
Impact of COVID-19 Pandemic on Use of Reference Sources and Services by Postgraduates' in Kenneth Dike Library, University of Ibadan, Nigeria

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ARTICLE INFO

Article history:

Received 4 October 2021
Revised 28 December 2021
Accepted 11 February 2022

Keywords:

Reference services,
Reference sources,
COVID 19 Pandemic,
Postgraduate students,
Kenneth Dike Library

ABSTRACT

The outbreak of the corona virus diseases (COVID-19) in the late 2019 has affected all facets of educational system including library and information services. Reference services, an important aspect of library services are not exempted from this impact. This study therefore, investigated the impact of COVID-19 pandemic on the use of reference services and sources by postgraduate students using Kenneth Dike Library (KDL), University of Ibadan, as a case study. Using descriptive survey of correlational type, the study adopted the use of structured questionnaire to randomly select three hundred (300) postgraduate users of reference sources and services in KDL using online survey monkey. Of the three hundred (300) copies, two hundred and twenty three (223) copies, representing 74.3% were retrieved and used for analysis. Findings revealed that, in spite of COVID-19 pandemic, most postgraduate students used Current Awareness Services (203, 91.0%, mean = 3.19), Reference Sources (202, 90.5%, mean = 3.18) and On-line Public Access Catalogue (195, 87.4%, mean = 3.13); low frequency of bibliotherapy (mean=2.22), Reader's Advisory services (mean=2.30) and inter-library loan (mean=2.13) and that COVID-19 pandemic had high impact on postgraduate students' use of reference services in Kenneth Dike Library, University of Ibadan. Based on the findings, recommendations were made that library management should consider the adoption of virtual reference services (VRS) in addition to the conventional mode of reference services to enhance patronage in the COVID-19 era. The library users should also be trained on how to take advantage of the COVID-19 pandemic to learn new skills in the digital space that will eventually optimize the usage of the library remotely.

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International Journal of Knowledge Content Development & Technology, 13(1): 27-41, 2023.
<http://dx.doi.org/10.5865/IJKCT.2023.13.1.027>

1. Introduction

The sight of the entire world has indeed changed, as a result of the unprecedented events occasioned by the outbreak of the Corona Virus Disease. The whole world faces a raging pandemic caused by Corona virus also known as COVID-19. The current outbreak of the novel coronavirus (COVID-19), was discovered in Hubei Province of the People's Republic of China and has spread to many other countries. It has infected over 112 million people worldwide with 152616 confirmed cases, 129300 cases discharged and 1862 deaths (NCDC, 2021). The first case of COVID-19 was reported in Nigeria by the Federal Ministry of Health on 27th of February, 2020. It was the case of an Italian citizen who returned to his place of work from Milan, Italy to Lagos, Nigeria on the 25th of February, 2020 (Agbele & Oyelade, 2020).

COVID-19 has taken a great toll on a variety of sectors of the economy ranging from socioeconomic sector to financial sector not sparing the educational sector. It led to a major lockdown, closure of various sectors including schools. There have been reforms in these sectors in a bid to ensure protection from the virus. The preventive measures include regular hand washing, social distancing among others. That is why educational institutions have adopted E-learning as an alternative to pass across lectures to students. This has also affected the way and manner in which library operates.

Libraries have always been described as the heart of a university, brain of the academic body and the scholar's workshop. They have become so important that renowned scholars judge the quality of education by the quality of library services in the university (Shrestha, 2008). The major aim of any university library is to support teaching, learning and research activities of its parent institution. University libraries must therefore, make sure that their resources are well utilized as this is essential for educational development of the students (Onifade, Ogbuiyi, & Omeluzor, 2013). Library, Subbaiah (2018), affirmed that the rapid advancement in information communication technology has made the internet inseparable part of today's reference services. With the new normal, internet is being adopted with more of the educational resources being produced, distributed and accessed in the digital format. The electronic resources in the virtual world represent a large investment of people's effort, money and wisdom. It is therefore important for postgraduate students to become familiar with latest search techniques for optimum utilization of reference sources and services.

References services are essential parts of services rendered by academic libraries. Madu and Ezeani (2010) described reference services as the form of assistance provided by the reference department in a library to help library patrons with access to the needed information. Reference services are the supreme and ultimate function of the library. Similarly, Flier (2019) described reference service as assistance in the use of resources of the library. Reference service is that part of library administration which deals with the assistance given to the readers in their use of the resources of the library. In a related development, Atanda and Uchendu (2017) described reference services as services rendered to library users which include reader education, meeting users request for specific information and assistance, the management of the use of information and loan of library material and equipment.

Reference service includes the direct and personal assistance given to persons in search of information for whatever purpose. It may also involve all activities targeted at making information easily available

as possible. According to Opara (2006), reference service is an integral aspect of library services in which contact between the readers and the library materials is established through staff assistance, matching the user with the library materials which could be printed or electronic. However, as a result of COVID-19 Pandemic, which according to Abubakar (2021), has profoundly affected all forms of physical and social human interactions, traditional face-to-face reference delivery model has been negatively impacted by lock downs, isolations, self-quarantines, and physical and social distancing among others, reference services have assumed a new dimension. Reference service is the most demanding of the entire library service and close to the patrons. Reference services provided in libraries include information Services, Bibliographic verification and documentation services, inter-library loan, Current Awareness Services (CAS), User Education, Selective Dissemination of Information (SDI) Services. Reference services may vary from library to library, but most libraries have an information or reference desk where assistance from a librarian is available.

There are three main types of reference services namely; assistance or instruction, assistance in identifying and provision of brief and factual answer to questions, as well as assistance or instruction in the use of the library. These services range from answers to simple reference queries such as “please where can I get a Ph.D thesis” to provision of education on the location of materials, use of catalogue, use of computers as well as the use of basic reference sources. Among the numerous users of reference services are the postgraduate students who form a significant portion of the reference services patrons. Postgraduate students are those who already have undergraduate degree and who are studying for a postgraduate qualification which may be a diploma or a degree such as honours, master degree or doctor of philosophy degree. Postgraduate student by the nature of their academic assignments require lots of quality, current, accurate and up-to-date information to carry out their mandates. Postgraduates need to access their university repositories to satisfy needs like writing seminar papers, term papers, getting information for their assignments and other academic activities. Research is one important component of postgraduate studies (Ismail, Abiddin, & Hassan, 2011). Tella et al. (2007) submit that postgraduate student’s ability to succeed is embedded in their accessibility and use of quality information resources available to them. They noted that in this digital era, any student at the higher level, especially postgraduate students who intend to carry out successful research and other academic obligations should have the ability to explore digital contents located in different sources such as the reference sources and services.

In view of this, the study examined the impact of COVID-19 pandemic on postgraduate students’ use of reference sources and services in Kenneth Dike Library, University of Ibadan. There is something to be learned from how academic library reference services adapted to providing accurate and timely information to students, faculty, staff, and other users during a global pandemic. In this spirit the researchers present, in increasing order of importance, three specific opportunities for reference services in a post COVID-19 world: evolution in technology, distributed staffing models, and measuring efficacy against student learning and success. Most importantly, reference services ought to adapt its core mission to one focused on student learning and success given the likely financial realities academia and academic libraries will face in a post COVID-19 environment.

1.1 Objectives

The main objective of the study is to determine the impact of COVID-19 pandemic on postgraduates use of reference sources and services in Kenneth Dike Library, University of Ibadan. Specifically, the study sought to:

- (a) Identify the types of reference sources and services used by postgraduate users of Kenneth Dike library in COVID-19 era.
- (b) Find out the frequency of use of reference sources and services by postgraduate users of Kenneth Dike library in COVID-19 era.
- (c) Determine the impact of COVID-19 pandemic on use of reference sources and services by postgraduate users of Kenneth Dike Library.

1.2 Research Questions

- (a) What are the types of reference sources and services used by postgraduate users of Kenneth dike library in post COVID-19 era?
- (b) What is the frequency of use of reference sources and services by postgraduate users of Kenneth dike library in COVID-19 era?
- (c) What is the impact of COVID-19 pandemic on use of reference sources and services by postgraduate users of Kenneth Dike Library?

2. Literature Review

2.1 Types of reference services and sources used by postgraduate students

Reference services, according to Madu and Ezeani (2010), are personal assistance eagerly given to library users in pursuit of information by a librarian in charge of reference section. In other words, Reference services are personal assistance given by libraries to users who are in pursuit of information. Its services rendered to its users as stated by Dhar (2010), include reader education, meeting users request for specific information and assistance, and the management of the use and loan of library materials and equipment. The library's reference section headed by the reference librarian, is an important section that houses and takes care of important information resources that cannot be given to users on loan. These information resources include Encyclopaedias, Biographies, Gazetteers, Dictionaries, Maps, Almanacs, Newspapers and Journals etc (Atanda & Uchendu, 2017). Additionally, Anyim (2018) believes that the application of interpersonal communication to a large extent enhances information service delivery in reference services as it allows the librarian to interact with the user, gather information needed to fill the information gap.

There are various types of reference sources in academic libraries. Reference sources are designed

to be consulted rather than read through. Their design is generally dependent on the type of information and treatment provided. Reference materials can be arranged alphabetically, topically, or chronologically. Many will contain cross listed information and more than one index. For postgraduate students, there are thousands of reference sources available that cover practically every subject. Although the term reference “book” is frequently used, reference sources can be books, serials, on-line databases or the Internet.

The aforementioned citations stated types of reference services and sources in the review but this could be said to be inexhaustive because reference services is elastic in nature which could cover services like library orientation, library consortium and other ready reference services that require internet connectivity.

2.2 Frequency of use of reference sources and services by postgraduate students

The frequency of use of reference sources has been determined on a number of factors, for instance, in determining the level of use of library information materials by students based on their demographic variables, the findings of the study by Suleiman, Vashistha, and Jimah (2018) showed that female students preferred to use the library and its resources more than their male counterparts and that majority of the frequent library users were less than 30 years of age. Most postgraduate students used more of books / ebooks, journal / electronic journals, newspapers / magazines, and Internet /computer. In addition, Ezeala and Yusuff (2011) opined that electronic resources such as functional computers, photocopying machines, CD-ROM, microforms, microform readers, fax machines, internet, local area network, radio messages, telephone, lighting and computer workstations are for library users and must be measured periodically by librarians to ensure that the resources and services of their libraries meet the set objectives of the library.

In contrast however, Unuabor and Oseghale (2018) revealed in their study that postgraduate do not use reference resources and services effectively. The nature of user education programme, timing and content were the major factors that caused undergraduates dissatisfaction in using the library resources. Shrestha (2008) remarked that besides traditional forms of resources, new forms of resources are also to be introduced in libraries as these may encourage its use and the use of its resources. Examples of the new forms of resources include: CD-ROM, online journals, Optical Discs, DVD and Internet. This assertion is supported by Korobili Tilikidou and Delistavrou (2006) who posited that the technological changes found in the library have moved faculty and students from using printed sources to using e-sources, and more specifically the Internet, as a major source of information.

Apart from the demographic factors highlighted in the citations, some other factors that could enhance the frequency of the use of reference sources and services by postgraduate users could include the availability of sources or services as well as the format in which of the sources or services.

2.3 Reference services and COVID-19 pandemic

Infection control and physical distancing measures are vital to prevent the virus from further

spreading and to help control the pandemic situation. The policy of compulsory physical distancing has been implemented in many countries including Nigeria. On account of these, there has been a closure of schools (Amir et al., 2020). Due to the closure of universities and academic libraries as a result of the COVID-19 pandemic crisis, many libraries now think of how they teach and interact with students. New perspectives regarding a change in face-to-face activities, social isolation, and the reformulation of reference activities result in a transition toward e-referencing and e-teaching processes. Teachers, students, and institutional administrators as well as library users are all working hard to make the best use of technology and have an efficient learning process, in order to minimize the learning gap that arose due to lockdown (Crawford et al., 2020).

Reference services can be in the form of virtual which requires the usage of electronic resources like internet, computers, and smart phones to acquire and disseminate knowledge. When enriched by audiovisual elements, e-learning can offer educational content and various tests supporting these contents, can facilitate access to necessary relevant information, and most importantly, provide an interactive environment for postgraduate students and all categories of reference service users of the library during COVID era (Olum et al., 2020).

The authors majorly emphasised on the virtual reference services (VRS) which is becoming the order of the day in the COVID-19 era in libraries. The implication on the traditional reference services is not stated, considering the fact that libraries in developing world have not totally migrated to the virtual reference service.

3. Methodology

The study adopted survey research design of correlational type. The population was made up of postgraduate students in the Faculties of Education, Law and Social Sciences in the University of Ibadan who are registered users of Kenneth Dike Library. The primary data source was an online survey which engaged active internet / social media users with the aid of questionnaire, assessed through a Universal Resource Locator (URL), specifically created to direct respondents to the questionnaire. The questionnaire was divided into four sections namely sections A, B C and D. Section A consisted of five items designed to elicit information relating to Faculty, department, age, gender and level of study. Also, Sections B and C, a closed ended questionnaire measured on a four-point likert scale of agreement, consisted of items aimed at eliciting information on types and frequency of use of reference services by postgraduate students while section D measured the impact of COVID-19 pandemic on use of reference services by postgraduate students. About three hundred (300) copies of the questionnaire were distributed online through various postgraduate students on social media platforms and e-mails. These users were drawn from the follower bases of Postgraduate platforms on the internet. This was completed online and the data collected were digitally compiled for easy descriptive analysis and presentation. Two hundred and twenty three (223) copies of the questionnaire were retrieved and valid for analysis. The data obtained were organized, collated and analysed using descriptive statistics of frequency counts, percentages, mean and standard deviation.

4. Results

Table 1. Demographic characteristics of respondents

| Demographic | (n=223) | |
|-------------------|-----------|------------|
| Characteristic | Frequency | Percentage |
| Gender | | |
| Male | 140 | 62.8 |
| Female | 83 | 37.2 |
| Age(Years) | | |
| 21-25 | 74 | 33.2 |
| 26-30 | 115 | 51.6 |
| 31-35 | 19 | 8.5 |
| 36 and above | 15 | 6.7 |
| Faculty | | |
| Law | 44 | 19.7 |
| Education | 98 | 44.0 |
| Social Sciences | 81 | 36.3 |
| Level | | |
| Ph.D | 43 | 19.3 |
| Master | 136 | 61.0 |
| M.Phil./Ph.D | 38 | 17.0 |
| M.Phil. | 6 | 2.7 |

Source: Field survey 2021

The data shown in **Table 1** revealed that 140 (62.8%) of the respondents were male while 83 (37.2%) were female. This shows that there were more male participants in the study than their female counterparts. The distribution according to ages of respondents revealed that postgraduate students were between the ages of 26-30 constituted majority in the study (51.6%) while those within the ages of 36 years and above were the least (6.7%) This is an indication that most of the postgraduate students in the study were aged between 26 and 30 years. Also the distribution of respondents in terms of faculty of study showed that postgraduate students that participated in the study, 98 (44.0%) were from faculty of Education while 44 (19.7%) were from the faculty of Law while 81 (36.3%) were from the Faculty of social sciences. Finally, it could be noted from the information provided in the table that majority of the respondents 136 (61.0%) were master students while the least number of participants were M.Phil. students.

The implication of the findings on demographic profiles of respondents point to the fact that the postgraduate students who participated in the study were well informed to be able to respond

appropriately to the questions posed in the questionnaire that were used in the study.

RQ 1: *What are the types of reference sources and services used by postgraduate users of Kenneth Dike library in COVID-19 era?*

Respondents were asked to indicate which of the following reference services were available for them in Kenneth Dike Library in COVID-19 era. The result is presented in **Table 2**.

Table 2. Types of Reference Services Available to Postgraduate Students in Kenneth Dike Library

| S/N | Reference Services | Readily available | | Available | | Somewhat available | | Not Available | | Mean |
|------|--|-------------------|------|-----------|------|--------------------|------|---------------|------|------|
| | | N | % | N | % | N | % | N | % | |
| i | CD-ROM literature search | 31 | 13.9 | 86 | 38.6 | 52 | 23.3 | 54 | 24.2 | 2.52 |
| ii | OPAC (On-line Public Access Catalogue) | 50 | 22.4 | 145 | 65.0 | 25 | 11.2 | 3 | 1.3 | 3.13 |
| iii | Internet: Reference tool | 47 | 21.1 | 129 | 57.8 | 46 | 20.6 | 1 | .4 | 3.09 |
| iv | Selective Dissemination of Information | 43 | 19.3 | 71 | 31.8 | 62 | 27.8 | 47 | 21.1 | 2.65 |
| v | Media | 36 | 16.1 | 120 | 53.8 | 52 | 23.3 | 15 | 6.7 | 2.37 |
| vi | Reference Sources | 64 | 28.7 | 138 | 61.9 | 19 | 8.5 | 2 | 0.9 | 3.18 |
| vii | Inter-library loan | 31 | 13.9 | 86 | 38.6 | 52 | 23.3 | 54 | 24.2 | 2.09 |
| viii | Ready reference | 28 | 12.6 | 102 | 45.7 | 46 | 20.6 | 47 | 21.1 | 2.11 |
| ix | Reader's Advisory services | 41 | 18.4 | 135 | 60.5 | 24 | 10.8 | 23 | 10.3 | 2.87 |
| x | Information and Referral Services | 22 | 9.9 | 143 | 64.1 | 42 | 18.8 | 16 | 7.2 | 2.77 |
| xi | Document Delivery | 35 | 15.7 | 142 | 63.7 | 27 | 12.1 | 19 | 8.5 | 2.37 |
| xii | Bibliotherapy | 14 | 6.3 | 59 | 26.5 | 138 | 61.9 | 13 | 5.4 | 2.02 |
| xiii | Current Awareness Services | 40 | 17.9 | 163 | 73.1 | 15 | 6.7 | 5 | 2.2 | 3.19 |

Source: Field survey 2021

Decision Rule: 1-1.49 = VL (Very Low), 1.5-2.49 = L (Low), 2.5-3.49 = H (High), while 3.5-4 = VH (Very High) the criteria mean =2.50 (that is 4+3+2+1=10 ÷ 4 = 2.5). This implies that any score less than 2.5 is considered low.

Table 2 presents the result of type reference services available for postgraduate students in Kenneth Dike Library, University of Ibadan. The percentage of respondents and their responses were presented in the same box for ease of reference such that readily available and available were added and somewhat available and not available were added to ensure ease and accuracy on interpreting the results. From the results, the three most available reference services for postgraduate students during the COVID-19 pandemic operation of Kenneth Dike library were Current Awareness Services (203,

91.0, mean = 3.19), Reference Sources (202, 90.5%, mean = 3.18) and On-line Public Access Catalogue (195, 87.4%, mean = 3.13). On the other hand, the three types of reference services which were rarely available during the COVID-19 pandemic operation of Kenneth Dike Library were Bibliotherapy (73, 38.8%, mean = 2.02), Inter-library loan (117, 52.5%, mean = 2.09) and Ready reference (130, 58.3%, mean = 2.11). This means that only limited types of reference services were available for postgraduate students in Kenneth Dike Library during COVID-19 pandemic.

RQ 2: *What is the frequency of use of reference sources and services by postgraduate users of Kenneth Dike library in COVID-19 era?*

Table 3 presents the results of research question two.

Table 3. Types of Reference Services Available to Postgraduate Students in Kenneth Dike Library

| S/N | Reference Services | Daily | | Weekly | | Monthly | | Occasionally | | Never | | Mean |
|-----------------------------|--|-------|------|--------|------|---------|------|--------------|------|-------|------|------|
| | | N | % | N | % | N | % | N | % | N | % | |
| i | CD-ROM literature search | 13 | 5.8 | 58 | 26.0 | 68 | 30.5 | 32 | 14.3 | 52 | 23.3 | 2.10 |
| ii | OPAC (On-line Public Access Catalogue) | 60 | 26.9 | 85 | 38.1 | 17 | 7.6 | 44 | 19.7 | 17 | 7.6 | 3.44 |
| iii | Internet: Reference tool | 30 | 13.5 | 53 | 23.8 | 96 | 43.0 | 35 | 15.7 | 9 | 4.0 | 2.61 |
| iv | Selective Dissemination of Information | 25 | 11.2 | 44 | 19.7 | 65 | 29.1 | 75 | 33.6 | 14 | 6.3 | 3.11 |
| v | Media | 52 | 23.3 | 21 | 9.4 | 28 | 12.6 | 99 | 44.4 | 23 | 10.3 | 2.62 |
| vi | Reference Sources | 78 | 35.0 | 61 | 27.4 | 59 | 26.5 | 17 | 7.6 | 8 | 3.6 | 3.56 |
| vii | Inter-library loan | 6 | 2.7 | 24 | 10.8 | 95 | 42.6 | 58 | 26.0 | 40 | 17.9 | 2.13 |
| viii | Ready reference | 30 | 13.5 | 35 | 15.7 | 46 | 20.6 | 82 | 36.8 | 30 | 13.5 | 2.24 |
| ix | Reader's Advisory services | 30 | 13.5 | 70 | 31.4 | 25 | 11.2 | 89 | 39.9 | 9 | 4.0 | 2.30 |
| x | Information and Referral Services | 51 | 22.9 | 61 | 27.4 | 60 | 26.9 | 37 | 16.6 | 14 | 6.3 | 3.12 |
| xi | Document Delivery | 49 | 22.0 | 71 | 31.8 | 52 | 23.3 | 37 | 16.6 | 14 | 6.3 | 3.05 |
| xii | Bibliotherapy | 11 | 4.9 | 28 | 12.6 | 46 | 20.6 | 28 | 12.5 | 90 | 40.4 | 2.22 |
| xiii | Current Awareness Services | 48 | 21.5 | 45 | 20.2 | 91 | 40.8 | 15 | 6.7 | 24 | 10.8 | 3.25 |
| Weighted mean = 2.75 | | | | | | | | | | | | |

Source: Field survey 2021

Decision Rule: 1-1.49 = VL (Very Low), 1.5-2.99 = L (Low), 3.00-3.99 = H (High), while 4.0-5 = VH (Very High) the criteria mean =2.50 (that is $5+4+3+2+1=10 \div 4 = 3.0$). This implies that any score less than 2.5 is considered low.

An observation of the result in **Table 3** revealed reference sources were the most frequently used reference services by postgraduate students in Kenneth Dike Library as indicated by 78 (35.0%) of the respondents who claimed they used the reference sources daily, 61 (27.4%) claimed they used reference sources weekly, 59 (26.5%) used it monthly and only 8 (3.6%) of the respondents claimed they never used the reference sources in Kenneth Dike Library. In terms of mean score, reference sources had the highest mean score of 3.56. In fact, the three most frequently used reference services by postgraduate students were reference sources Internet facilities (mean = 3.56), On-line Public Access Catalogue (mean = 3.44) and Current Awareness Services (mean = 3.25). On the other hand the three reference services which were least frequently used by postgraduate students in COVID-19 era in Kenneth Dike Library were bibliotherapy (mean = 2.22), Reader's Advisory services (mean = 2.30) and inter-library loan (mean = 2.13). Overall, using the decision rule, the weighted mean was 2.75 which falls under the low level of frequency of use. It is therefore concluded that the frequency of use of reference services by postgraduate users of Kenneth Dike Library in COVID-19 era was low. This could be attributed to the fact that most of the learning and research activities were done virtually.

RQ 3: *What is the impact of COVID-19 pandemic on use of reference sources and services by postgraduate users of Kenneth Dike Library?*

Respondents were asked to indicate how the restriction occasioned by COVID-19 pandemic had affected the use of the following reference services and sources in Kenneth Dike Library. The result is presented in **Table 4**.

Table 4. Impact of COVID-19 pandemic on use of reference sources and services

| S/N | Reference Services | Great extent | | Moderate extent | | Low extent | | Not affected | | Mean |
|------|--|--------------|------|-----------------|------|------------|------|--------------|------|------|
| | | N | % | N | % | N | % | N | % | |
| i | CD-ROM literature search | 67 | 30.0 | 123 | 55.2 | 27 | 12.1 | 6 | 2.7 | 3.33 |
| ii | OPAC (On-line Public Access Catalogue) | 6 | 2.7 | 149 | 66.8 | 57 | 25.6 | 11 | 4.9 | 2.67 |
| iii | Internet: Reference tool | 24 | 10.8 | 144 | 64.6 | 38 | 17.0 | 17 | 7.6 | 2.78 |
| iv | Selective Dissemination of Information | 35 | 15.7 | 142 | 63.7 | 27 | 12.1 | 19 | 8.5 | 3.15 |
| v | Media | 37 | 16.6 | 103 | 46.2 | 58 | 26.0 | 25 | 11.2 | 2.68 |
| vi | Reference Sources | 44 | 19.7 | 73 | 32.7 | 67 | 30.0 | 39 | 17.5 | 2.55 |
| vii | Inter-library loan | 33 | 14.8 | 147 | 65.9 | 17 | 7.6 | 26 | 11.7 | 2.34 |
| viii | Ready reference | 19 | 8.5 | 148 | 66.4 | 50 | 22.4 | 6 | 2.7 | 2.81 |
| ix | Reader's Advisory services | 42 | 18.8 | 138 | 61.9 | 39 | 17.5 | 4 | 1.8 | 2.28 |
| x | Information and Referral Services | 31 | 13.9 | 148 | 66.4 | 35 | 15.7 | 9 | 4.0 | 2.73 |
| xi | Document Delivery | 40 | 17.9 | 114 | 51.1 | 44 | 19.7 | 25 | 11.2 | 3.19 |

| | | | | | | | | | | |
|-----------------------------|----------------------------|----|------|-----|------|----|------|----|-----|------|
| xii | Bibliotherapy | 27 | 12.1 | 125 | 56.1 | 54 | 24.2 | 17 | 7.6 | 2.43 |
| xiii | Current Awareness Services | 29 | 13.0 | 142 | 63.7 | 35 | 15.7 | 17 | 7.6 | 2.72 |
| Weighted mean = 2.74 | | | | | | | | | | |

Source: Field survey 2021

Decision Rule: 1-1.49 = VL (Very Low), 1.5-2.49 = L (Low), 2.5-3.49 = H (High), while 3.5-4 = VH (Very High) the criteria mean =2.50 (that is $4+3+2+1=10 \div 4 = 2.5$). This implies that any score less than 2.5 is considered low.

Results in **Table 4** revealed that COVID-19 pandemic has greatly affected postgraduate students' use of reference services in Kenneth Dike Library, University of Ibadan. This is evident in the responses and means recorded as shown in the Table. For instance, CD-ROM literature search, Document Delivery and Selective Dissemination of Information had mean scores of 3.33, 3.19 and 3.15 respectively which all fell into high level of impact according to the decision rule. The overall weighted mean is 2.74 which fall under high level of impact. This implies that COVID-19 Pandemic has high level of impact on postgraduate students' use of reference services in Kenneth Dike Library, University of Ibadan.

5. Discussions of Findings

The result of this study showed that a significant number of the postgraduate users of Kenneth Dike Library, University of Ibadan participated in the study as their responses were analyzed and used for this study. The postgraduate users of KDL reported that the three most available reference services mostly available for them during the COVID-19 pandemic operation of Kenneth Dike library were Current Awareness Services, reference sources and On-line Public Access Catalogue. On the other hand, the finding also revealed that the three types of reference services which were rarely available during the COVID-19 pandemic operation of Kenneth Dike Library were Bibliotherapy, Inter-library loan and Ready reference. This means that only limited types of reference services were available for postgraduate students in Kenneth Dike Library during COVID-19 pandemic. This finding corroborates Ifidon and Ifidon (2008), Atanda and Uchendu (2017), and Flier (2019) that reference service is that part of library administration which deals with the assistance given to the readers in their use of the resources of the library the use pattern of reference services of the postgraduate students in Kenneth Dike library seems to be a little different from pre-COVID era as observed by Atanda and Uchendu (2017).

Similarly, the finding on frequency of use of reference services and sources by postgraduate students in Kenneth Dike Library revealed that the three most frequently used reference services by postgraduate students were reference sources such as internet facilities, On-line Public Access Catalogue and Current Awareness Services. On the other hand the three reference services which

were least frequently used by postgraduate students in COVID-19 era in Kenneth Dike Library were bibliotherapy, Reader's Advisory services and inter-library loan. Finding further indicated that the frequency of use of reference services by postgraduate users of Kenneth Dike Library in COVID-19 era was low. This could be attributed to the fact that most of the learning and research activities were done virtually. This is in line with the position of Abubakar (2021) and Olum et al. (2020) that e-platform can offer educational content and various tests supporting these contents, can facilitate access to necessary relevant information, and most importantly, provide an interactive environment for postgraduate students and all categories of reference services users of the library during COVID era.

This is evident in the responses and means recorded as shown in the Table. For instance, CD-ROM literature search, Document Delivery and Selective Dissemination of Information had mean scores of 3.33, 3.19 and 3.15 respectively which all fell into high level of impact according to the decision rule. The overall weighted mean is 2.74 which fall under high level of impact. This implies that COVID-19 Pandemic has high level of impact on postgraduate students' use of reference services in Kenneth Dike Library, University of Ibadan.

6. Conclusion

Reference services as integral part of library and information services rendered by academic libraries have been greatly affected by the new normal occasioned by COVID-19 pandemic. As such, postgraduate students who are researchers in their respective disciplines were not spared in this phenomenon. There is therefore the need for library management to adopt new modes of reference services to their numerous users in general and postgraduate students in particular so as to meet the information needs irrespective of the restrictions brought about by the COVID-19 pandemic.

7. Recommendations

In view of the negative impact occasioned by COVID-19 pandemic, the following recommendations are considered necessary to bridge the gap in rendering effective reference services.

The library management should consider the adoption of virtual reference services (VRS) in addition to the conventional mode of reference services. This will enable the library to provide services such as document delivery, selective dissemination of information, bibliotherapy and other reference services adversely affected by the pandemic.

The library users should be trained on how to take advantage of the COVID-19 pandemic to learn new skills in the digital space that will eventually optimize the usage of the library remotely.

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