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Towards an Innovative Approach in Libraries and Information Niche during Covid-19: a Rapid Review of Various Exercises and Endeavors by Contemporary Library Professionals

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Towards an Innovative Approach in Libraries and Information Niche during Covid-19: a Rapid Review of Various Exercises and Endeavors by Contemporary Library Professionals

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Abstract

Purpose: The study aims to review the literature published on the effects of COVID-19 on libraries and library professionals. It provides a glimpse of the actions taken by various kinds of libraries and associations in India and western regions. **Research Methodology:** The rapid review method is adopted for the study as it provides information rapidly and timely. The information obtained through this method is beneficial for the professionals and the stakeholders. It gives an insight to the libraries to follow the practices adopted by the academic libraries in western regions and India. **Findings:** The findings revealed that libraries across the globe have emerged as knowledge hubs with reframed tools and techniques suitable during the pandemic. It has supported the academic community by providing the users' information and settling down into a new normal situation. It is also found that libraries have left no stone unturned to reach the users and meet their needs. **Conclusion:** Technology played a significant role in encouraging library professionals to stay connected with their users. The paper has been able to bring out various experiences from libraries and professional interactions spread across the literature. The visibility of libraries and provisions of information services are possible due to the application of technologies and creating a new normal.

Keywords- COVID-19, libraries, library professionals, e-resources, digital technology

1. Introduction

Worldwide, the effect of COVID-19 has been borne by all sectors, including the education division that led to the closure of the academic institutions. The emergency crisis has

transformed the landscape of education systems in all the countries globally. This situation provided no choice to the organizations but to work remotely. The academic libraries updated their websites, providing information about the library resources to meet the needs of the academic community. Few measures were taken by the libraries, such as posting information on COVID-19 related aspects, preparing tutorials and manuals on the access of resources, organizing awareness sessions.

The technology adopted by the libraries has strengthened its role in supporting the academic community. The impact of COVID-19 has been experienced in all spheres of life, from education, medical, religious practice, social activities, economic activities, and so on (Adeyemi, 2021). Libraries are considered the backbone of the organization, and the role of the library professionals is significant in enriching the knowledge. Library personnel was working remotely and providing e-services to the users, interacting and understanding the users' requirements. Libraries left no stone unturned to stay connected with their users by adopting digital technologies and setting up the infrastructure suitable for the situation.

The objective of the present paper is to provide an outline of the studies on the impact of COVID-19 on libraries and library professionals conducted through various mechanisms across the globe. The studies attempted to cover the efforts of different libraries during the emergency, the role of digital technology, services provided to the users, and the contribution of libraries and librarians to support the academic community. The study would be beneficial for the library professionals and stakeholders to have a glimpse of the efforts undertaken by the libraries not only in India but also in Western countries.

2. Methodology

The rapid review method has been considered for the study to accomplish the goal of amalgamating the literature. "Rapid reviews are a form of knowledge synthesis in which components of the systematic review process are simplified or omitted to produce information promptly" (Tricco *et al.*, 2015). Though kinds of reviewing methods are helpful for literature

studies and discussions, the rapid review methods have become influential in a short span to study a specific area. They are beneficial for providing an overview of important information in a time-bound manner. The literature published in various journals during 2020 and 2021 focusing on the different aspects of libraries and COVID-19 is considered for the study.

3. Endeavors of Libraries Worldwide

The pandemic exposed the gap in the use of digital technology among the rural and urban residents in Pakistan (Baloch and Musyani, 2020; Nakhoda, 2020). The library professionals in Jamaica experienced challenges in terms of inadequate staff and e-resources collection as they were partially prepared. The staff that experienced anxiousness and stress were provided psychosocial support through remote counseling, training programs, and webinars to face the pandemic conditions. The observance of the functioning of various academic institutions in South Africa reflects the competitiveness as the libraries have been viewed as a space to interact and communicate with peers and cater to the users' needs. The digital aspects, including the inclusivity of technologies, have transformed the physical space into virtual space, which provides access to resources, anytime, anywhere. The digital libraries are filling up the empty-headed space created by the pandemic due to the closure of the libraries (Chisita, 2020). The unpreparedness of South African libraries in context with the pandemic crisis has expressed the implementation of virtual classes as a solution. The technological assistance could have been proved to ease the interruption in academic perspectives caused by COVID-19 (Mhlanga and Mloi, 2020). Covid situations brought the issues such as innovative services, technological facets, ergonomics, and unexpected conditions into the library planning. According to the studies mentioned, the partnership among various South African government departments is tied to make certain the commencement of virtual learning in the time of lockdown.

The digital libraries are playing supportive roles among the organizations to ensure the effective rendering of library services to the users during the pandemic (Kosciejew, 2020). It is observed

that virtual platforms and conferencing methods emerged as alternative mechanisms. This kind of technical support has provided innovative ways to initiate and sustain significant professional developments. The applications such as Zoom, academic, social network sites (ASNS), and group meetings due to Microsoft teams, Skype support routine office tasks, and remote learning (Mhlanga and Moloi, 2020) visualized in HEI in South Africa.

The adoption of 4IR (digital transformation) in the South African education region has opened new vistas for promoting the different levels of education during nationwide lock-down during the pandemic. The survey of selective libraries in the US revealed the access to online content in academic and most public libraries was provided due to a shift in focus to the digital environment through online services and various types of training sessions, book discussions, etc. Such professional activities have been possible through applications like Zoom video (Ballard, 2020). However, Zoom-bombing is a significant challenge where the malicious users disrupt the virtual classrooms or discussions. Sometimes, disruptive intrusion occurs during video meetings or conference calls (Dutton and Erola, 2020; Lorenz and Alba, 2020). These interventions have opened new areas of researches as well as limiting human errors.

The collaboration between the various platforms and libraries also observed the new vistas. The practices such as the publishers supported the academic community by providing facilities such as free online access to digital resources, supportive digital lending, and direct document delivery without restrictions. The COVID-19 situation in the European nations has conscientious stakeholders and library professionals on many hindrances that may prevent access to knowledge.

The libraries and librarians assured users that remote access services would be provided during the pandemic (Sabinet, 2020; Sukula and Babbar, 2020). The publishers supported the academic libraries in South Africa by providing free access to the content and personalized collections to users. The digital libraries in the academic institutions located in South Africa continued to provide online services during the crisis in various ways such as research support, technical

support, access to e-resources, other open educational resources, and free access to the content from the reputed publishers to support the community. The positive response of the librarians assisted in rendering the services efficiently to the user's (Gill and Gill, 2020).

Wallace and Dollery (2021) considered the impact of the closure of the municipal libraries in New South Wales (NSW) from two perspectives: its effect on the economic circumstances of local authorities and its impact on the spread of the COVID-19. It is observed that instead of complete closure, partial closure can be considered with some restrictions on the use of the library. Boston University Academy (2020) highlighted the university's closure to avoid the spread of COVID-19, yet there were provisions for online communications, query solving mechanisms, etc., to support the academic community. The sensitization and spread of awareness are the tools that assist in minimizing the pandemic impacts on higher education users in Nigeria. The study focused upon the global effects of COVID-19 on university libraries and methods adopted for sustainable services towards library users (Annune *et al.*, 2020). Neog (2020) sent a structured questionnaire to the University Librarians of four Assam universities under the top 100 ranking in the India Rankings, 2019 by NIRF (National Institutional Ranking Framework). The results disclosed that WhatsApp is the most preferred social media tool for disseminating library services during the pandemic. The research also highlighted that libraries delivered mostly open access resources. The study recommended that libraries should post information to create awareness among the users about the COVID-19.

4. Services provided to the users

Academic libraries strived hard to meet the requirements of the users by offering digitized information. The publishers and vendors have supported the libraries by making the content openly accessible to the academic community. The librarian shared that the document delivery service required scanned chapters provided through emails (Rafiq *et al.*, 2021). Shi, Li, and Luo (2021) conducted a qualitative study using journaling and in-depth interviews to evaluate the use of the library and the requirements of Chinese college students during the pandemic. The results

revealed a lack of familiarity to use the library's e-resources, and the support is much needed from the library that could assist them in enhancing their productivity and reduce the concern in the new process of learning. Park and Oh (2020) noted the impact of COVID-19 on the environment surrounding the library and explored the libraries' response activities. The news media and social media issues were detected using text mining techniques to engage environmental changes surrounding the library. 1,852 news reports and 222,983 tweets related to the library during the COVID-19 were scrutinized to derive the major issues. With this, implications were derived: escalation of e-book lending, revamps of library space, and advancement of online services. The future services were discussed by selecting representative instances of services provided virtually. Yang *et al.* (2020) identified the practices adopted in implementing user services in various Chinese libraries in response to the emergency, presenting the inherent challenges and concerns associated with delivering services during the crisis. It was found that over 94% of Chinese academic libraries posted information related to COVID-19 on their websites. The majority of the libraries have adopted remote access facilities and online research support services. The use of VRS (Virtual Reference Service) communication technologies can reduce the impact of COVID-19 in catering to the requirements of the users. There should be a proper space to extend social media tools, such as Facebook Express Wi-Fi, Facebook Free Basic Model, and Twitter, in the academic libraries VRS (Abubakar, 2021; Sukula, Babbar and Chand, 2021). The literature has reflected various efforts made by libraries at different levels to support academic needs, research support services, and awareness.

Mandrekar and Rodrigues (2020) used a questionnaire method to collect the data about the effective use of Social Networking Sites by the libraries for marketing & promoting library products and information services to meet the users' needs during the crisis. The study revealed that Social networking sites played a significant role in promoting the products and library services during the lockdown. The majority of the libraries have adopted digital technology such as library websites, Facebook, and WhatsApp tools to promote the services and products to stay

connected with their users. During the emergency period, it was a challenge to provide services to the users, and the technology became a savior for the institutions of India. The information was collected from the contents posted on the web pages by the Indian Institutes of Technology (IITs) libraries. The study highlighted the necessary initiatives to meet the needs post lockdown (Dadhe and Dubey, 2020).

5. Use of Library Resources

The online library resources have been highly used by the users during the crisis. The usage escalated, and the libraries subscribing to the online resources were better positioned to meet the users' requirements. Libraries played a pivotal role during the lockdown by supporting the communities in providing all kinds of assistance in their research endeavors. The pandemic provided an opportunity for the libraries to transform the library spaces, services, and other aspects of the profession.

Connell, Wallis, and Comeaux (2021) compared the usage of library resources at three university libraries before and after the pandemic. The findings revealed that the usage of all the three libraries' websites, discovery tools, and databases decreased during the COVID-19. Virtual communication has increased, and all three libraries have experienced the same. Henda (2020) explored the use of e-resources by the faculty members of Kuwait University during the COVID-19 and the purpose for using the resources and the challenges encountered by them. The study disclosed the increased usage of e-resources during the pandemic. The academic community used the e-resources in writing the research articles. The results revealed that the non-users are keen to enhance their learning about the online resources and their use.

6. COVID-19 and Digital Technology in libraries

University libraries have supported online teaching and learning to cater to the needs of scholars. Since last year, digital technology has been used in almost every sector; the health sector is also among them. Ting *et al.* (2020) reported that different digital technologies exist that can be used

to enhance public health strategies. The successful implementation of digital technologies in the health sector to handle the challenge has increased the people and governmental acceptance of digital tools in other areas of healthcare. Pambayun (2021) conducted the bibliometric assessment to collect the data from 66 research publications from the Scopus database. The study reported that 23 (34.8%) out of 66 publications were significant to digital libraries during the pandemic. The USA had made the highest contribution, the publisher 35% open access publications are Emerald. Nawaz, Gomes, and Saldeen (2020) considered the databases Pubmed, Baidu, Scopus, and Google Scholar and introduced a computerized-based methodology to assist the libraries. The study provided artificial intelligence applications to library services and resources to overcome the emergency. The libraries need to expand the infrastructure to provide quick services to users.

7. Efforts of Associations

The information is gathered about the circumstances in which libraries are functioning globally since the outspread of COVID (IFLA, 2020). The information about the repercussions of COVID-19 on the webpage is presented and shared various ways to tackle it (American Library Association, 2020). A manual is prepared to motivate the different types of libraries in distance education, measures to be taken, and preparing the librarians to reopen libraries (Association of College and Research Libraries, 2020). The webpage is designed to post information related to COVID-19 resources (Association of Research Libraries, 2020). A web portal is designed to communicate the library's services and information about the measures taken to overcome the emergency (Australian Library and Information Association, 2020). A “Statement on the GLOBAL COVID-19 Pandemic and its impact on Library Services and Resources” has been issued by the International Coalition of Library Consortia (2020) on behalf of many library consortia worldwide. Globally, library associations continued to be a prototype in the development of the literature. They have designed several online portals, web pages to record

and converse their challenges and achievements in rendering library services during an emergency (Kosciejew, 2020; ALA, 2020; IFLA, 2020; ACRL, 2020; ACURIL, 2020).

8. Challenges and Opportunities

The library professionals worked from home and felt overburdened due to 24*7 connectivity with no formal working environment. University librarians experienced the digital gap, slow internet speed, and lack of digital literacy skills, which were hindrances in the transition from physical to digital. The delivery of physical and online services was a major challenge (Rafiq *et al.*, 2021). The university libraries encountered social, financial, and technical challenges. The exceptional cases to be studied during this pandemic are the lack of technological applications worldwide, remote access to subscribed resources, institutional repositories, and projects are undertaken collaboratively. Further, the slow internet speed and mobile access in rural areas affect the capability of the students to access online classes and e-resources of the library (Baloch and Musyani, 2020; Nakhoda, 2020).

The libraries have started gradually to shift from physical to e-collections before the pandemic. The needs and information-seeking behaviors of the users are also got affected during the emergency. The paradigm shift from print to digital in the libraries is a difficult task for developing countries. The various issues encountered by underdeveloped countries like finance, infrastructure, technology, and limited electronic resources. Many libraries have already adopted different tools and techniques to render the services efficiently when an emergency arises for the users of the library residing in the rural areas or the underdeveloped regions where the speed of the internet is a significant challenge to access the resources. The local libraries cannot afford the digital shift, and a hybrid approach would be better in Pakistan (Rafiq *et al.*, 2021).

The librarians experienced some challenges while working from home, such as online fatigue, lack of devices, lack of digital skills and competencies to cope with the digital environment. A new trend was visible to host the webinars, workshops, and conferences, orientation programs

online. Librarians disclosed that they encounter problems reaching the students with restricted internet access and who are short of devices to access online resources.

COLINET communicated various lacunas and the emerging technological issues by the students that hindered the use of e-resources. They are as follows:

- Lack of searching skills to retrieve the information from the online databases
- Lack of online resources
- Limited computer knowledge and competent skills to retrieve the relevant information from the databases.
- Students' inconvenience to use the online medium for an extended period.
- Library professionals and students have limited or no access to the internet (Pryce *et al.*, 2021).

Chakraborty and Jana (2021) discussed the impact of the pandemic on academic libraries in India. The four areas were identified: space, collection development, service, and the management system to discuss the challenges and opportunities they encountered due to COVID-19. There are certain reflections of the services to be considered during the crisis, such as remote access service, updated library website, management of digital resources, online learning, use of digital access tools, and information literacy training. The library management needs to focus on safety, work from home culture, training of staff, open and online educational resources. Remote online teaching was adopted across the globe, and new measures were followed to engage the students. The technology has well supported in balancing the crisis and reducing the impact. The different modes like video and telephone consultations are considered safe now (Iancu *et al.*, 2020).

9. Role of Libraries and Library Professionals

The responsibilities of the library professionals include promoting reading among the users and providing quality reading material to assist people living in seclusion due to the crisis. The

library professionals can host awareness sessions to update the information about the pandemic. The libraries have redesigned their role during the emergency crisis before the pandemic, and few universities offered online education. This pandemic has offered various challenges and opportunities at the same time to library professionals to reshape their roles and services to cater to the needs of the academic community (Rafiq *et al.*, 2021).

Ali and Gatiti (2020) outlined the pandemic related lateral responsibilities of libraries:

- Creation of health awareness through wide dissemination of the preventive measures and concerned guidelines.
- Supporting the academic community by providing the latest information
- Catering to the needs of the library users.

During the emergency period, libraries have also collaborated with health authorities in a health crisis due to pandemics. Health care librarians have collected the emerging, and relevant information related to health evaluated information services related to the pandemic and delivered precise information to meet the urgent needs of the health care workers (Featherstone *et al.*, 2012).

The emergency highlighted the two sides of the same coin, as the library professionals faced challenges and opportunities simultaneously. Libraries have the opportunity to present their value in the education and research process. The hosting of online meetings and other events provided the librarians with the opportunity to join from their workplace, and as a result, more numbers can partake. The professionals have the opportunity to participate in the e-programmes both at the national and international levels. With the identification of the skills and competencies of the staff, the library can affirm its value, and its role is visible during the crisis (Pryce *et al.*, 2021). Smith (2020) discussed technological innovations introduced to reach the vulnerable communities beyond the library premises and encourage online engagement while patrons are at home in isolation during the lockdown period. The study revealed that the challenges and opportunities are different, but public libraries retrain their objective to support

digital literacy and act as gateways to information. The library staff that supports research and innovation should ensure that this continues in the future. The library professionals acquire competencies to manage and disseminate the information, and they can provide authentic and reliable information to the academic community through the online mode.

The library professionals acted swiftly to the emergency call and supported the online education to stay connected with the academic community. The Public Libraries in Pakistan are struggling to survive due to a lack of resources, facilities, and ICT infrastructure. Digital platforms are used across the world to connect with users. Library professionals play a crucial role during the crisis and assist the academic community by providing the required information (Bhati and Kumar, 2020).

10. Road to New Normal

The main components that must be considered to follow social distancing norms when libraries physically reopen (Thill, 2020)-

- Regularly sanitizing the common areas, thus maintaining the hygiene
- Staff needs protective gear when offering services
- Teleworking communication
- Motivating staff to regularly test for COVID-19

The strategies should be laid down when the libraries are made accessible to the users. The university libraries need to be sanitized regularly and sensitize users to restrain the effects of COVID-19. Annune (2020) mentioned a few strategies:-

- The University library should be sanitized properly to restrict the transmission of COVID-19.
- The libraries should ensure the provision of sanitizers at significant places for the ease of the users.
- Display of literature and COVID-19 related information for the users.

- COVID-19 jingles through the audio-visual mode to enlighten the users.
- The sitting arrangement in the University Library should be arranged to ensure social distancing.

11. Impact on society

The repercussions of COVID-19 on Society are irreparable and beyond the description of words. World Health Organization (WHO) announced the COVID-19, a deadly disease that had a fatal impact on an individual's health. Social interactions and relations are a significant part of humans' life. The emergency caused due to the COVID-19 put restrictions and taboos to interact socially and maintain a social distancing to avoid the containment of the disease. Singh and Singh (2020) reported that the absence of social connections in human life leads to a situation where a vacuum is filled with isolation, apprehensions, depression, health issues, and many others, which had a substantial impact on the life of an individual and a society as a whole. Environmental pollution is a primary concern of society leading to the various vectors borne infectious disease. Due to the outspread of COVID-19, the lockdown was declared in almost every city, academic institutions were closed, and religious trips were canceled. The efforts to restrict the transmission of the virus by limiting the movement have a positive effect on environmental pollution. The less movement of vehicles leads to improved air quality by leaps and bounds. In many cities, the locals experienced a clear sky and clear rover water for the first time (Verma and Prakash, 2020). Chakraborty (2020) reported significant evidence that COVID-19 can cause fear, panic, anxiety, and xenophobia.

12. Recommendations

Based on the literature reviewed, the following recommendations are put forward for the professionals and stakeholders:-

The university library should implement the virtual reference service (VRS) to assist the users during an emergency. To render the VRS smoothly, the staff should be skilled and competent to

handle the digital technology. The staff needs to be trained by organizing workshops/seminars/training programmes to cater to users' needs (Abubakar, 2021).

Jain (2013) recommended that the libraries and librarians put together a new roadmap by advancing their knowledge about new technologies, skills, and competencies. There is an urgent need for all the governments in all the countries to invest profoundly in infrastructure and technology on a priority basis.

13. Conclusion

Since last year the COVID-19 waves have affected almost everything significant for human life. There is a swift change in delivering the library services due to the burst of the COVID-19 pandemic, social distancing norms, and lockdown preventions were enforced in the initial phase of the emergency. It is observed from the review studies that libraries are appearing as a new category of knowledge hubs with redesigned tools and technologies and are competent of playing a significant role in encouraging the research to reconcile into a new normal situation. The pandemic situation caused by COVID-19 had impacted the usage of the physical library. The library professionals acted swiftly as soon as the lockdown was announced in various countries. The infrastructure was developed according to the situation, and the technologies were adopted to reach out to the users. The users were served remotely by using research support technology tools and other platforms that assisted in organizing the webinars/workshops/orientation programmes. Technology tools played a significant role in supporting the library professionals, and it had equally addressed the problems of reference services in the libraries during COVID-19.

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