IMPACT OF COVID-19 ON LIBRARIES OF NAAC ACCREDITED COLLEGES IN MAHARASHTRA: A CASE STUDY

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ABSTRACT

The main objective of this study is to discover the impact of COVID-19 pandemic on libraries of NAAC accredited arts, commerce and science colleges in Maharashtra state, India. Out of 1118 libraries of accredited colleges identified, questionnaires (in google form) were distributed through cluster sampling method (via email and WhatsApp) to 152 college librarians and 110 received back were analyzed. The results showed that COVID-19 recognizably affected college libraries in Maharashtra, 3/5th of the libraries remain closed, document delivery services and interlibrary loan services decreased below 50%, acquisition of print documents decreased whereas electronic documents increased, use of physical resources decreased whereas electronic resources increased, a large majority of reading materials were quarantined, major library services were provided through google meet, zoom and webex, library staff utilized their time in professional development programs, in more than half of the libraries the staff completed pending library jobs, shifting from physical services to online was the biggest problem, cent percent respondents expressed that library authorities did check body temperature, obeying social distancing and use of sanitizers. This study will be of help in guiding college libraries in preparing to survive in hybrid environments.

Keywords: COVID-19, Pandemic, COVID-19 Pandemic, Academic libraries, Indian Academic Libraries, College Libraries, Corona Virus, Library Users, Library Services, Library Facilities, Online Services, Collection Development, Information Seeking Behavior, E-Resources, Lockdown, Social Media, Maharashtra.

1. Introduction

The first case of Corona virus in Maharashtra state was reported on March 9, 2020 in Pune city. (www.en.wikipedia.org/wiki/COVID19 pandemic). Later COVID-19 spread to other parts of the state. It caused a paradigm shift in every sphere of life. Libraries are no exception. Most of the academic institutions and their libraries in the state were forced to close from the last week of march 2020. Academic institutions continued to conduct their examinations in online mode. Students and faculty members were not allowed to visit libraries. Some of the libraries began offering alternate services including home delivery and mobile services in some parts of India. In Maharashtra also in order to communicate and connect with the members, many libraries began to employ WIFI services during the lockdown period. Even though the libraries were physically closed (during lockdown) yet online services to users continued. This paper presents a picture of how COVID-19 pandemic influenced the college libraries in the state of Maharashtra.

2. Review of Literature

Before COVID-19, it is seen that there were studies to find out the services, collection development etc. of college libraries. But after the outbreak, there is an increase in the amount of publications on the impact of COVID-19 on academic libraries. The past literature showed that there is a transition from physical services to online information services, but even then, the library services continued without any interruption. Even

though there are a number of studies seen in literature on the impact of the pandemic on various types of libraries, only the selected recent ones are reviewed here in reverse chronological order.

A recent paper by McMenemy et al. (2023) explores the impact of lockdown on public libraries in UK. COVID-19 impact on the Chinese top academic libraries has been studied by Kang et al. (2022). Chigwada (2022) discusses the impact of COVID-19 in academic libraries in Zimbabwe.

The study done by De Groote and Scoulas (2021) examines the differences in library use patterns in pre-COVID and during COVID-19 pandemic and the potential impact on users' behavior. The paper by Johnson and Bakare (2021) describes the restrictions caused by COVID-19 impact on library use and users of Lead City University Library, Ibadan, Nigeria. Role of academic libraries and library staff during COVID-19 is detailed by Deol and Brar (2021). Comparison on the use of library resources during pandemic versus pre-pandemic periods were studied by Connell et al. (2021). What is the impact of COVID-19 on academic libraries of India? This aspect has been studied by Chakraborty and Jana (2021). The study done by Tammaro et al. (2021) concluded that COVID-19 pandemic pushed for a transformation of libraries. How Qatar national library embraced the pandemic? This has been studied by Medawar and Tabet (2021). Vishnumaya (2021) conducted a study on the impact of COVID-19 on public libraries of Delhi.

A study from Nigeria reported by Reagen (2020) investigated the impact of COVID-19 on academic libraries of Nigeria. Rand and Shepard (2020) discusses the perspectives of academic library technology use during COVID-19 in the University of South Alabama. A joint study by Naikwadi and Sankpal (2020) discusses the impact of lockdown on libraries in Maharashtra.

3. Objectives of the Study

The major objective of the study is to determine the impact of COVID-19 on the libraries of the NAAC accredited Arts, Science and Commerce colleges in Maharashtra state. The specific objectives are:

a) To identify the impact of COVID-19 on the library services, acquisition of documents and use of resources in the selected college libraries.

b) To find out the impact of COVID-19 on the library facilities and communication channels used by libraries during pandemic.

c) To examine the impact of COVID-19 on the professional development of staff as well as library activities.

d) To identify the challenges faced by the libraries and the precautions taken during pandemic period.

4. Methodology

In this study, the data was collected from the college librarians of NAAC accredited arts, commerce and science colleges in Maharashtra state, India. A structured questionnaire was prepared using google forms and sent to the college librarians in the state through email as well as WhatsApp. The survey was conducted from august 2020 to march 2021. This study does not include the professional colleges such as engineering, medical, management, computer science, education, law, physical education, pharmacy etc. There are a total of 1548 colleges including all categories, of which 430 are of professional nature. Rest total population is 1118 NAAC accredited arts, commerce and science colleges. Out of 1118 college libraries, 152 were randomly selected based on cluster sampling method and questionnaires were sent to them. Out of 152 respondents, 118 were filled and returned. Of which eight are found unsuitable and the rest 110 questionnaires found suitable were analyzed. The data received were entered in Microsoft Excel and analyzed.

5. Data Analysis

5.1. Socio-Demographic Features of Respondents

A major share (81.82%) of the respondents are male and majority of them are librarians (90%) according to their designation (see table 1).

Table 1
Socio-Demographic Characteristics of Respondents

Socio-demographic details		No. of Respondents	Percentage
Gender	Male	90	81.82
	Female	20	18.18
Designation	Librarian	99	90.00
	Assistant Librarian	04	3.64
	Library Assistant	07	6.36

5.2. Working of Libraries during COVID-19

During the COVID-19 period, 3/5th of the libraries remain closed and only 39.09% of libraries were opened for users following necessary precautions. Tej and Rao in their study found that 70% libraries affiliated to Manipal Academy of Higher Education were kept open during COVID-19 pandemic with necessary precautions. In the present study, researchers found that significant number of libraries (60.90%) were closed during COVID-19 pandemic.

Table 2
Working of Libraries

SI. No	Working status	Number	Percentage
1	Opened	43	39.10
2	Closed	67	60.90
	Total	110	100.00

5.3. Library Services during COVID-19

The analysis (table 3) shows that COVID-19 has significantly affected the functioning of college libraries. Document Delivery Services (44.54%) and Inter Library Loan Service (43.63%) decreased below 50%. But user requests for assistance increased to 54.54%. Further COVID-19 has a positive impact on book bank services and it increased to 33.63%.

Table 3
Library services during COVID-19 Pandemic

SI. No.	Name of the Service	Increase		Decrease		No Change		Total Response
		Nos.	%	Nos.	%	Nos.	%	
1	Document Delivery Service	37	33.63	49	44.54	24	21.81	110
2	Inter Library Loan Service	25	22.72	48	43.63	37	33.63	110
3	Book Bank Services	43	39.09	37	33.63	30	27.27	110
4	User request for assistance	60	54.54	30	27.27	20	18.18	110

5.4. Acquisition of Documents during COVID-19

It is observed from the analysis given on table 4 that COVID-19 had an impact (either positive or negative) on the acquisition of electronic and print documents in the college libraries. It is found that there is a decrease in the purchase of print documents to 65.45%, whereas the purchase of electronic books and other electronic resources increased to 61.81%.

Table 4
Acquisition of library resources during COVID-19 Pandemic

SI. No.	Acquisition of Documents	Increase		Decrease		No Change		Total	Percen- tage
		Nos.	%	Nos.	%	Nos.	%		
1	Acquisition of electronic resources	68	61.81	16	14.54	26	23.63	110	100.00
2	Purchasing of print documents	21	19.09	72	65.45	17	15.45	110	100.00
	Total	89	40.45	88	40.00	43	19.55	220	100.00

5.5. Library Use during COVID-19

The analysis (table 5) indicates that COVID-19 does have an impact on the usage of physical resources as well as electronic resources by the library users. The use of physical resources of the library decreased by 66.36%. But the use of electronic resources such as N-List, DELNET, and the databases such as EBSCO, ProQuest etc. increased to 73.63%. Moody and Best (2021) found in their study that the circulation of electronic and physical resources decreased due to COVID-19 pandemic. On the contrary, here it is observed that the circulation of physical resources decreased however; there was a growth in circulation of electronic resources.

Table 5
Library Use during COVID-19 Pandemic

SI. No.	Type of Resources	Increase		Decrease		No Change		Total Response
		Nos.	%	Nos.	%	Nos.	%	
1	Use of physical resources	25	22.72	73	66.36	12	10.90	110
2	Use of electronic resources	81	73.63	16	14.54	13	11.81	110

5.6. Impact of COVID -19 Pandemic on Library Facilities

COVID-19 pandemic does have an impact on the library facilities. A large majority (81.81%) of books and other reading materials in college libraries were quarantined after returning. Lion's share (87.27%) of the respondents reported that they were given limited access to their own libraries. The result (table 6) also showed that 83.63% of the college libraries changed their borrowing rules.

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Table 6

Impact on Library Facilities

SI. No.	Facility	Yes		No		Total	
		Nos.	%	Nos.	%	Nos.	%
1	Limited usages of physical documents	96	87.27	14	12.72	110	100.00
2	Changed borrowing rules	92	83.63	18	16.36	110	100.00
3	Quarantined physical documents when it is returned	90	81.81	20	18.18	110	100.00

5.7. Communication Channel to Users

The analysis (table 7) indicates that major percentage (91.81%) of the respondents were provided library services through zoom, google meet and webex. Hyperlinks to open access resources from the college library or library websites were provided to 92.72% of the members. Again, a great majority (91.81%) of the users were provided library services through e-mail, mobile and chatting. Medawar and Tabet (2021) observed that the library services were provided using various online platforms.

Table 7

Communication Channels Used by Libraries during COVID-19 Pandemic

SI. No.	Communication Channels	Yes		No		Total	
		Nos.	%	Nos.	%	Nos.	%
1	Provided user education service/ Counseling service using zoom app, google meet, webex etc.	103	93.63	7	6.36	110	100.00
2	Provided hyperlinks to open access e-resources from institutional/ library website	102	92.72	8	7.27	110	100.00
3	Library support services through e-mail, mobile, chatting,	101	91.81	9	8.18	110	100.00
4	Use of social media such as Facebook, LinkedIn, Blog, Telegram, etc.	94	85.45	16	14.54	110	100.00
5	Use of WhatsApp for providing library services	91	82.72	19	17.27	110	100.00

5.8. Professional Development During COVID-19

During the COVID-19 pandemic, the staff members of the college libraries ere encouraged to work from home. The findings in table 8 indicates that the library staff working in the colleges of Maharashtra have fully utilized their time in attending Faculty Development programs, induction programs, refresher courses, workshops, webinars etc. In addition, they have also published technical articles in professional journals and books.

Table 8
Professional Development of Staff During COVID-19 Pandemic

Sl. No.	Name of the Professional Activity	Number	Percentage
1	Attended webinars, online workshops	102	92.72
2	Attended Faculty Induction Programs	70	63.63
3	Published research articles in journals and books	67	60.90
4	Attended Refresher Course	64	58.18

• Multiple answers allowed

It can be seen that 92.72% of them attended webinars and online workshops. Those participated in Faculty Induction programs are 63.63%. Three fifth (60.90%) of the library staff during this period, published research articles either in journals or books. Those staff members who attended refresher courses are 58.18%. Thus, the COVID-19, in fact was a boon to the staff members.

5.9. Library Jobs Performed During COVID-19

It is found (table 9) that during COVID-19, the library staff members were encouraged to do the library work, more than half (58.18%) of the libraries, the staff completed the long pending data entry work. College library websites were updated in 54.54% of the libraries. Stock verification was done in 51.81% of the libraries. Forty percent of the libraries completed the classification work.

Table 9
Library Jobs Performed during COVID-19

Sl. No.	Name of the Activity	Number	Percentage
1	Completed pending data entry	64	58.18
2	Updated library website	60	54.54
3	Completed stock verification	57	51.81
4	Completed classification	44	40.00

• Multiple answers allowed

5.10. Challenges Faced by Library Staff

The analysis in table 10, clearly indicates that the biggest problem faced by the college libraries are shifting from physical services to online services. This has been pointed out by 81.81% of librarians. More than half (54.54%) of the librarians reported about the network issues in libraries located in rural areas. Students in those college libraries were unable to browse the e-resources because of the low network speed. Technological issues were the problems for 44.54%. Vishnumaya (2021) found that the library professionals faced problems in providing education services to their online users. Authors in this study also found that the librarians of the colleges faced similar challenges due to lack of education towards online platforms.

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Table 10
Challenges Faced by Library Staff

Sl. No.	Challenges Faced	Number	Percentage
1	Transition from physical to online delivery of information services	90	81.81
2	Low internet penetration and mobile, broad band access in small towns	60	54.54
4	Lacking in wide scale technological application	49	44.54
5	E- documentation services, SDI services and others	1	0.90

● Multiple answers allowed

5.11. Precautions Taken

Hundred percentage of respondents expressed that the library authorities checked the body temperature; they followed social distancing and usage of hand sanitizer. But only 82.72% of them used masks and cleaning and sanitizing the library area. Very less percentage (18.18%) of respondents said that they have quarantined books after circulation.

Table 11
Precautions Taken for Staff and Students

Sl. No.	Preventive Measures Adopted	Respondents	Percentage
1	Checked Body Temperature	110	100.00
2	Use of hand sanitizer	110	100.00
3	Follow social distancing	110	100.00
4	Usages of Mask	91	82.72
5	Cleaning and sanitizing the area	91	82.72
6	Quarantined books	20	18.18

● Multiple answers allowed

6. Findings

Following are the major findings of the study

i) COVID-19 recognizably affected the college libraries in Maharashtra

ii) During COVID-19, 3/5th of the libraries remain closed.

iii) Even though libraries were closed, librarians provided online services without any interruption.

iv) Document Delivery Services and Inter Library Loan Services decreased below 50% during pandemic period.

v) Acquisition of print documents decreased whereas the purchase of electronic documents increased.

vi) Use of physical resources of the library decreased, whereas the use of electronic documents increased during COVID-19 period.

vii) A large majority (81.81%) of books and other reading materials of the college libraries were quarantined.

viii) Lion's share (91.81%) of the respondents were provided library services through zoom, google meet and webex.

ix) Library staff working in the colleges of Maharashtra fully utilized their time during COVID-19 for professional development activities.

x) During COVID-19, the staff completed the pending data entry work, updated college library websites, did stock verification and completed classification work.

xi) Shifting from physical services to online services was the biggest challenge. Network issues and technological applications were the other problems.

xii) Hundred percentage of the users expressed satisfaction about the precautions taken such as checking body temperature, following social distancing, use of masks and sanitizers.

7. Conclusion

COVID-19 pandemic badly affected the entire education system in Maharashtra. The college libraries in the state need to adopt new technologies to overcome the hurdles. It is seen in Maharashtra that many of the college libraries are not technologically equipped to effectively reach to their users. In order to overcome such situation, the college libraries should be provided with strong IT infrastructure so that users can continuously avail the knowledge resources through online mode even in pandemic situation. Further these libraries should be provided with adequate e-resources such as e-books, e-journals and other online resources which will enable to serve the users in a better way. Additionally, the study revealed the need for training to students and faculty for training on searching and effectively retrieving the online resources. More research should be

conducted on how the pandemic impacted the various types of libraries in Maharashtra as well as throughout India.

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