

**UNIVERSITY LIBRARIES DURING COVID-19: OPPORTUNITIES AND CHALLENGES: A CASE STUDY OF MEERUT REGION OF UTTAR PRADESH, INDIA**

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**Abstract**

The COVID-19 pandemic has presented unique challenges in the educational sector and has forced students, policy makers and service providers including the librarians to adopt technology as a valuable option to ensure fulfilment of the educational needs of the stakeholders. The present study is an effort to understand the impact of COVID-19 on libraries, preventive measures adopted, special services offered, and to know the mode of information dissemination to users. A well-structured questionnaire was prepared comprising collective questions. Question covering the impact of covid-19 pandemic on the university libraries and the extent of usage of physical and digital resources and distributed among the librarians of the respective university libraries and the response were tabulated carefully on the Microsoft excel sheet. The results were analyzed, organised and properly plotted the graph for each parameter for easier understanding. The study reveals that Librarians had to remold themselves and stirrup all the skills they had to come up with innovative plans to walk through the pandemic to render the services to the user community.

**Keywords:** COVID-19, University Libraries, Opportunities, Challenges

**Introduction**

The impact of COVID- 19 on university library services is a less researched area. University libraries in making decisions on the adoption of digital and electronic services to support students' e-learning programs. Through exploration and reflection, this review contributes to a newly emerging body of knowledge on university library services during the outbreak of corona virus.

University libraries have abandoned their traditional methods since students have deserted their campuses due to the COVID-19 pandemic. Universities have started to offer online teaching and learning approaches to keep students interested at 5 home and fulfill their academic cycles. Following COVID-19, some universities are considering adopting a hybrid teaching technique

that combines traditional and online approaches. As a result, university libraries' traditional methods of serving users' information needs (which require actual interaction between the library and users) have become obsolete during the present epidemic (Ifijeh & Yusuf, 2020). The concept of online education is not new to universities in the developed world such as Europe, North America, and parts of Africa and Asia. The outbreak of the COVID-19 epidemic, on the other hand, has forced universities all over the world to adopt online education (Czerniewicz, 2020). This study is particularly focusing on the impact of COVID-19 on the university library services and how they managed it in this situation.

For many libraries, COVID-related shutdowns have reinforced the importance of the library as a source for provisioning digital content and for supporting online pedagogy, as demand from faculty and students for online content grew. Many librarians addressed this by shifting resources to providing further support for teaching, whether through digitization of course materials, working with instructors to create or manage online courses. Among the concerns raised by library leaders were the long-lasting impact of having run libraries absent their physical spaces, the impact on staff morale, and an inability to move ahead with new plans.

The impact of the COVID pandemic in 2020 had a rapid and severe impact on institutions of higher learning. In March 2020, many campuses acted quickly to send students home as the extent of the health risk became clear and schools rapidly developed plans for remote and hybrid learning which were to last throughout the academic year. With no clear solutions on the horizon and much uncertainty about Fall 2020, many students were required to stay away from campuses, or chose to do so. And for many of those who want to continue during the academic year 2020-2021, course work was often done partly or entirely remotely, via online platforms. How did academic libraries respond to the crisis? The SPARC survey on the impact of COVID was intended to address academic libraries' budgetary challenges and approaches, with a focus on understanding how they affected attitudes towards content, collections, and open initiatives. The survey and follow-up interviews aimed to answer a series of interconnected questions, including: How did librarians determine how to manage them while delivering service to the campuses they serve? With most courses moving quickly online, what impact did this have on the materials required by students and faculty and how did this change the work of librarians in supporting them? With digital resources becoming more important, how did this affect librarians' investments in various open resources? Finally, which of these changes do librarians anticipate are likely to be long-lasting? Did the COVID era require one-time fixes that will quickly fade, or was it simply an accelerant to permanent changes already underway?

### **Opportunities and Challenges of COVID-19 Pandemic**

- Paradigm shift from physical to online environment
- Change of mindset among library staff and library users
- Increase in use of Internet and also use of digital library materials.
- Improvement in Information & communication Technology (ICT) Infrastructure too many online webinars/workshops/ meetings.
- Restricted movement- save fuel and no pollution
- Better environment and reduced pollution

- Thermal scanners, hand sanitizer, face shield, masks, gloves, disinfecting spray & wipes etc.

### **Library operations and services-**

Libraries contain print and electronic materials but with time new ways of information has emerged and libraries are changing accordingly. Library staff works remotely on their library's websites, pointing students to the wide variety of resources available online. The global networking environment has enabled users to receive virtual help in the library from their desks, regardless of their physical location. Libraries which increasingly include these remote users, have attempted to provide reference services without face to face communication, attempting to meet the needs and expectations of the users. Libraries strive to continuously support researcher. Library staff can create an online guide to provide remote assistance in finding. Drexel University library, for instance, is providing access to valuable tools and resources to support researchers by sharing links to find funding opportunities & partnerships. Researcher Data Management Support. Writing & Publishing and Research Guides & Tutorials. A virtual meeting with a book author is a great way to connect readers with the magic of book reading. The library manages book writer virtual meetings and uploads the schedule of the meeting on the website. Libraries today, have almost been working 24 hours a day; they are committed to delivering remote services to their users under incredibly complex circumstances. Libraries are not just physical spaces anymore; In fact, many of the libraries, which had closed their buildings, had could continue to Interest with user communities, and participate in virtual programming. The NDL India is established at the Indian Institute of Technology Kharagpur, which is collaborating with libraries in Indian educational institutions, public libraries as well as big International libraries to get free access to book on a wide range of subjects through their platform (Bashir et al., 2019 and Singh, 2022).

The library can constantly be updated with free/open digital resources, including e-books, e-journals, e-Theses & Dissertations, MOOCs, and Open Course Wave widely recognized by experts in the field. Key subject resources are easily accessible online. The ebook/audio book mobile apps are playing an important role in extending the library's electronic collection. The library can aware of the users regarding mobile apps so that they can download e-books/audio books and videos by using the preinstalled app on their phones and putting the huge collections of the library in their pockets. To assist users in these uncertain times, the library can also provide free links to information resources maintained by other organizations. Resources available between not for profit organizations are often seen as a response to limited resources and to increase client and operational needs.

### **Universities Profile Surveyed**

1. Chaudhary Charan Singh University, Meerut
2. Swami Vivekanand Subharti University, Meerut
3. IIMT University Ganga Nagar, Meerut
4. Sardar Vallabhbhai Patel University of Agriculture & Technology Meerut
5. Shobhit University, Meerut

## Review of Literature

**Ali & Gatiti (2020)** explain in their work “International Perspectives and Initiatives” that social distancing can help to prevent the spread of COVID-19, yet the role of the librarian is the key to support public health awareness and in supporting research teams, to provide routine services to regular library users.

**Aristovnik et al. (2020)**, in their survey, found that higher education students’ lives have been impacted, leaving them confused about their prospects. Students found it difficult to adjust the digital transition of the academic curriculum due to a lack of preparedness for the COVID-19 pandemic; along with their studies, their personal and emotional behavior was influenced.

**According to Asif & Singh (2020)**, the pandemic has affected the users in finding the information they need from the libraries due to the worldwide lockdown. Preventive measures such as using the sanitizer, maintaining social distancing, wearing the mask at all times, making use of online platforms for resource sharing are to be taken by the libraries. By following health and hygiene habits, keeping the surfaces clean, including library computer desks, switches, doorknobs, advising sick people to stay at home, and limiting the library user numbers in the reading rooms could curb the spread of COVID-19

**Bhati P. (2020)**, in his study on “Role of Library Professionals in a Pandemic Situation Like COVID-19,” depicts that library professionals have many challenges to face and to overcome these challenges, a librarian should have very good knowledge about everything, service-oriented mentality, presentation skills, understanding, and cultural diversity, managerial and marketing skills along with technical and communication skills. The current situation of pandemics demands the librarian to play a multi-dimensional role to meet the demands of the users. Social distancing and other approaches in maintaining hygiene premises can promote better use of library resources.

**Bilawar B. P. (2020)**, in his work “Lockdown Period and Information Sources,” explains the periods of COVID-19 lockdown and the impact it had on libraries and he raises points about the impact on the declined economic cycle, employment reduction, and restriction of traveling to important places. The author suggests ways to support online users with the help of social media and government-aided information sources. The author explains that the lockdown period has made it clear about the importance of the usage of digital resources.

**D. Mestri (2020)**, in the study “Reopening libraries in COVID-19 pandemic challenges and recommendations,” has suggested that the libraries have to adopt new methods to prevent the spreading of COVID-19 until the virus is part of human life. The author suggested different steps to breaking the chain from the virus to spread in library premises. Formulated four levels of library functioning based on the number of active cases of COVID in the place; they are more or less usual, few restrictions, minimum service, and the complete closure of the library at places where the number of COVID-19 cases is above 5000.

**Dadhe & Dubey (2020)** have conducted a study on library websites of the Indian Institute of Technology of all the 23 library webpages and found the way the libraries are providing services to the users, and the ways the libraries have adopted the COVID-19 situation, and made a list and explained the preventive measures that are to be taken to combat coronavirus. They found that remote access to e-resources, free and expanded services, and open access to the users can help in supporting the users.

### **Objectives, Scope and Methodology**

COVID-19 pandemic necessitated teaching and learning in online mode instead of offline mode and students were attending online classes from their home/hostels as one of the preventive measures in preventing the spreading of the coronavirus in colleges and universities. COVID-19 pandemic also interrupted access to physical resources of the libraries as entry to the libraries was restricted to limited hours. All the users were more dependent on electronic resources than print resources as access to libraries was restricted during the COVID-19 pandemic. Users of the libraries were of two categories, i.e., users who were using the libraries remotely and the users who were visiting the library by following COVID-19 precautionary measures taken by the University libraries of Meerut region. Meerut region libraries provide access to a vast collection of both print and electronic resources. University libraries of Meerut region were subscribing to almost all important online databases having e-books and online journals and remote access facility has been extended to the users even before the COVID-19 pandemic. COVID-19 pandemic necessitated librarians to come up with reformed, effective, and innovative services by implementing technologies to keep the information flow from the libraries to both the categories of users, i.e., users who use the library remotely as well as users who visit the library physically. Libraries were implementing the required precautionary measures in their libraries to fight the pandemic.

### **Significance of the Study-**

University Library of Meerut region facing challenges from the onset of the COVID-19 situation. The library's traditional functions and services are impacted majorly and the information service providers of the University libraries at Meerut region are preparing themselves to acclimatize to the situation by implementing new measures. This study helps to understand the impact of COVID-19 on University libraries at Meerut region and various measures that have been implemented in the libraries to keep the functional routine in supporting the users with the user needs.

### **Objectives of the Study-**

The study is focused on the following objectives:

- To understand the impact of COVID-19 on the working hours of the library.
- To determine the impact of COVID-19 on the academic libraries of the University at Meerut region.
- To understand the preventive measures taken in the libraries during the COVID-19 pandemic.

- To be acquainted with enhanced services provided by the University libraries during the COVID-19 pandemic.
- Type of facilities and services provided to the users.
- Mode of dissemination of services during the period.
- Preventive measures taken to combat coronavirus

### **Scope and Limitation of the Study-**

1. Chaudhary Charan Singh University, Meerut.
2. Swami Vivekanand Subharti University, Meerut.
3. IIMT University, Meerut.
4. Sardar Vallabhbhai Patel Agriculture Universities, Meerut.
5. Shobhit University, Meerut.

### **Methodology-**

The categorization of the purposed investigation into a certain type of survey a corresponding method designed for it and appropriate techniques for collection and analyzing data together known as methodology.

There are several techniques for collecting data like-

1. Questionnaire Method.
2. Observation Method.
3. Interview Method.

The impact of Covid-19 on five university library of Meerut region were selected for the study.

### **Sample Population-**

The sample population for the present study are five university libraries.

1. Chaudhary Charan Singh University, Meerut.
2. Swami Vivekanand Subharti University, Meerut.
3. IIMT University, Meerut.
4. Sardar Vallabhbhai Patel Agriculture Universities, Meerut.
5. Shobhit University, Meerut.

Well structured questionnaire was prepared comprising collective questions that are both open and closed ended. Question covering the impact of the covid-19 pandemic on the university libraries and the extent of usage of physical and digital resources and distributed among the librarians of the respective university libraries and the response were tabulated carefully on the Microsoft excel sheet. The results were analyzed, organised and properly plotted the graph for each parameter for easier understanding.

### **Data Analysis and Interpretation**

**Table: 1** Status of Opening Hours of University Libraries during COVID-19

S. No.	Status of University Library	Response	Percentage
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01	Opened	01	20
02	Closed	03	60
03	Hybrid	01	20
	<b>Total</b>	<b>05</b>	<b>100</b>

Table 1, presents the status of opening condition of university libraries during the covid-19 pandemic period, it has been found that most of the university libraries i.e. 3 (60%), whereas one (20%) library remained opened and one other library provided services through Hybrid mode.

**Table: 2** Impact of Covid-19 on Library Working Hours

S. No.	Impact	Response	Percentage
01	Remained opened at usual Working Hours	02	40
02	Regular Working Hours Reduced	02	40
03	Only for Circulation Services	05	100

Table 2, reveals the impact of covid-19 pandemic on working hours of the university libraries, it has been noticed that 2 (40%) university libraries remained opened at their usual working hours. The routine regular working hours of libraries were reduced in 2 (40%) university libraries. However all libraries provided circulation services to their users during COVID-19 pandemic.

**Table: 3** Impact of Covid-19 on Library Services

S. No.	Impact	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
01	Physical Resource Usage Reduced	20%	80%	00%	00%	00%
02	Digital Resource Usage Increased	20%	80%	00%	00%	00%
03	Patron Enrolment Decreased	00%	40%	60%	00%	00%
04	Increase in Online Research Assistance	40%	60%	00%	00%	00%
05	Decreased Library Lending	20%	80%	00%	00%	00%

Table 3, Provides the information pertaining to the impact of covid-19 pandemic on library services. The collected data shows that physical resource usage is decreased during covid-19 pandemic in university libraries, whereas Digital resource usage is increased during pandemic. Patron enrollment has also been decreased and online research assistance is also increased in 2 university libraries under the present study. Decreased in the library lending services has been

noticed, in spite of the fact that all university libraries provided such service during that tough time.

**Table: 4** Preventive Measures Adopted in University Libraries at Meerut Region

S. No.	Impact	Percentage
01	Limiting the number of users	60%
02	Temperature check at the entrance	100%
03	Provision of hand sanitizers	80%
04	Frequent sanitization of the library premises	100%
05	Mandatory use of face mask	100%
06	Maintenance of social distancing	100%
07	None of these measures adopted	00%

Table 4, Describes the preventive measures adopted in university libraries during COVID-19 at Meerut region. Limiting the number of users, 3 (60%) university libraries agree regarding this measures. All university libraries agree for the temperature check at the entrance (100%), provision of hand sanitizers were approved by 4 (80%) university libraries. Frequent sanitization of library premises were also maintained by all university libraries and mandatory use of face mask in the library were made compulsory in all university libraries. Maintenance of social distancing was also compulsory in all libraries during COVID-19 pandemic.

**Table: 5** Enhanced Services Provided in University Libraries

S. No.	Impact	Percentage
01	Remote Access to Library Services	80%
02	Webinars (User Education)	80%
03	In – Person Staff Meeting Converted to Online	100%
04	Extended due dates	60%
05	No late fines	100%
06	virtual author work shops	40%
07	Online project/research assistance	80%
08	None of the above services are provided	0%

Table 5, shows the enhanced services provided by libraries during COVID-19. The collected information reveals that in-person meetings were converted into online in all libraries under study. No late fines were taken by all university libraries during that period. 80% libraries provided remote access, conducted various webinars and online research assistance were provided to students/scholars and faculty members during COVID-19 pandemic. However,



40% libraries organized virtual author workshops to help and guide the information seekers. It has been noticed that all libraries were doing something different during that particular period of time.

**Table: 6** Additional Services Provided During Covid-19 Pandemic in University Libraries

S. No.	Impact	Percentage
01	Do you provide the facilities of Email & Google meet appointment in your library	100%
02	Interlibrary loan facilities	80%
03	Online database access by your university library	100%
04	During Covid-19 Pandemic any webinar conducted by librarian	100%
05	Webinar attended	100%
06	Databases, E-journals, E-books, provided by your university library	100%
07	Any kind of mobile application services provided by our university library	100%
08	Any level of services provided by your university a service that allows. Off campus users to access digital material/library	80%
09	Any level of reference of bibliography services provided by your library	80%
10	Do you provide any platform for study via digital tutoring via zoom, skype to assist student for their academics	100%
11	Do you follow any learning management platform	100%
12	The library offer digital library as well as e-learning	80%
13	Activating webinar for organizing event	80%
14	Using "Ask librarian" form to maintain direct connection	80%

Table 6, Provides the information related to additional services provided during covid-19 pandemic. All university libraries under the present study provided the facility of email and Google meet appointment in the library. Inter library loan facility has been provided by 4 university libraries (80%). Online database access has become popular during COVID-19 and has been followed by all university libraries. During covid-19 pandemic webinars were organized by all libraries to impart education to students. Databases E-journals, E-books provided by all the university libraries as these sources were the only alternative during that time. Mobile application services, a service that allows off campus users to access digital material/library were provided by 4 university libraries (80%).

Reference service and bibliographic service provided by 4 university library (80%). All the university library provide online learning platform for study via digital tutoring via zoom, skype.

Learning management platform, digital library services and “Ask Librarian” were some other important services which were made available for users.

## **Findings, Recommendations and Conclusion**

### **Findings**

- Status of the university library during the covid-19 pandemic period, majority of library is closed (60%) 3 library closed followed by 1 open (20%) 1 partially open (20%).
- 2 Libraries remained open at usual working hours. The working hours of university libraries of Meerut region were reduced in 2 libraries.
- All the university libraries were remained open for the circulation process during covid-19 pandemic.
- Physical resource usage decreased.
- Digital resource usage increased. Patron enrollment decreased.
- Online research assistance increased in two libraries.
- Decrease in the library lending process.
- Limiting the number of users.
- Temperature check at the entrance maintained by all libraries.
- Provision of hand sanitizer followed by 4 libraries
- Frequent sanitization in the library premises assured by all.
- During covid-19 pandemic all the university libraries made mandatory use of face mask in the university library.
- Social distancing maintained by all during covid-19 pandemic.
- Remote access facility is provided by 4 university library during covid-19 pandemic.
- Webinar related to (user education) organized by 4 university libraries.
- Staff meeting converts to online (100%).
- No late fine during the covid-19 pandemic.
- Virtual author workshop were organized by 2 libraries (40%).
- Online project research assistance by 4 libraries (80%).
- All libraries provided facility of Google meet appointment in the library.
- Interlibrary loan facility provided.
- Access to database by (100%).
- Attend webinar during covid-19 pandemic (100%).
- E-Journals, E-books, provided by all the libraries.
- Mobile application services by all.
- Campus users to access digital material in library.
- Reference service and bibliographic service provided by (80%).
- Online learning platform for study via Zoom Skype etc. by all.
- 80% university libraries used "Ask librarian" form to maintain direct connection.

### **Recommendations-**

The above identified challenges could be solved through the following:

- Create awareness and teach to library users to improve their digital skill development.

- Arranging training for library users on accessing and use of available e-resources.
- Training for library staff to increase skill on handling e-resources.
- The access to computers is seen as essential task for searching, retrieving, copying and studying purposes. It is suggested that in Covid-19 pandemic period the users should use their own laptop.
- The close physical contact is the major cause of catching the corona virus, and only way to avoid the virus is social distancing – keeping a safe distance between two persons in order to reduce the risks of Covid-19 from one person to another. The recommended distance differ from country to country but appears not to be below 1 meter i.e. about 3-4 feet, and more than that may be better.
- Maintaining culture so as to manage the available web 2.0 facilities effectively.
- Colleges, Universities and UGC should take an active role in providing ICT facilities to digital libraries.
- Training of librarians to acquire 21st century skills to adopt to the changing web 2.0 environment.
- Educating the library users on the issue of copyright law and violation.

### **Conclusion-**

Librarians had to remold themselves and stirrup all the skills they had to come up with innovative plans to walk through the pandemic to render the services to the user community. The impact of COVID-19 on the university libraries of Meerut region was tangible. It is heartening to note that some university libraries were closed some university libraries were open for the users during COVID-19 by following all the precautionary measures to prevent the spreading of the disease. Since the students were attending online classes from their respective place of residence and many students were not on campus, there was a decrease in the usage of print resource in the library. University Libraries of Meerut region played a significant role in the collection development of e-resources and dissemination of information online by providing remote access facilities. Though it was challenging to provide all required literature/books online and to satisfy each and every reader, since libraries had a subscription to a huge collection of digital resources even before 2020 and were conducting user training programs in using e-resources regularly, library users find it convenient to use the digital resources remotely during the COVID-19 pandemic. For example Chaudhary Charan Singh University, Meerut library Raja Mahendra Pratap Library is providing Bridge library platform for the students and faculty members of all branch and discipline. This platform provide various e-contents related to course syllabus and very much useful for them.

Swami Vivekanand Subharti University also provide various e-contents related to various subject which is very much helpful for their students & teachers. This contents helps the students very much to cover their course syllabus and continue their study properly and safely during covid-19 pandemic.

Looking ahead, the use of e-libraries will continue to grow exponentially and there will be an increase in ICT-based service Prediction is tricky in regards to the future, but remote access to the users will be priority. Providing online learning platform for the students and research scholar frequent sanitization of library premises. Libraries have transform over the past decades

in terms of usage of technology and COVID-19 pandemic made libraries understand the need for the digital resources and the need for automation of the libraries.

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