Implementation and limitation of online services in rural college libraries during COVID-19 pandemic in Cooch Behar district, West Bengal: A study

Arpita Dutta
Cooch Behar Panchanan Barma University, India

Susmita Cakraborty
University of Calcutta, India

Abstract
Purpose: The purpose of the study is to provide a summary of COVID-19 situation and its effect on academic libraries, the services given by the college libraries during the pandemic situation and how the libraries especially the college libraries have implemented online services during Covid-19 situation. This study tries to understand the functioning and obstacles as well as challenges faced by the college libraries in Cooch Behar during Covid-19 pandemic with regard to their services and performance.
Methodology: The survey method has been used to explore the research objective. Sometimes observations methods also used to explore the research objective. The structured questionnaires were mailed to the librarians of the college libraries in Cooch Behar email as well as WhatsApp. A total number of 14 questionnaires were distributed to the college libraries of Cooch Behar district and 100% were received back.
Findings: The author highlights some major services provided by the college libraries during Covid-19 pandemic and concludes by showing how the college libraries work collaboratively to support online education systems during pandemic situations.
Research limitations: The result of the study is limited to the fourteen college libraries of the Cooch Behar district.
Practical implications: The results will be helpful to the other college libraries of Cooch Behar regarding the implementation of online services in their respective institutions.
Originality/value: This is original research that identifies the services of college libraries during the pandemic and as well as limitations for implementing those services.
Keywords: College library, Coronavirus, library services during Covid-19 pandemic, online services.

1. Introduction
The Covid-19 has brought a revolution not only in the online learning system but also in the effective ways college libraries can deliver their services virtually. The pandemic has created an increasing need for serving faculty and students through online services in which libraries are an indispensable part. This study will help to find out the various online services provided by the college libraries in West Bengal during lockdown time. This research study will also help to understand the obstacle as well as challenges of online library services faced by faculty, students and library staff during Covid-19 pandemic. This study comprised the various college libraries in West Bengal. It can be a useful resource in educational institutions to enhance the library services through digital or online library systems. A paradigm shift from physical to digital operations has been geared up by the pandemic and in the education sector as an alternative to the traditional system to the online system has emerged. Being an integral part of the education system most of the academic libraries have adopted the online services as well. The college libraries in West Bengal also started delivering online library services to its users through various social media and digital platforms to meet the challenges posed by Covid-19 pandemic in the education system.

In this research the researchers tried to explore the online services and its usefulness of the college libraries in West Bengal. The activities organized by the college librarians during Covid-19 pandemic situation and the researchers try to find out major obstacles and challenges of this online library service initiative from the perspective of college librarians in West Bengal. The researchers also try to identify the measures put in place in West Bengal college librarians to curtail the spread of Covid-19.

2. Literature review
India reported its first positive case of the Novel Coronavirus (Covid-19) on 30th January, 2020 from the state of Kerala with a student, who was studying in Wuhan University and had travelled to India (Perappadan, 2020). As a precautionary measure to control the spread of the CoronaVirus, the Government of India declared closure of all educational institutions across the country from 16th March, 2020, which was initially for 15 days (Times of India, 2020). However, as on 10th October, 2020 with 69,79,423 positive cases and 1,07,450 reported deaths (“India Coronavirus”, 2020). India is one of the worst hit countries and as of ………….., the educational institutions are still closed. In response to the nationwide lockdown during March and April, 2020, the school educational sector was quick enough to shift its whole affair to online platform than the higher education sector in India (Wadia, 2020). Perhaps the timing and duration of the initial decision to close educational Institutions classroom teaching was almost over and examinations were about to start. However, considering the
rapidly evolving situation of the pandemic, the apex body of the higher education system of India, University Grants Commission (UGC), decided to cancel all the examinations except the terminal semester/final years and directed to complete it by end of September, 2020 (University Grand Commission, 2020). The students are suffering with lack of course materials to prepare for the examinations. This situation challenged the ways which academic and public libraries used to function.

The e-Learning has emerged as an additional medium for imparting education in many disciplines to overcome the constraint of physical capacity associated with the traditional classroom methods. For a vast developing country like India, this provides an immense opportunity to provide even higher education to remote places besides extending the library services through networking (Manzoor, 2020). The lockdown has compelled many educational institutions to cancel their classes, examinations, internships etc. and to choose the online modes in which teaching professionals and students are virtually connected (Jena, 2020). E-learning is quite simple to understand and implement. The use of a desktop, laptop, or smart phones and the internet forms a major component of this learning methodology (Radha, 2019). Teachers and students were skilled in using social media app viz. WhatsApp, Facebook, Twitter, Instagram, which turned into smooth facilitation of using online educational platforms such as ZOOM, Cisco WebEx, Google Meet etc. as a sign of positive transfer of learning (Sexena, 2020). If we look at the global viewpoint, during the COVID-19 pandemic, the university libraries in Pakistan engaged with users by WhatsApp, phone, and Email, raised awareness through public health education, provide support to medical staff and researchers, and offered ongoing traditional services (Rafiq et al., 2021). They also delivered scanned papers of needed books and articles to regular library patrons all around the pandemic (Ali & Gatiti, 2020). Polish University libraries used social media as a tool to engage with patrons during the Covid-19 pandemic. As per the survey result, Facebook was the most frequently used, followed by Instagram, Twitter, and You Tube to a smaller extent (Gmiterek, 2021).

In the UK, academic libraries supported the students’ mental health and well-being because digital learning stressed students as students struggled to adjust to a greater reliance on e-resources (Cox & Brewster, 2020). Academic libraries in Zimbabwe managed to offer digital and virtual library services; however, they faced challenges, including a lack of internet connectivity to interact with patrons (Tsekeka & Chigwada, 2020). One of the innovative practices carried out by Indonesian libraries implementing health protocols in all aspects, such as furniture and library programs changing to online during the pandemic (Winata et al., 2020). Likewise, academics worldwide extended emergency eLearning to avoid the possible second wave of Covid-19 (Murphy, 2020).
The educational scenario of the post-Covid-19 outbreak would not be easy to manage teaching-learning situations without using online teaching platforms rigorously. Having seen the fearsome monster of corona virus, it can be anticipated that in the upcoming time student would face multiple challenges of educational hardships including quality education, hands-on experience, laboratory work, library visit, peer tutoring, remedial teaching, research and innovation (Rieley, 2020).

3. Significance of the study
This study would help the academic as well as college libraries in formulation of online services in libraries and help to create policies and strategies for using digital content for delivering library services more effectively in future.

4. Objective of the study
The objectives of the study are to:

- Identify the services delivered by College libraries in Cooch Behar, West Bengal during the Covid-19 crisis.
- Ascertain the frequency of the services delivered to library patrons during the period of pandemic.
- Find out the activities organized by college librarians in Cooch Behar to curtail the spread of Covid-19 pandemic in the country.
- Investigate the challenges faced by libraries in Cooch Behar in service delivery during the Covid-19 crisis.

5. Research questions
The following research questions guided this study:

- What are the services delivered by college libraries in Cooch Behar, West Bengal during Covid-19 crisis?
- How often are the services delivered to library users during a pandemic period?
- What are the activities organized by the College libraries in Cooch Behar, West Bengal to curtail the spread of the pandemic?
- What are the challenges faced by college libraries in Cooch Behar in service delivery during the Covid-19 crisis?

6. Methodology of the study
In this present study, the researcher used survey method to explore the research objective. Sometimes observations methods also used to explore the research objective. The structured questionnaires were mailed to the librarians of the college libraries in Cooch Behar email as well as WhatsApp. A total number of 14 questionnaires were distributed to the college libraries of Cooch Behar district and 100% were received back.
7. Analysis and findings of the study
The response and the feedback from the respondents under the ambit of the study forms the basis of different charts, diagrams and figures shown below:

7.1 Importance of using of online mode for delivering library services during lockdown
All the college libraries in Cooch Behar considered that it is important to use online mode for delivering library services during Covid-19 Pandemic when the physical access of the library is fully closed. 50% of the libraries considered it extremely important, 49% considered it very important and 1% thought it's important.

7.2 Social media used by the college libraries during pandemic
It is found that the college libraries have been used by Facebook 60%, Twitter 25%, Blog 40%, YouTube 10% and some other media by 50% used by them. WhatsApp has been used by 100% of the libraries during pandemic to share e-resources.

7.3 Frequency of using social media by the college libraries during pandemic
It is found from the study that 70% of the college libraries under the scope of this study have been using social media on daily basis during lockdown and connected with their users, 25% of the libraries have been using social media whenever they found it necessary and 5% of them using social media weekly.

7.4 Use of Open Educational Resources (OER) by the users of the college libraries in Cooch Behar
Open Educational Resources are used by the college students and the teachers in Cooch Behar. This study found that college students are less interested than the teachers in using OER. 40% of students and 80% of teachers used OER and 40% of students and 20% of teachers did not use OER in degree colleges in Cooch Behar.

7.5 Services provided during pandemic by the college libraries
It can be seen that 85% of the libraries provided reference services through online mode to their users whenever it was necessary. The information regarding Covid-19 by 60% of the libraries, Information through library websites by 50%, news regarding library services by 20% and link to web OPAC by 10%. Share link to open access resources provided by 100% to their users during pandemic.
7.6 Effectiveness of online services during pandemic
The effectiveness of online services during pandemic by the libraries have been represented in the Fig.6. It can be learned about the effectiveness of using online services for delivering library services during lockdown time by 60% extremely beneficial, by 20% very beneficial, by 10% beneficial and by 10% less beneficial.

7.7 Challenges in providing library services through online mode during Covid-19 pandemic
The various challenges faced by the libraries during Covid-19 pandemic to provide library services through online mode. According to survey response 50% of libraries faced challenges regarding lack of official/ policy guideline, by 25% lack of positive attitude of the users, by 30% lack of sufficient resources, by 70% of the libraries found low response of users to online services, by 45% the libraries don’t have proper infrastructure for online services and the most common challenges faced by 80% of the libraries regarding low speed of internet which played the vital role in online services.

Various digital platforms played pivotal roles in reaching out to the library patrons and satisfying their information needs. The online applications like WhatsApp, Zoom, and Twitter were the most used digital platforms by professional librarians in reaching out to their clientele. The librarians have upgraded and acquired several digital information communication services such as social networking, web conferencing, internet research skills, electronic mailing, during the pandemic period. There are various challenges militating against the utilization of digital platforms for information service delivery by professional librarians. The most prominent among them is instability of internet facilities and inadequate knowledge of online information communication systems. Now the librarians are trying to provide online delivery service to the users.

7.8 Applications used for online communication by the libraries during Covid-19 Pandemic
7.8.1 Cisco Webex
The Cisco Webex video conferencing app provides video facilities and chat as well. It has HD video conferencing features bundled with compatibility across various platforms like Windows, iOS and Android. It allows users to share documents across the platform which is a key feature in it and fulfill the organizational needs.

7.8.2 Google Meet
Google has made the Google Meet app for video calling platform free for everyone. Google Meet is a secure and reliable video conferencing solution. Users can use it in their web browsers, the app is also available for Android and iOS platforms.

7.8.3 Zoom
Zoom is a video calling app. It also offers different backgrounds and audio enhancement features. Zoom Cloud Meeting application requires a link or a password to initiate a meeting which means ‘Zoom bombing’ should not be a problem anymore.

**Table 1: Applications used for online communication by the libraries during Covid-19 pandemic**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Application</th>
<th>Connecting Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>GoTo Meeting</td>
<td><a href="https://www.gotomeeting.com/en-in">https://www.gotomeeting.com/en-in</a></td>
</tr>
<tr>
<td>6.</td>
<td>Join Me</td>
<td><a href="https://www.join.me/">https://www.join.me/</a></td>
</tr>
<tr>
<td>8.</td>
<td>Zoom</td>
<td><a href="https://zoom.us/signin">https://zoom.us/signin</a></td>
</tr>
</tbody>
</table>

7.8.4 Skype
Skype allows users to easily set up a collaboration space and invite both Skype contacts and users who are not on Skype. Participants can easily join meetings whether they have an account or not. It can blur the background before entering the video call. One can also share presentations, work material in a conference.

7.8.5 Microsoft teams
Microsoft Teams is another professional meetings app that allows chatting among users along with bringing features like video conferencing, support for up to 250 members and more. These web conferencing apps have played a vital role during Covid-19 pandemic. It helped not only to maintain communication between people, but also helped in online education at quarantine time across the country.
Libraries have an important role of disseminating information during times of emergency. During the pandemic of Covid-19, people are in panic due to the threat of the Covid-19 virus and the governments are declared to shut down temporarily all the places of rush for an indefinite time. It is a challenge for the library staff to play a positive role which can contribute to providing information to the information seekers and provide social help as well. Libraries and many service-based organizations and social institutions are switching to online mode for service delivery due to the closure of libraries.

7.9 Some reliable information resources during pandemic

7.9.1 NDLI
Educational materials available for all subject areas like technology, social science, literature, law, medical etc.

7.9.2 Hathi Trust
Hathi Trust is a partnership of academic and research institutions, offering a collection of millions of titles digitized from libraries around the world.

7.9.3 World Digital Library
The world digital library provides free access to manuscripts, rare books, maps, photographs and other important cultural documents from all countries.

7.9.4 Open Library
Open Library is an open-source web page for every book ever published.

7.9.5 Project Gutenberg
Project Gutenberg is a volunteer effort to digitize and archive cultural works.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Title / Name</th>
<th>Web Address / URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>NDLI</td>
<td><a href="https://ndl.iitkgp.ac.in/">https://ndl.iitkgp.ac.in/</a></td>
</tr>
<tr>
<td>2.</td>
<td>Hathi Trust</td>
<td><a href="https://www.hathitrust.org/">https://www.hathitrust.org/</a></td>
</tr>
<tr>
<td>4.</td>
<td>Open Library</td>
<td><a href="https://openlibrary.org">https://openlibrary.org</a></td>
</tr>
<tr>
<td>5.</td>
<td>Project Gutenberg</td>
<td><a href="https://www.gutenberg.org/">https://www.gutenberg.org/</a></td>
</tr>
</tbody>
</table>

7.9.6 Internet Archive
Internet Archive is a non-profit library of millions of free books, movies, software, music, websites and more. Rare books across libraries of Bengal would now have a
digital copy. West Bengal public library Network has taken up an initiative to make ebooks out of all the rare books available in the state across several libraries.

7.10 Library services during pandemic
After analyzing the data we can see that when all public places were announced to be closed for a while, the libraries were also shut down. As the libraries like school, college, university library etc. had no prior information about the temporary but immediate shut down, the library employees could not make any plan to meet the challenges of the times. The books have been issued to the users for definite time, but those books could not be returned within time. Due to unannounced and indefinite shut down, the cleanliness and maintenance of hygiene of the libraries was not possible. The sudden and unexpected outbreak of the virus forced the library professionals to ascertain ways of working in a rapid time frame like shifting to digital platforms whenever possible and to provide adequate remote services to the users. Some of the significant services and facilities provided by the libraries under study are discussed here:

7.10.1 Remote access to e-resources
The main aim of the academic libraries is to enhance and strengthen the teaching, learning and research process by information delivery system. The College libraries in West Bengal have been working hard to provide services and access to collections to their users who have been displaced due to Covid-19. The College libraries under the study have taken a lot of efforts in providing E-resources and expanding online services.

7.10.2 Open access resources
There are many freely available scholarly resources available in (NDLI) National Digital Library of India, Shodhganga- a repository of Electronic Thesis & Dissertations, AMS Free Online Books, (DOAB) Directly of Open Access Books, (DOAJ) directory of Open Access Books and many more. 80% of the libraries in this study made these links available for their users to fill the information needed.

7.10.3 Free and expanded access
In response to the uncertain and difficult time, some publishers and organizations are provided free access to e-resources including e-books, e-journals, e-database etc. for a limited period of time during this pandemic. Some of the libraries in this study have highlighted the links of these free resources on their portal for their users. This has enhanced the possibility of users availing the virtual services.

7.10.4 Resources related to covid-19
Coronavirus is rapidly evolving in nature. In view of the prevailing situation on Covid-19 component authorities like WHO (World Health Organization),
Government of India, various state governments have issued directives/instructions time to time on preventive measures to be followed to contain the spread. Many libraries have prepared an information page which displays health advice, updates on the Government and WHO’s guidelines at the time of pandemic. In this study 30% libraries provided links to WHO, Government of India, State Government sites through various social media sites.

7.10.5 Safety measures for library employees
Library is the heart of an educational institution, and the number of visits to library buildings is quite higher than any other section of the institution. The workspace of libraries is relatively close and the spread of coronavirus is comparatively fast among library staff and visitors. It is very tough to make the library virus free by taking some preventative measures. As libraries re-opened in May after nationwide lockdown many of libraries are doing so only for limited hours every day and allowing staff to work with a minimum number in accordance with the government guidelines. This study showed that 80% of the academic libraries under the study have followed the safety measure and re-open the library for official work on a regular basis and 20% on a weekly basis.

7.10.6 Initiatives taken by the libraries
Some notable initiatives taken by the general degree college libraries in West Bengal are Assistance in Information Searching (email alert, scanned document), Organization of virtual events – (Webinar), Operating as information Hubs. The pandemic has necessitated the sudden and radical changes in delivery of library services. The internet and web technologies have created a new and unparalleled environment enabling the libraries to enhance and strengthen the teaching and learning even in this difficult and uncertain time. The concept of remote access of e-resources by libraries is not new, but during pandemic situation the libraries taken various initiatives like Assistance in information search through online, Organizing virtual events like webinars, working as an information Hub and provided various online/virtual reference services through e-mail, Whatsapp etc. while all the academic institutions are still struggling to build a strong e-platform to provided their services, the academic libraries have acted smart even this time and evolved as a continuous learning factory. It can be said from this study that libraries are emerging as new knowledge hubs capable of playing a vital role in supporting our nation to settle into a new normal situation.

A paradigm shift from physical to digital operations has been geared up by the pandemic and in the education sector as an alternative to the traditional system the online system has emerged. Being an integral part of the education system, most of the academic libraries have adopted the online services as well. The college libraries in West Bengal also started delivering online library services to its users through various social media and digital platforms to meet the challenges posed by Covid-19 in the
education system. In conclusion it must be admitted that the college libraries have tried to provide the services at their level best in spite of various obstacles and challenges during the pandemic period. However it is true that the digital services was not completely adequate and firmly cannot be said that it has entirely replaced the gap of physical mode of operations but undoubtedly it can be said that while the physical use of academic institutions and accession of libraries was not possible at that time the digital and online mode of education and library services has benefitted the students immensely. Finally it cannot be denied that due to Covid-19 pandemic the entire world has switched to an online system more than ever before. The educational institutions and libraries are also not the exception and their initiative for digital and online service is going to be a giant leap in near future benefitting millions of students and library users across the globe. The Covid-19 has impacted the use of libraries both positively and negatively. Online resources were greatly used, libraries organised online workshops and conferences through Google Meet, Zoom, Webinar and others during Covid-19 lockdown. This has enabled the library staff and library users to improve their skills on the use of Information Communication Technology (ICT) to disseminate information. Librarians provided online services to students and researchers. Information was disseminated to the users through online databases and Emails. Libraries made effective use of social media platforms such as Facebook, blog, WhatsApp and others to connect with their users during this pandemic.

8. Conclusion

In conclusion we can said-

- OER becomes a vital part of the library when physical distancing is essential. Open Educational Resources helps the academic libraries to serve its users online delivery services during pandemic.
- Use of digital platforms like online applications, social media etc. to connect with the users become an essential part of the library.
- Collaborative work increased by the libraries to provide hazardless services to the users.
- Library staff as well as users improved their technical knowledge for the situation's demand.
- Libraries have started using electronic media for sharing information and resolving their user's queries very easily and quickly through e-mail, SMS, phone calls and using various types of apps.
- To manage the situations, the libraries enhance digital literacy of their staff to provide continuous digital services to their users.
Covid-19 pandemic revolutionized library services in the digital era. Online library services or the virtual reference services have become more suitable than the terms of digitization and resource management in this pandemic situation. The application of ICT, Internet and particularly the World Wide Web have revolutionized library activities. The present trend of library resources includes e-books, e-resources, digital library, e-reference services etc. librarians are also looking forward to discovering new services and opportunities to build a stronger library-user interface in the future. Besides various problems and challenges academic libraries' goal in this pandemic situation is to achieve the users' satisfaction and fulfill users' needs by applying various virtual library services.

In conclusion it must be admitted that the college libraries in West Bengal have tried to provide the services at their level best in spite of various obstacles and challenges during the pandemic period. However it is true that the digital service was not completely adequate and it cannot be firmly said that it has entirely bridged the gap of physical mode of operations but undoubtedly it can be said that while the physical use of academic institutions and accession of libraries was not possible at that time the digital and online mode of education and library services has benefited the students immensely. Finally it cannot be denied that due to Covid-19 pandemic the entire world has switched to an online system more than ever before. The educational institutions and libraries are also not an exception and their initiative for digital and online service is going to be a giant leap in near future benefiting millions of students and library users across the globe.

References


for the universities in view of Covid-19 pandemic. UGC. 
https://www.google.com/search?client=
firfox-b-
d&q=https%3A%2F%2Fwww.ugc.ac.in%2Fpdfnews%2F6100894_UGC-Revised-
Guidelines-on-Examinations-and-Academic-Calendar-for-the-Universities-in-view-of-

25. Wadia, L. C. (n.d.). Graduating from emergency remote teaching to online higher 
education in India. https://www.orfonline.org/expert-speak/graduating-emergency-
remote-teaching-online-higher-education-india-67279/

https://doi.org/10.1108/DLP-07-2020-0059

https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200413-

Author biography

Arpita Dutta is the Librarian of Baneswar Sarathibala Mahavidyalaya and also a Guest 
Teacher in the Department of Library and Information Science, Cooch Behar 
Panchanan Barma University, West Bengal, India.

Susmita Cakraborty is the Professor and Head of the Department of Library and 
Information Science at University of Calcutta, West Bengal, India.

Corresponding author 
Arpita Dutta can be contacted at: mistuarpita@gmail.com