nigeria should have a CD copy. This is to ensure that books published locally are accessible to users with visual impairment.
5. A reading section should be created for visually impaired students in libraries. This will enable them to feel free to use their screen readers in the library without feeling guilty that they may be disturbing other users.

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