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**IMPLEMENTATION OF ONLINE RESOURCES AND SERVICES  
DURING COVID-19 PANDEMIC: A STUDY OF INSTITUTE OF  
NURSING EDUCATION, BAMBOLIM GOA**

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**Abstract:**

*As we all know how the pandemic had affected the education system. This paper highlights the implementation of the online resources and services provided to the teaching faculty as well as the students. 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 platform wherever possible and to provide adequate remote services to the users. Given the extrinsic challenges in providing services during a public health emergency, the purpose of this study is to find out how technology became an important for the premier technological institutions of India during the COVID -19 pandemic. The study explores the type of services provided by library staff.*

**Keywords:** *Implementation, Online Resources, Online Services, COVID-19 Pandemic, Institute of Nursing Education.*

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**Introduction:**

The technological advancement and changing trends have put forward new challenges before library and information professionals. The world in which we live today is digital /web world. The web is often described as the ultimate medium for the distribution and interchange of information. Library and Information Science professionals face complex challenges by recent trends in ICT and Covid-19 pandemic environment. The role of LIS professionals has become more dynamic and challenging. The technology to provide digital access to library reserve collections has been available for some

time. Access to information and knowledge will therefore assume a different dimension altogether ( Ramesh Babu, 2020).

During this pandemic period the users were depend on the library websites or social media tools to satisfy their needs of information. Academic library web sites are libraries virtual presentation to the world. Beyond providing information about libraries and library services, academic library web sites provide access to online catalogues, electronic databases, subject resources, library instruction/tutorials, and digital collections. Academic library Web pages

are portals to knowledge that support faculty and student research and educational needs, in line with the institution's mission. A library website helps to build a long and strong relationship with the users by promoting library services. To build a credible relationship with the user library image needs to be projected through the library website; it is hard for any library to establish a credible relationship with the users. Present day's library websites act as a main window to access library sources and services. It has become a starting point to access academic or scholarly information. The growth and use of online information sources increase its importance and the present generation is very much dependent on electronic journals, e-books and electronic databases. Usability analysis of libraries website is paramount because libraries' website is taking more attention to serving primary sources of information for their users; and for many services and sources, library users depend on the library websites.

#### **COVID-19 Pandemic and Libraries:**

Throughout the globe, the COVID-19 pandemic has had an immense impact on education at all levels. As per UNESCO estimates, over 154 crore students are severely impacted by closure of educational institutions across the globe amid the COVID-19 outbreak. During Janata Curfew and the Lockdown, due to the infection caused by Covid-19 Pandemic across globe, it was decided that educational institutions will remain closed. It was essential that students and teachers to be at home and study-teaching carried from home. To ensure that learning never stops, teachers are preparing lessons using distance learning tools, and parents are learning new teaching techniques at home.

In a networked environment, the challenges and opportunities for the information professional are manifold. Libraries have the major responsibility of managing information resources enabling their user's quick and convenient access to these resources and to provide variety of on-demand and in-anticipation information services.

#### **Institute of Nursing Education, Bambolim Goa:**

The activities of the Institute of Nursing Education, Bambolim, Goa have been specially designed and aimed to empower students to acquire all the knowledge, skills and attitudes necessary to practice nursing effectively in the current century, and to enable these nurses to educate the community on measures to promote health, to prevent disease, to identify early signs of disease and to minimize the consequences of disease.

In the 15th century when Goa was under the Portuguese rule, this institution began nursing education programs the very first of its kind in Asia known as Curso de Emfermagem (Course of Nursing). The nursing education programs were run at the Santa Casa de Misericordia Hospicio (Holy House of Charity Hospital) in Ribandar (North Goa District), and at the Hospicio de Sagrado Curaco de Maria (Hospital of the Sacred Heart of Mary) in Margao (South Goa District). The institute was affiliated to the Escola Medica Cirurgica de Goa (Medical Surgical School of Goa) at Panaji. After Goa was liberated, and became a Union Territory in 1961 the nursing education programs, which were being run at, the two districts of Goa were phased out and were replaced by modern nursing education programs affiliated to the Indian Nursing Council. The nursing education programs were run

from multiple locations until 2008, when they moved to the Institute's current campus located at Bambolim.

The well-laid out campus houses six blocks: a college block, an administrative block, a girls' hostel, a boys' hostel, a wardens' block and a dining block. In addition to these facilities, students are regularly transported to their designated practice sites mainly the Goa Medical College Hospital and the Institute of Psychiatry and Human Behavior, conveniently located within a radius of two kilometers. Other practice sites include the District Hospitals, Primary Health Centers, Urban Health Centers and Sub centers under the Directorate of Health Services. The students are assisted to gain expertise in the necessary personal and professional skills under the guidance of trained nursing educators.

The Institute of Nursing Education functions as an independent unit, and is administratively under the Directorate of Health Services, Government of Goa.

### Literature Review:

1. **American Libraries magazine (ALA Survey Shows Effects of Pandemic on Library Services, 3 June 2020)** reported that a survey by ALA showed that libraries were involved in community crisis response, cautiously planning for reopening facilities, working to meet the educational needs of students and researchers, reporting increased use of digital services, and anticipating future demands
2. **Ifijeh & Yusuf (2020)** in their study about dynamism in library service delivery, recommended urgency in the acquisition of new skill sets by academic librarians in Nigeria. They placed emphasis on relevant stakeholders to provide adequate funding for libraries to deploy

relevant ICT infrastructures needed to adequately support teaching and learning in a virtual environment. the study considered perceived challenges libraries may be confronted with in deploying relevant ICT infrastructures geared towards transitioning from traditional to online provision of services in support of teaching and learning

3. **Asundi & Uplaonkar (2020)** reviewed articles regarding the reopening of libraries and provided links to these papers so that librarians can refer to them while preparing guidelines. During this period users' services as also the normal functioning of libraries have been affected. The IFLA and many LIS professional bodies across the world have suggested several key remedial measures on the reopening of libraries. The published literature in this regard is quite extensive and voluminous.
4. **Mehta & Wang (2020)** described the library's status during the pandemic and explained the uncharted challenges that the pandemic has posed to its digital services. Furthermore, they gave details of how the library converted some existing services into digital format and explored new initiatives/practices to support the university's full online teaching and learning. This paper aims to make other university libraries aware of what the library has implemented with providing digital services to its teaching faculty and students during the pandemic.
5. **Clough (2020)** discussed the principles of fair use in this crisis situation and reported that according to the group of copyright experts from universities, US copyright law

is "well equipped to provide the flexibility necessary for the vast majority of remote learning needed at this time."

#### Objective of the study:

1. To know the services provided by the library during pandemic period
2. To study the satisfaction level of the users about the resources developed
3. To promote the reading habit among the students
4. To survey the extent of utilization and implementation of the library online resources and services, designed during Covid-19 pandemic period for both students and teachers

#### Scope of the Study:

The purpose of this study is to provide an overall picture of the library services used by the users during COVID-19 pandemic. The scope of the present study primarily consists of the students and teachers of the Institute of Nursing Education Bambolim Goa.

1. The total number of teaching staff working in the institute of Nursing Education, Bambolim is 45 and 27

non teaching staff, but they were not covered in the study.

2. The institute of nursing education provide degree course in Bachelors of Science in Nursing Education (B.Sc. Nursing) and the data was collected from the First, Second, third and fourth year nursing student. The total sampling population was 421 students of B.Sc. Nursing.
3. The Master of Science in Nursing Education and Auxiliary Nurse and Midwives was not covered in this study.

#### Methodology:

Data has been collected by using Questionnaire survey method from the students by visiting personally in their respective class and telephonic interview to collect the data from teaching staff. This study involves 45 Teachers, and 421 students from Institute of Nursing Education, Bambolim Goa. Data received from the respondents were scrutinized before analysis and interpretation. Collected data were organized and tabulated by percentage analysis using MS OFFICE 2007, MS EXCEL 2007.

#### Analysis and interpretation of Data:

This paper is based upon questionnaire survey method and

telephonic interview to collect the data from teaching staff and students.

**Table No.1: Questionnaires distributed, telephonic interview and responses received**

Respondents		Questionnaires distributed	responses received
Librarian		01	01
Teachers( Staff Nurse, Tutors)		45	45
Students	1 <sup>st</sup> Year (B.Sc. N.)	102	102
	2 <sup>nd</sup> Year (B.Sc. N.)	112	112
	3 <sup>rd</sup> Year (B.Sc. N.)	109	109
	4 <sup>th</sup> Year (B.Sc. N.)	98	98
TOTAL		467	467

The table no. 01 shows the response rate of data collection. The data was collected through personal visit to the class. All (100%) students responded the questionnaire.

**Table No.2: ICT Based Services**

Sr. No.	ICT Based online access to study materials class and subject wise	Teachers	Students
1	ICT infrastructure provided to conduct online Class	42(93.33%)	NA
2	ICT infrastructure provided to Subject wise access e- resources	42(93.33%)	345 (81.95%)
3	Internet based retrieval of sources and services	45(100%)	255 (60.57%)
4	Creation, conduction and sharing of online quiz on different themes and Exams	45(100%)	NA
5	Convinced to attend online quiz on different themes and Exams on	NA	314 (74.58%)

The above table shows the ICT based services provided by the Institute of Nursing Education Goa during pandemic, it shows that the 100% maximum utilization of the ICT based services by the teachers was done, and it was also useful in conduction and sharing of online quiz on different themes and Exams, also the

retrieval of sources was done 100%. The ICT infrastructure provided to Subject wise access e- resources maximum utilization was done by teachers as well as students, but the Internet based retrieval of sources and services by the students was just done 60.57%

**Table No. 3: Creation, conduction and sharing of online quiz on different themes and Users' responses during lockdown**

Respondents	Effective	Less effective	Not effective
Students	264 (62.71%)	89 (21.14 %)	68 (16.15)
Teachers	36 (80%)	09 (20%)	00 (0%)
Librarian	01(100%)	00 (0%)	00 (0%)

The implementation of conducting online class and sharing resource on various themes of nursing profession was very effective and efficient. The 62.71 % student's respondent regarding the effectiveness of conducting online class and other ways and means of providing of resources to them, but 21.14% had responded less effectiveness due to connectivity or the difficulty faced by

them to access the data sent to them. Teacher's show 80% of effectiveness in conducting class also was satisfied with the online requirement was being fulfilled of them by sharing the relevant data or resources. The 100% have responded by the library staff to the effectiveness of sharing information to the teacher and the students.



**Table No. 4: Platforms used for communication and conducting lectures**

Mode	Librarian	Teachers	Students
Web blogs	01 (100%)	40 (88.88%)	351 (83.37%)
Google class room	01(100%)	45 (100%)	420 (99.76%)
WhatsApp Group of Students and Teachers	01(100%)	45 (100%)	421 (100%)
Face book	01(100%)	25 (55.55%)	251 (59.62%)
Twitter	00(0%)	00 (0%)	00(0%)
YouTube	01(100%)	35 (77.77%)	355 (84.32%)
LinkedIn	00 (0%)	00 (0%)	00 (0%)
Email Services	01(100%)	45 (100%)	412 (97.86%)
SMS Services	01(100%)	10 (22.22%)	50 (11.88%)

Table no.4 shows that the librarian was familiar with all the resource available in conducting online class and even help in communicating with the students through social media platform which is 100%. The platform used by the teachers in conducting the online class or lecture, most of the teachers used Google class room that is 100% and they used

Whatsapp group to communicate with the students as per their needs and also email service was used for by the both of them teachers and students 100%. Twitter and LinkedIn was not used in the Institute of Nursing Education. Also the facebook and youtube was used by teachers and students more frequently.

**Table No. 5: Use of Extended Library Services over the Internet**

Sr. No.	Library Services	Teachers	Students
1	OPAC	25 (55.55%)	150(35.63%)
2	Reference Service	36(80%)	106(25.18%)
3	Newspaper Clipping	01(2.22%)	00 (0%)
4	Document Delivery Service	20(44.44%)	00 (0%)
5	Remote access	45(100%)	236(56.06%)
6	Question papers	45(100%)	300(71.26%)
7	Syllabus	45(100%)	421(100%)
8	Subject Contents	45(100%)	415(98.57%)

The above table shows the extended library services in providing the information resource by using the internet. The OPAC system was more used by the teacher that is (55.55%) but the less effort was made by the students in using the OPAC (33.63%). Remote access, Question papers sharing using internet, syllabus and subject content resource sharing was done 100% use age. The Newspaper clipping

and Document delivery system was done less. Students used the more the syllabus and subject content library resources as they had to attend the online class as well as they had to attend weekly make duty in various part of hospital in Goa, as per their profession. OPAC and reference services was used less by them. All the services were provided online after clicking photos or scan copy was sent through email.

**Table No.6: Initiatives Taken in Response to COVID-19**

Types of services provided	Teachers	Students
Link of special services during COVID - 19	45 (100%)	312 (74.82%)
Share of notification of WHO/Government of India	45 (100%)	152 (36.10%)
Display of SOPs	45 (100%)	421 (100%)
Display of research support tools	35 (77.77%)	120 (28.50%)
Restricted working hours	45 (100%)	412 (97.86%)
Restriction on certain services	45 (100%)	125 (29.69%)

The table shows the initiatives taken by the teacher and the library staff in preventing the Covid-19 pandemic situation. Various notification and guidelines was posting in social networking sites, also were SOPs were

displayed in entering and preventing the disease. The Restriction of work had done by keeping 50% of capacity per day. Certain services institutional as well as library were restricted.

**Table No.7: Reopening of the library and plans after lockdown**

Sr. No.	Reopening of the library	Teachers	Students
1	Keeping safe distances between workstations/computers	45 (100%)	315 (74.82%)
2	Keeping safe distances between chairs in the reading room	45 (100%)	363 (86.22%)
3	Completely close down reading/study hall	45 (100%)	163 (38.72%)
4	Only issue/return counter will remain open	45 (100%)	401 (95.25%)
5	By maintaining social distancing in the issue, return counters	45 (100%)	421 (100%)
6	Cleaning and sanitation	45 (100%)	421 (100%)
7	Negotiating with database vendors for log in id-based availability of resources	45 (100%)	125 (29.69%)
8	Ensuring access to soap and water and also a supply of hand sanitizer	45 (100%)	421 (100%)
9	Implementing quarantine policies on returned books/Compact discs (CDs) (Studies say that risk posed by cardboard can be considered negligible after 24 hours, and plastic after 72 hours)	45 (100%)	421 (100%)
10	Cleaning of book drop facility /return desks	45 (100%)	421 (100%)
11	Limiting numbers of readers using the library at any one time by making proper schedules	45 (100%)	216 (51.31%)
12	Communicating clearly about all new rules to library users, both online and onsite	45 (100%)	412 (97.86%)
13	Making a portal of e-content developed by teachers of institutions or helping them to provide resources to make such e-content	45 (100%)	155 (36.82%)
14	Restrictions for social gathering like no lunch together	45 (100%)	421 (100%)
15	Others	00(0%)	00(0%)

The last question was open ended, asking them regarding post Covid-19 library situation, including how they would visualize the library measures in solving the problems regarding reopening it again. As the students were asked to do their duty in hospitals they were not allowed to enter the work station. They were allocated separate hostel to stay so safe distance was advised by the teaching staff. Strict WHO guidelines and SOPs were made mandatory and they were asked to follow up. Cleaning of work place and sanitization were done mandatory for three times per day. The reading rooms were closed. The issue and return counter was made separately, books were scanned before allocating in the racks, also were kept separately for 24 hours without touching it. In take limitation were made. The teachers had advice for the CINAL Nursing Key subscription. Teachers had advised for more importance to acquiring e-resources in future and also more e-journals subscription. They mentioned developing an institutional repository and populating it with other nursing institute e-resource and publication. Also it is important to enrich the library website separately, implementing the right web page information skills for searching and evaluating.

### Conclusion:

The study revealed that the library website should be upgraded providing relevant information. The library plays an important role in knowledge resources sharing of the relevant data. As we know that technology has its own importance in life and the advanced technology creating the virtual library has increased in demand, now a day the information should be provided on top of the figures. The

situation had thought us how the technologies help in providing the required resources without wasting the time and putting more effort in getting the resources through online mode. If the online teaching is made compulsory, then the demand for e-resources should be also increase. The changing situation had made the librarian role as a facilitator in providing the required information as and even needed, even the work load had become more magnified in providing the library services. The user should also update their ICT skills and should know various usefulness of online resources.

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