Case Study: Kenyan University Libraries Status of Access to Library Spaces and Facilities for Persons with Disabilities

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ABSTRACT

The purpose of this paper was to find out the position of library spaces and facilities at the university libraries in Kenya particularly in serving users with disabilities. The study was conducted using a pragmatic research philosophy, a convergent mixed methods design and a multiple-case studies strategy. The study population was university library users and librarians drawn from six public and private universities in Kenya. The six universities were selected purposefully based on their age (time they have been in existence) with an assumption that old universities have more developed infrastructure. Data was collected from students and academic staff who participated in an online survey; librarians participated in online focus groups and follow up online surveys while university librarians and students with disabilities had telephone call interviews. There were follow up telephone calls with the university librarians. The online survey was conducted using online questionnaires that were distributed via emails and Whatsapp. Online focus group discussions were conducted in Google Meet platform and interviews were conducted via personal telephone calls. The qualitative data collected was analysed thematically while the quantitative data adopted a statistical approach that encompasses descriptive and inferential statistics. After exploring inclusivity of university library spaces and facilities in Kenya for users with disabilities, this paper noted though the university libraries offered some space and facilities for PWDs, these were far from sufficient. The findings revealed that library staff required training on how to handle and assist PWDs and sign language was largely emphasised. However, the study concluded that accommodating diverse needs of persons with disabilities is a long-term process that requires involvement of all the relevant stakeholders. In addition, the study noted that access to services and facilities for PWDs is another significant aspect of modernised university library.

Keywords: Access to libraries, library inclusivity, physical library spaces, academic libraries, Kenya.
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1. Introduction

Like other service institutions, libraries are important and provide users with different services and facilities aiming to satisfy their needs. Libraries are like catalysts in the lives of persons with

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disabilities because they facilitate their full participation in the society. Considering that there are people with disabilities within the society, it is important for the universities to take necessary measures to cater for their needs by making provision for them.

In the global sphere, university library users' needs continue to change thus driving university libraries to reposition themselves to address the changing users' needs. An important aspect of the change revolves around the library space and many university libraries are making efforts to change their spaces to meet the need driven by information technology, improved higher education systems and shifting of users' expectations. This implies having inclusive library spaces and facilities within the university libraries that cater for the needs of all of its users. However, the efforts in changing the spaces in order to meet users' needs in some cases leave out the user as indicated in several studies particularly in the needs assessment and planning process (Musangi,Odero & Kwanya, 2019; Ateka, 2018; Wanyonyi, 2018; Ellison, 2016). This leads to having reconfigured spaces which meet the users' needs less.

Besides, library users have diverse needs and wants. Therefore, libraries ought to strike a balance to meet those needs and wants in order to attain user satisfaction. Persons with disabilities require special attention and specialised services.

The World Health Organization (2012: 3) describes disability as a "physical or mental characteristic labelled or perceived as an impairment or dysfunction" and "some personal or social limitation associated with that impairment. Impairments are problems in body functions or structures, while activity limitations are difficulties encountered by an individual in executing tasks or actions."

The importance of providing accessible facilities and services to persons with disabilities in libraries has been a topic of interest. Research conducted by the World Health Organisation (2018) indicates that persons with disabilities make up 15% of the entire population of the world and the people identified as having disabilities are now less stigmatised. Both international and national frameworks that support and advocate for inclusivity have been developed. The frameworks contain a number of provisions which constitute the foundation of resolutions concerning disabilities based on the principle of equal rights.

Education is a fundamental human right that every individual is entitled to irrespective of race, gender, nationality, ethnic origin, religion or political affiliation, age or disability. The right has universally been recognized since the Universal Declaration of Human Rights in 1948. This declaration has since been integrated in various international and national conventions including constitutions and development plans. Libraries all over the world have a moral obligation to ensure educational services and facilities are availed to all categories of users without discrimination.

In the Kenyan context, both international and local laws issue guidance on the extent to which persons with disabilities have a right to inclusive education in Kenya. Article 24 of the United Convention on the Rights of Persons with Disabilities and the Kenya Persons with Disability Act 2003 proclaim the right to inclusive education for this category of people and that they should participate in the general education system. The Kenya Disability Act of 2003 advocates for PWDs entitlement to a barrier free and disability friendly environment as a way of facilitating them to easily access buildings, roads and other communal facilities. In addition, International Federation of Library Associations and Institutions (IFLA) guidelines that focuses on providing equal access to library services and facilities to all inclusive of persons with disabilities. According to the guidelines, the surrounding of the library, the entrance, restrooms, stairs, elevators and special rooms should be accessible to persons with different kinds of disabilities. Outside the library, there should be sufficient parking spaces well marked with international symbol for PWDs, parking space that is close to the library, smooth and non-slip surface at the entrance and where need be a non-slip not too steep ramp with railings next to the stairs. In terms of library physical space, there should be shelves reachable from a wheelchair, reading and computer tables of varying heights throughout the library, chairs with study armrests and staff trained to assist users in case of emergency. In addition, at least one toilet for persons with disabilities that has the required standards such as door wide enough for a wheelchair to enter and sufficient space for a wheelchair turn around.

Since students with disabilities enroll in various institutions of higher learning such as the universities, these institutions ought to follow the required standards in catering for their needs.

Kenya is one of the African countries which have witnessed a significant increase in student enrolment as shown in the Table 1

Table 1.

Student Enrolment in the Kenyan Universities 2015-2023.

No.	Academic Year	Student Enrolment
1	2015/2016	67,790
2	2016/2017	86,142
3	2017/2018	88,620
4	2018/2019	68,545
5	2019/2020	89,486
6	2020/2021	122,831
7	2021/2022	128,073
8	2022/2023	123,963

Source: Kenya Universities and Colleges Central Placement Service Financial statements and accounts 2021/2022

Among the important criteria of education landscape in the universities are the libraries that facilitate learning, teaching and research and the spaces within them is part of the important focus. These particular students encounter difficulties in accessing library spaces and this simply means they never get to fully benefit from the services and facilities offered. A report on increasing access for PWDs, the case for Kenyatta University by Mugenda (2012) reveals that out of a population of 44,000 students, 300 live with disabilities while from a total of 2,792 staff, 70 live with disabilities. Therefore, it is important for university libraries to promote architectural designs and spaces that encourage more students with disabilities into their buildings thus enabling them enjoy the benefits of the services and facilities that are provided. This implies that libraries ought to restructure the library spaces so as to accommodate users with disabilities in case it is realised that the spaces are not inclusive. Therefore, as a starting point, it is important to establish the status of the library spaces and facilities in serving persons with disabilities before embarking on library space restructuring. To establish the status of access of library spaces and facilities in the Kenyan universities, this paper was guided by four objectives; to identify the available library spaces and facilities offered by Kenyan universities to persons with disabilities, determine the extent to which library staff in Kenyan universities are able to serve persons with disabilities, ascertain university library users awareness of the availability of special library spaces and facilities for persons with disabilities and establish the relationship between the provision of library spaces and facilities for persons with disabilities with their satisfaction with the spaces and facilities.

Findings of this study have implications on educational policy at the institutional and government levels. This is because creating a knowledge economy means more than supporting the university but ensuring the resources are put into proper use by having library spaces and facilities that efficiently serve users inclusively. This study expands body of knowledge on access to library spaces and facilities for persons with disabilities particularly in the global south.

2. Literature review

Beg and Sarkar (2021) argue that access to library services and facilities for persons with disabilities is a topic of considerable attention in the world. Several studies have been conducted on library and information services for persons with disabilities in different parts of the world such as the United States of America (Hardesty, 2016; Mulliken, 2017); the United Kingdom (Gibson et al., 2016; Lawson, 2017) ; Australia (Goggin et al.,); Canada (Kaeding et al., 2017); Countries of Africa (Ayoung et al., 2021; Chiputula & Mapulanga, 2016; Eneya et al., 2021; Kavishe & Isibika, 2018; Kiruki & Mutula, 2021; Kaunda & Chizwina, 2021; Majinge & Stilwell, 2013); and India (Chaurasia & Singh, 2022; Nazim et al., 2021; Solanki & Mandaliya, 2016; Subramaniam et al 2012).

Beg and Sarkar (2021) are of the view that the global north countries like the United Kingdom and the United States of America are ahead in terms of access to library facilities and services for persons with disabilities as compared to the global south where progress is relatively slow. The two authors argue that there is need for research initiatives to assist in addressing the predicaments especially in the university libraries. According to them, in global south, there are other challenges such as poor attitude towards disabilities, limited funding and infrastructure. Baffoe (2013) provides an example of Ghana, one of the countries in the global south and says that the issues of disabilities are surrounded with myths, misconceptions and superstitious beliefs associated with certain types of disabilities. For instance, in Ghana, a child born with a deformity is deemed to be as a result of evil spirits, a failure of the family to keep taboos or attributed to witchcraft. Similar views are held by McKenzie and Smith (2009) as they say that the problem of isolation and stigmatisation are more evident in global south countries. They continue to say that global south countries have limited facilities and services, few people trained enough to support and empower persons with disabilities.

According to Hughes (2017), there are a limited number of studies that tend to focus on the physical environment such as space planning, furniture, lighting, cleanliness of the library and ambience among others. Nazim and Sarkar (2021) emphasise that it is important to look at the physical state of library facilities as well as services and programmes for persons with disabilities in order to provide equitable access considering their special needs. Kumbier and Starkey (2016) hold a similar view that within the library environment, users with disabilities ought to get into the building, have access to the bathrooms, use the stacks and work at desks.

A number of scholars note that despite the progress that has been made in increasing the number of students with disabilities in higher education internationally, there are persistent inequities in participation and completion of higher education by PWDs (Cotton et al., 2017; Chaputula & Mapulanga, 2017). Further, Evans et al. (2017) says that the growing demand for equitable higher education necessitates changes in the design and delivery of higher education. This is supported by Burgstahler (2017) by quoting physical spaces as one of the aspects that should be changed to ensure that they are accessible to all.

In addition to the increasing number of students with disabilities in higher education, literature shows that persons with disabilities in universities have different library facilities requirements (Yadav & Singh, 2022; Arbes et al., 2019; Crabb et al., 2019). However, persons with disabilities continue to face challenges in accessing library facilities. Findings of Solanki and Mandaliya (2016) on accessibility of library services to persons with disabilities in India indicated that services offered to persons with disabilities were not adequate. Ayoung, Baada and Baayel (2020) investigated the extent to which university libraries in Ghana had made library facilities and services accessible to persons with disabilities. Their study revealed that most of the universities were incapable of implementing Persons with Disabilities Act in Ghana and providing physical and intellectual access to persons with such special needs. There was inadequate knowledge on issues relating to persons with disabilities and their rights to access information. Chaputula and Mapulanga (2017) investigated the provision of library services to persons with disabilities in Malawi. The study highlighted the lack of adequate library and information services for persons with disabilities such as braille and acknowledged possible hindrances. The study also revealed that there was inadequate equipment to support persons with disabilities to access library services and facilities such as reading tables and computer tables that are wheelchair friendly.

On library staff training, IFLA guidelines provide examples of appropriate staff training such as inviting persons with disabilities to staff meetings to talk about their needs as library users, including information about services to special user groups in orientation for new staff and sending emails and other information to staff on a regular basis about library services to specific disability groups. Majinge and Msonge (2020) conducted a study in Tanzania where library staff were asked to indicate whether they had training related to serving persons with disabilities. The majority responded negatively (47; 96%) and only two responses (4.1%) were in the affirmative.

IFLA's guidelines are clear that it is important for all staff to be knowledgeable about various kinds of disabilities and how well to assist the PWD library users. Pionke (2020) analysed library staff's attitude towards persons with disabilities and accessibility to assess the training needs of existing library staff. The findings revealed that librarians felt unprepared to work with users with disabilities. Some of the staff reported that they knew there existed computers with assistive technology or

software but they did not know how to help in troubleshooting when the computers failed to work. The staff were also not sure whether their interactions with the users with disabilities were useful and respectful to them. The discomfort and self-doubt are related to lack of adequate knowledge which is a training issue. Another concern was that despite the library staff being aware of the need for training, the administrators may not see the urgency of the training. Therefore, the library staff concluded that all staff needed training in working with persons with disabilities not just librarians and supervisors. Training of library staff is emphasised by Cassner et al., (2011) by saying that staff training is a key factor in addressing issues surrounding serving persons with disabilities.

Based on the 2019 census, 2.2% (0.9 million people) of Kenyans live with some form of disability. According to Elder (2015), inclusive education is still at its initial stage in Kenya. A report released by Commission for University Education (2016) on university education indicated that in the more than 70 public and private universities in the country at the time, only 645 students with disabilities were enrolled. This report stated that most of the students are those who had physical disability followed by vision and finally hearing disability. Compared to the overall student enrolment at the universities, the enrolment of students with disabilities was said to be small. This was interpreted to be an indication of inadequate deliberate structures and facilities that were available to motivate enrolment of this category of students. The report further stated that the universities were not well prepared in terms of services and facilities to support people with disabilities. The report recommended that universities ought to collaborate with the National Council for People with Disabilities in order to enhance their services and facilities that they provide to students and persons living with all classes of disabilities.

Kenya as a country recognises disability inclusion and the important part it plays in achieving sustainable development that aims to leave no one behind. An example of the country's commitment is in co-hosting of Global Disability Summit (GDS). This was a summit where world leaders, government officials, civil society, the donor community and organizations of persons with disabilities (OPDs) came together to share experiences, ideas and aspirations for development for inclusivity of persons with disabilities. On 24th July 2018, Kenya, United Kingdom and the International Disability Alliance co-hosted the GDS 2018. The summit aimed at transforming the lives of persons with disabilities by raising global attention on neglected areas as well as mobilise global and national commitment goals and the UN Convention on the Rights of Persons with Disabilities. One of the summit's thematic areas was inclusion in education. University libraries are integral parts of university education system and they ought to respond to the changes that the education sector is undergoing. Restructuring library spaces is a way of supporting inclusive education that aims at providing equitable and quality services for all without discrimination. By the end of the GDS 2018 summit, over 300 organisations and governments had signed the Charter for Change, a framework for action on implementing the Convention on the Rights of Persons with Disabilities (CRPD) and the disability movement 'Nothing About Us, without Us'. Based on the 2018 Global Disability Summit that Kenya co-hosted, the country has made progress. Global Disability Summit accountability report (2019) showed that most of the commitments done in GDS 2018 were underway (74%) and 10% were reported as complete and only 5% of the commitments were reported as having not started. In the country, the Persons with Disability Draft Bill 2018 was presented in parliament for the second reading at the senate in April 2019. Part III Section 20 (1) of the draft bill states that every person with disability has a right to admission to any institution of learning and access to an inclusive, quality education on an equal basis with others. Students with disabilities are enrolled in different universities and it is important to ensure they enjoy the right of access to facilities and services, According to Ilako et al., (2020), one important area of focus in the university is the library building and the spaces within them. The physical library spaces ought to be those that are inviting to all users including the ones with disabilities.

There is limited literature on access to university libraries for persons with disabilities particularly in the country. Kiruki and Mutula (2021) examined public university library websites in Kenya in reference to their accessibility and usability to students with visual and physical disabilities and concluded that in public universities libraries, this category of library users is excluded in access and use of the library websites. The study revealed that the website design posed challenges to students with visual disabilities. The library website ought to have disability services page with specific information for persons with disabilities.

Gichuhi et al., (2021) research concentrated on exploring approaches taken by Kenyatta post-modern library in support of inclusive education. The study findings revealed that the structure was accessible and comfortable. However, this research was carried out only in one university without any other university comparison and library spaces were not part of the research.

There is no known recent research in the country that has established the special spaces and facilities offered by Kenyan university libraries. This paper embarked on establishing the status of access to spaces and facilities provided to PWDs using the following objectives; identify the available library spaces and facilities offered by Kenyan universities to persons with disabilities, determine the extent to which library staff in Kenyan universities are skilled in serving persons with disabilities, ascertain university library users' awareness of the availability of special library spaces and facilities for persons with disabilities and examine the relationship between the provision of library spaces and facilities for persons with disabilities with their satisfaction with the spaces and facilities.

3. Research methodology

The paper adopted a pragmatic research philosophy, a convergent mixed methods design and a multiple-case studies strategy. The study population was university library users and librarians drawn from six public and private universities in Kenya. The six universities were selected purposefully based on their age (time they have been in existence) with an assumption that old universities have more developed infrastructure. Data was collected from students and academic staff who participated in an online survey; librarians participated in online focus groups while university librarians and students with disabilities had telephone call interviews. The online survey was conducted using online questionnaires that were distributed via emails and Whatsapp. Online focus group discussions were conducted in Google Meet platform and interviews were conducted via personal telephone calls.

The paper assumes that the combination of public and private universities, coupled with the different phases of infrastructure, would provide a clear picture of the responsiveness of university libraries to the library space and facilities for persons with disabilities. The mode of funding public and private universities in Kenya is different whereby public universities are largely financed by the government and private universities receive conditional grants for specific programmes. A comparison between public and private universities infrastructure shows that private universities excel in library, information, community and technology infrastructure (The Kenya Institute for Public Policy Research and Analysis, 2022).

Since the researcher was not in a position to include the 193,880 students (159,951 undergraduates and 33,929 postgraduates) in a survey, a sample determination table provided by Krejcie and Morgan (1970) was employed. The total number of undergraduate respondents for the survey in both public and private universities was seven hundred and fifty four (754). The total number of postgraduate respondents for the survey in both public and private universities was seven hundred and thirteen (713). A sample size of 754 and 713 respectively that adds up to 1467. Out of the 1467 questionnaires administered to university students in a population of 193,880, 785 were properly filled and returned representing a 53.5% response rate. The study was conducted during Covid- 19 lockdown regulations that restricted data collection to remote and virtual methodologies. According to Revilla and Ochoa (2015), online surveys have lower completion rates than in-person interviews. Similar opinion is held by Campo-Arias et al. (2022) as they say response rate of online questionnaires is typically lower than that of paper-based questionnaires. In addition, there were eight hundred and fifteen (815) respondents from academic staff in public universities while in private universities there were four hundred and seventy three (473). A total sample size of one thousand two hundred and eighty eight (1288). A total of 863 academic staff out of 1288 participated in the study representing a 67 % response rate. The qualitative data collected from University librarians (5; 83%), librarians (6; 100%) on special spaces and facilities offered to persons with disabilities and students with disabilities (5; 100%) on their personal experiences and satisfaction with special spaces and facilities offered to them was analysed thematically while the quantitative data collected from students and academic staff on ascertaining users' awareness of the availability of special spaces and facilities for users with disabilities adopted a statistical approach that encompasses descriptive and inferential statistics. Later on, there was a follow up online survey with the librarians on special spaces and facilities offered to library users'

with disabilities. There was one private university that reported that they did not have any student with disability.

For the sake of anonymity and confidentiality, the libraries where the respondents, interviewees were based are not mentioned in the findings but denoted with library 1, library 2 and so on in no particular order. The names of key informants have been replaced with pseudonyms.

4. Findings and discussion

The results of the study on provision of special library spaces and facilities for persons with disabilities in Kenyan universities are presented as per the objectives. The objectives of this paper were to;

i) Identify the available library spaces and facilities offered by Kenyan universities to persons with disabilities;

ii) Determine the extent to which library staff in Kenyan universities are able to serve persons with disabilities

iii) Ascertain university library users' awareness of the availability of special library spaces and facilities for persons with disabilities

iv) Establish the relationship between the provision of library spaces and facilities for persons with disabilities with their satisfaction with the spaces and facilities.

4.1 Provision of Special Library Spaces and Facilities for Persons with Disabilities

The study explored the extent to which the libraries provided special library spaces and facilities for users with disabilities. The data was collected from a follow up online survey from the librarians. Descriptive results are presented in Table 2

Table 2.

Available Special Library Spaces and Facilities for Persons with Disabilities.

Special Library spaces and Facilities	University libraries					
	Public			Private		
Presence ✓ Absence x	LIB1	LIB2	LIB3	LIB1	LIB2	LIB3
Parking close to the library entrance	x	✓	✓	✓	✓	✓
Availability of wheel chair ramps	✓	x	✓	✓	✓	✓
Railings at both sides of the ramp	✓	x	✓	x	✓	✓
Level, non-slip surface at the entrance	x	✓	x	✓	✓	✓
Sufficient space at the door to allow wheelchair turn around	✓	✓	✓	✓	✓	✓
Adapted toilet for the persons with disability	x	✓	✓	x	x	x
Shelves reachable from a wheelchair	x	x	x	x	x	x
Emergency facilities for PWDs	✓	x	x	x	✓	x
Adjustable desks	x	X	X	x	x	x
Designated computer workstations adapted for users in wheelchairs	✓	✓	✓	x	x	x
Designated computers equipped with screen reading programs, enlargement and synthetic speech	x	✓	✓	x	x	x
Talking books, talking newspapers and talking periodicals	✓	✓	✓	✓	✓	✓
Talking elevators /lifts	✓	x	x	x	x	x
Availability of trained library personnel to serve persons with disabilities	x	✓	✓	✓	x	x

Interviews with librarians confirmed the facilities and services the libraries offered to persons with disabilities:

> Our library has spaces and resources which are well labelled, toilets and ramps for PWDs. Nonetheless, there is need for improvement of the facilities to take care of PWDs including providing lifts for persons with walking disabilities within the library and short shelves that are easy to access. Currently, the shelves are tall; PWDs have to depend on the librarians to help them to pick books. In addition, our university has reserved parking spaces for persons with disabilities. [Librarian 1, June 2022]

The use of technology to enhance library facilities and services for PWDs also emerged from the interview with librarians:

> There are computers installed with relevant applications put aside for PWDs in my library. There are also special tables and seats to accommodate their needs. Moreover, there is also a reading area which is accessible through ramps and wheelchairs. The university also has a lift for library users with mobility challenges. With the lift, they are able to go upstairs and access more materials with ease. [Librarian 2, June 2022]

Some libraries have created specialised reading areas or rooms for PWDs. These facilities are located in areas which can easily be accessed by PWDs. However, as one librarian elaborated, additional facilities such as lifts are required to make accessibility to upper floors easier:

> Our library has a study room at the library's ground floor for library users with disabilities. This is fully equipped with relevant study materials. Nevertheless, the university does not have sophisticated facilities for PWDs like lifts which need to be installed. [Librarian 3, June 2022]

Based on IFLA guidelines, there are some areas that all the six libraries have met the requirements. All the six libraries have sufficient space at the door to allow wheelchair turn around and talking books, talking newspapers and talking periodicals. The findings suggest that although some efforts have been made by the universities, there is much scope for universities libraries in Kenya to add facilities for serving users with disabilities more effectively and at ease.

4.2 Determine the extent which Library staff in Kenyan Universities are able to serve Persons with Disabilities

Follow up telephone call interviews with the librarians revealed that to effectively serve PWDs, librarians need to have multiple skills and knowledge. However, this was not the case; in some cases, the librarians lacked the prerequisite skills:

> We have different categories of PWDs and they require varied skills to serve them better. For instance, in our library there are those who are visually impaired and others have challenges in mobility. We also have users with hearing impairments. Visually impaired users use special software like JAWS, NVDA and Orbit readers and some of the librarians are not well equipped to guide the users and may not be aware of how the software operates. When the librarians are not aware of how to operate the machines, it is difficult to know when maintenance is required or replacement of any of the gadgets. The technology is also changing fast and librarians need to keep training to acquire latest skills. In my opinion, sign language should also be prioritised. [Librarian 1, January 2023]

Another librarian added:

> Information resources for PWDs are in several media formats. For instance, talking books, captioned films, closed circuit TVs and various printing conversion systems. Therefore, the librarians need to be sensitised on the available information media formats. Librarians also require to be equipped with the knowledge of various websites that are available for PWDs in order to direct users on where to find relevant information resources. Sensitisation on how to treat PWDs is required so that they feel welcome in the library. In addition, serving PWDs requires librarians who are passionate about the service. For instance, in helping the PWDs with mobility challenges, one may even need to carry them to the location that they cannot access. [Librarian 2, January 2023]

The issue of trained staff turnover amongst the librarians as well as shortage of staff also emerged:

Sign language skills are important. Unfortunately, the staff who was trained on sign language retired last year. With the limited financial resources in the institution, it may take some time to have another staff trained on the same. Additionally, there is need to train more than one staff because libraries have work shifts. For instance, there is daytime shift and night shift and could be only one staff is trained. There should also be at least one librarian with the knowledge of classifying the information resources for PWDs for ease of retrieval. [Librarian 3, January 2023]

Follow up telephone interviews with the librarians revealed that to effectively serve PWDs, librarians need to have multiple skills and knowledge. However, this was not the case; in some cases, the librarians lacked the prerequisite skills.

4.3   Ascertain university library users' awareness of the availability of special library spaces and facilities for persons with disabilities

To ascertain university library users' awareness of the availability of special spaces and facilities for students with disabilities, the students were asked to confirm the presence or absence of various special library spaces and facilities for PWDs. The descriptive results provided in Figure 1 indicate that only 34.1% provided emergency facilities for library users with disabilities such as emergency doors; another 32% and 38.2% had adjustable desks and designated computer workstations adapted for users in wheelchairs respectively. Also, only 33.2% and 36.3% had designated computers equipped with screen reading programs, synthetic speech and talking elevators or lifts respectively.

The availability of trained library personnel to serve users with disabilities was also limited in most universities as already revealed in the follow up interviews with the librarians.
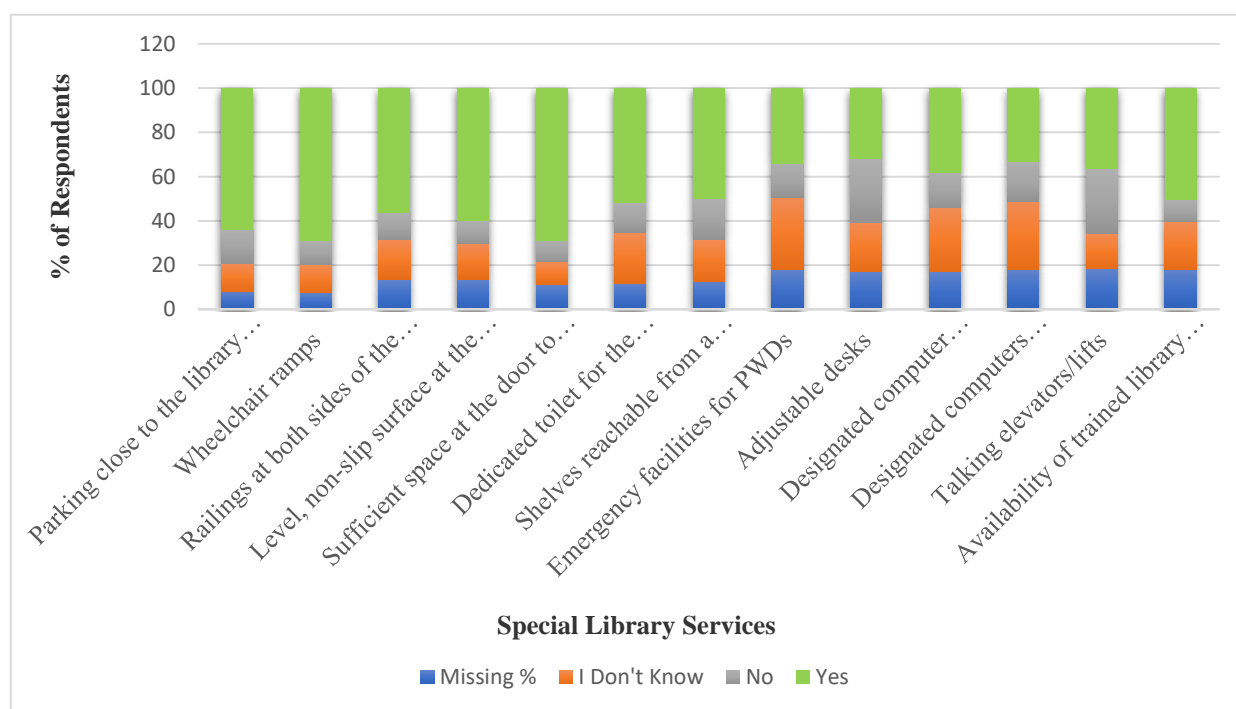

Figure 1. Library Users' Awareness of Special Spaces and Facilities for Students with Disabilities.

Table 3.

Special spaces and facilities for PWD	Missing	I Don't Know	No	Yes
		%		
Parking close to the library entrance	8.3	12.6	15.3	63.8
Wheelchair ramps	7.5	12.6	11.2	68.7
Railings at both sides of the ramp	13.5	18.1	12.0	56.4
Level, non-slip surface at the entrance	13.6	15.9	10.6	59.9
Sufficient space at the door to allow wheelchair turn around	11.2	10.4	9.7	68.7
Dedicated toilet for the persons with disability	11.5	23.2	13.4	52.0

Shelves reachable from a wheelchair	12.7	18.9	18.3	50.1
Emergency facilities for PWDs	18.0	32.7	15.2	34.1
Adjustable desks	16.9	22.5	28.5	32.0
Designated computer workstations adapted for users in wheelchairs	16.9	29.2	15.7	38.2
Designated computers equipped with screen reading programs, enlargement, and synthetic speech	17.8	31.1	17.8	33.2
Talking elevators/lifts	18.2	16.1	29.4	36.3
Availability of trained library personnel to serve persons with disabilities	17.8	21.8	10.2	50.2

Information gathered through interviews with the students with disabilities of their personal experiences indicates that although the university libraries offered special spaces and facilities for PWD, these were far from sufficient:

Am a visually-impaired student. The university provides visually-impaired users aid facilities and computers that have apps to read what is in the computers. However, there are much more facilities to be included for persons with disabilities. Some of these include braille machines and orbit readers. The braille machine which is currently available in the library makes a lot of noise to other library users thereby interrupting them. It is a mechanical one which makes a lot of noise. [Student 1, June 2022]

We have computers to scan notes. We also use computers to read. There is a special software installed in the machines that can speak alongside Non-Visual Desktop Access (NVDA) fitted in the computers. NVDA is a free screen reader that allows visually-impaired users to interact with the Windows operating system. However, there is still much more to be done including the acquisition of automated audio books and material we can just listen to. In case of assignments, we tell library workers to record for us so that we just listen. [Student2, June 2022]

The statements made by the library users with disabilities corroborate Khetarpal (2014) who contends that assistive technologies are either limited or non-existent in low-income countries.

IFLA categorises library users with disabilities into five groups; visually impaired persons, hearing impaired persons, persons with reading difficulties, persons with physical disabilities and cognitively disabled persons. It would be useful for university libraries to categorise users with disabilities in order to serve them effectively.

4.4 Correlation between Provision of Library Facilities for PWDs and Satisfaction with Library Services

A chi-square test was performed to examine the relation between the provision of library facilities for persons with disabilities and their satisfaction with library spaces and facilities. The results in Table 4 shows the relation between provision of library facilities for PWDs and satisfaction with library services was statistically significant.

Table 4.
Provision of library facilities for PWDs and satisfaction with library services.

		Satisfaction with Library Services		
		Yes	No	Total
Library provides facilities for PWDs	Yes	501	77	578
	No	98	109	207
Total		599	186	785
Chi-square	(χ)	9.316		
	P-value	.037		

(χ =9.316 and a reported p value of .037<0.05). This implies that the provision of library facilities for PWDs is a significant predictor of user satisfaction with the type of library spaces and facilities available in the university libraries for PWDs.

5. Conclusion and recommendations

The paper aimed at establishing the status of access to library spaces and facilities for persons with disabilities. The study noted though the university libraries offered some space and facilities for PWDs, these were far from sufficient. The findings revealed that library staff required training on how to handle and assist PWDs and sign language was largely emphasised. The study also noted that access to services and facilities for PWDs is another significant aspect of modernised university library. However, the study concluded that accommodating diverse needs of persons with disabilities is a long-term process that requires involvement of all the relevant stakeholders.

Based on the findings, this paper therefore concludes with the following recommendations;

i. University libraries should strive to implement IFLA guidelines even if it means doing it gradually. By doing so, the libraries will continue making progress however small they may seem.

ii. University libraries should upscale awareness on disability issues so that the rest of the students and staff can be brought on board since they are also important in achieving some milestones.

iii. Library and Information Science schools may consider including some of the required skills in the curriculum in preparation for improved services for persons with disabilities. In line with the library staff training, Kenya Library and Information Services Consortium (KLISC) could consider including some of the skills in their capacity building programmes with similar efforts that other emerging trends have been accorded.

The current study did not concentrate on the number of persons with disabilities that are served by the participating libraries and the categorization of their disabilities. Further studies could be conducted to categorise persons with disabilities in the universities and compile a comprehensive guide of their required spaces and facilities and get input from relevant bodies like National Council of Persons with Disabilities.

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