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"Analyzing the Awareness and Utilization of Digital Resources by the Library Users of Selected Medical Deemed Universities in Maharashtra"

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Analyzing the Awareness and Utilization of Digital Resources by the Library Users of Selected Medical Deemed Universities in Maharashtra

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Abstract:

Digital Resource awareness was studied among Medical Deemed University Libraries students in Maharashtra. The study used a questionnaire to investigate four Medical Deemed University Libraries of Maharashtra. This study examines digital resource utilization, purpose, frequency, locality, and preference. The study indicated that Maharashtra Medical Deemed University Libraries users were moderately aware of digital medical resources and used them mainly for the education, Learning, and knowledge updating. Students use e-journals, standards, reports, patents, and trade reports. This survey explores how Maharashtra Medical Deemed University Libraries students use electronic resources.

Customers of Medical Deemed University Libraries have difficulties using digital resources because of a lack of training or orientation, slow internet, an energy crisis or load shedding, a lack of printing facilities, the lack of full-text access to the majority of journals, a lack of awareness, information overload, and insufficient digital resource consumption. However, these factors are not statistically different from low levels of satisfaction and low internet speeds. The findings improve digital library services and resources. This research advanced medical e-resources and services. The results may enhance digital library services and virtual culture in designated medical Deemed University libraries, notably in Maharashtra. The author has considered medical students for this research survey. The structured questionnaire was randomly distributed among the four Medical Deemed Universities, which covered 200 UG and PG paradigms, with the scrutiny of the distributed questionnaire with speculation.

Keyword:
Digital Resources & Services, Users Awareness, Purposes, Satisfaction, Barriers, Medical Deemed University, Library, Maharashtra,

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Introduction:

This study covers four Maharashtra medical Deemed University Libraries utilization. In the age of

digital Medical, students need digital library resources. E-resource managers and Librarians can improve digital resources by analyzing their use. The researcher has studied four Maharashtra medical deemed universities; such as D.Y. Patil Educational Society, Kolhapur; Datta Meghe Institute of Medical Sciences, Wardha; Dr. D.Y. Patil Vidyapeeth, Pune; and MGM University of Health Sciences, Mumbai. This study fills a gap in the literature on electronic information resource use at Maharashtra medical institute.

Several digital sources satisfy learners and researchers in today's fast-changing ICT environment. Digital library resources simplify information retrieval. With the help of new technology, medical libraries gather, store, retrieve, and disseminate knowledge for Students, teaching, research, and clinical practice. Digital formats can use networks or authentication to access online library resources from home or work. Libraries subscribed to authentic digital information and provided reliable and current medical information to the users. Medical libraries used electronic resources early because doctors wanted high-quality information. Doctors and students need internet tools as more kids use computers. Faculty need medical data for teaching, research, and clinical practice. The Library conducted library orientation and training for professors and other users.

Digital Resources and Services:

The collection of a library must include digital resources because they are the most efficient means of international scholarly communication. Because to significant ICT breakthroughs, electronic publication has experienced unprecedented growth in recent years. This has caused the quick production of digital resources with the information from all perspectives and across all topic areas worldwide. As technology advances, libraries are relying more and more on digital materials since they are more convenient and less expensive. In the digital age, the Internet, CD-ROMs, online databases, library OPACs, and other widely available digital resources are replacing print media. In recent years, the use of digital resources in scholarly communication has increased significantly.

Literature Review:

A literature review is critical for finding studies that academics worldwide have already done. Studies have been found on how library patrons use e-resources and services at the Medical Deemed University of Maharashtra.

Kwadzo (2015)[1] conducted a study; in light of these findings, it is suggested that librarians, especially topic librarians, improve their marketing of the databases and research guides to both teachers and students to learn more about students' understanding of and usage of databases at the University of Ghana.

Baskar (2017)[2]. Given that it is a resource that necessitates computer access, an electronic product that supplies a compilation of open data with the goal of commercialization is referred to as an electronic resource. Electronic books, journals, theses and dissertations, reports, OPACs, the Internet and other computer-based electronic networks, e-newspapers, e-newsletters, audio, and videos, among other things, are examples of e-resources.

Lavanya and Santharooban (2018)[3] studied how Eastern University of Sri Lanka's College of Agriculture students utilized online resources. Few studies have been conducted to examine issues with e-resources and services as well as how various user categories use them. According to the study, most students utilize online resources for various educational purposes

using their smartphones, and they need to be made aware of free and paid university memberships. The study found several barriers to adopting online resources, including slow internet connectivity, ignorance, and virus attacks. It is advised that pupils be exposed to well-planned information literacy programs.

Burhansab, Patel Adam, and M Sadik Batcha (2020)[4] This study looked at how users of the libraries at the chosen colleges of Solapur University were aware of and used electronic resources. The survey revealed that e-resources are used and known to library users. Users of libraries can find, retrieve, and share research thanks to e-resources. Research production was increased via electronic resources. The most popular electronic resources were databases, research reports, and journals. Research experts heavily invest in these resources. Ongoing information literacy training emphasizing electronic information retrieval would enhance how well people use and comprehend electronic resources. Customers of the Library need user training to conduct independent searches. Advanced search strategies, restricted vocabulary, and informational internet use should be taught to simplify the electronic search. Computer capabilities and information retrieval techniques must be updated frequently to stay up-to-date with information communication technologies.

Singh, N. (2021)[5] According to the author of this article, online resources are increasingly useful for professionals and students performing research. The respondents are infrequent users of e-resources at Bhagat Phool Singh Mahila Polytechnic College. 53.21% of BPS Mahila Polytechnic's clients are satisfied. 39.10% of those surveyed admitted to using Google to find the information they required. Online learning resources are accessed by 44.23% of users. 26.28% of patrons in the university library required access to electronic resources. 32.69% of users use e-resources daily, and 64.74% think they are extremely valuable.

Kashyap, Santu Ram & Deepa Sahu (2021)[6] The writer clarified Due to their assistance in helping students prepare for their notes, assignments, seminars, and other projects, electronic resources have become essential study aids for college students. Most P.G. College Science students in Chhattisgarh's Dhamatari District currently use internet resources. Such as, among others, P.G. Pathshala, newspapers, periodicals, and electronic publications. Overall, this study's findings showed that most participants spent one to two hours online daily. Two hundred seventy-eight respondents, or 78.97%, use electronic books, 343 respondents, or 94.44 respondents, use electronic resources for research, and 75 respondents, or 21.31%, spend two to three hours utilizing digital resources. The biggest percentage of respondents—260 (73.86%)—were very satisfied with e-resources, as opposed to the lowest percentages—69 (19.60%), 13 (3.69%), and 10 (2.84%). A maximum of 229 respondents (65.06%) stated that using electronic resources was challenging due to delayed downloads.

Khan I, Modak A, and Khan MK.(2021)[7] explained that technological resources affect how the medical community consumes, stores, and retains information. Electronic resources are now essential to students and teachers of Uttar Pradesh medical college libraries. It revolutionized information search and dissemination. It shows that most students and instructors use e-resources to find information online. Hence, Uttar Pradesh medical college library students and faculty need effective user education, orientation, workshops, seminars, and more to maximize e-resource utilization.

Saba Habib and al (2022)[8] The author conduct a cross-sectional survey, the author used a questionnaire. Users of the library at Multan Medical College received the survey. This survey

revealed that the majority of medical library users used medical e-resources for learning and knowledge upkeep and were only "Slightly Aware" of them. Seldom used databases included MEDLINE, PubMed, Springer Link, Science Direct, Black-Well Synergy, and ProQuest. The internet library resources are relatively satisfying to Multan medical students. Customers of medical college libraries had to deal with issues like inadequate training or orientation, bad Internet, power outages or load shedding, limited printing options, restricted access to most journals' full texts, a lack of awareness of information overload, and inadequate I.T. infrastructure. Male and female respondents share medical e-resource awareness, use, satisfaction, and barriers. The results support proactive, effective, and efficient digitization of services and materials by library staff. This study improved awareness of medical e-resources and services. The findings could help the Multan Division libraries of Pakistani medical colleges promote online resources, digital library services and goods, and virtual culture.

Objectives of the Study

This study aimed to determine how users used electronic resources at the Medical Deemed University Maharashtra. The following objectives were more specific:
- To determine the source of knowledge about using digital information resources by students.
- To assess how the Medical Deemed University libraries services and online resources are currently being used.
- To find out how well users are satisfied with online resources and services.
- To determine the purpose and level of usage of the various digital resources and services by medical students;
- To examine the frequency with which the students utilize the different types of digital resources;

Scope

The scope of the present study is limited to the libraries of four Medical Deemed Universities in Maharashtra. The study is restricted to the students of four Libraries of Medical Deemed Universities in Maharashtra.

Sr. No	Name of Medical Deemed University	Place	Abbreviation
1.	D.Y Patil Educational Society,	Kolhapur	DYP, Kolhapur
3.	Dr. D.Y. Patil Vidyapeeth	Pune	DYP, Pune
3.	Datta Meghe Institute of Medical Sciences	Wardha	DMIMS, Wardha
4.	MGM Institute of Health Sciences	Mumbai	MGM, Mumbai

Users of the above-mentioned libraries were the study's target demographic. Two hundred students from the target population were enrolled at the time; To learn about the numerous kinds of

electronic information sources that users use.

Research Methodology

The study was intended to know the current status of awareness and utilization of Digital Resources and services of Selected Medical Deemed University Libraries in Maharashtra. The author has prepared 200 structured questionnaires and distributed them to the Library users (Under and Post Graduate students) of the selected Medical Deemed Universities, and 180 questionnaires were received from the Library users of respected Universities.

Sampling and Questionnaire Design

Out of the seven medically deemed universities in Maharashtra, a survey was done in 4 libraries. A formal questionnaire was created. Each institute's library patrons were chosen at random. From the four institutes, 200 library patrons were randomly chosen. The survey asked various questions about demographics, e-resource use and access, competencies and training, obstacles and advantages of e-resources, and other topics. Also, there were two open-ended questions that inquired about the challenges and advancements faced by the e-resources in the libraries of the respondents' institutions. 180 of the 200 surveys given out to library patrons were returned. 90% of the respondents responded. The data were analyzed using Microsoft Excel.

Study Population

Out of the seven medical deemed universities of Maharashtra, there are 04 medical deemed universities selected for the study. The study population constituted library users of 04 medical deemed universities of Maharashtra.

Data Analysis

Respondents

Table 1: Descriptive Statistics of Respondents from Different Medical Deemed Universities

Sr. No	Name of Medical Deemed University	Distributed Questionnaire	Responded	Percentage (%)
1.	D.Y Patil Educational Society, Kolhapur	50	43	86%
2.	Dr. D.Y. Patil Vidyapeeth, Pune	50	46	92%
3	Datta Meghe Institute of Medical Sciences	50	44	88%
4.	MGM Institute of Health Sciences, Mumbai	50	47	94%
	Total	200	180	90%

The response rate for the data collection from 04 medical universities was 90%. From a total of 200 participants, only 180 Participants responded; D.Y Patil Educational Society, Kolhapur, responded 86%; Dr. D.Y. Patil Vidyapeeth, Pune, responded 92%, Datta Meghe Institute of Medical Sciences, Wardha, responded 88%, and MGM Institute of Health Sciences, Mumbai were

responded 94%. The responses from various medical universities are displayed in Tabulation (Table 1)

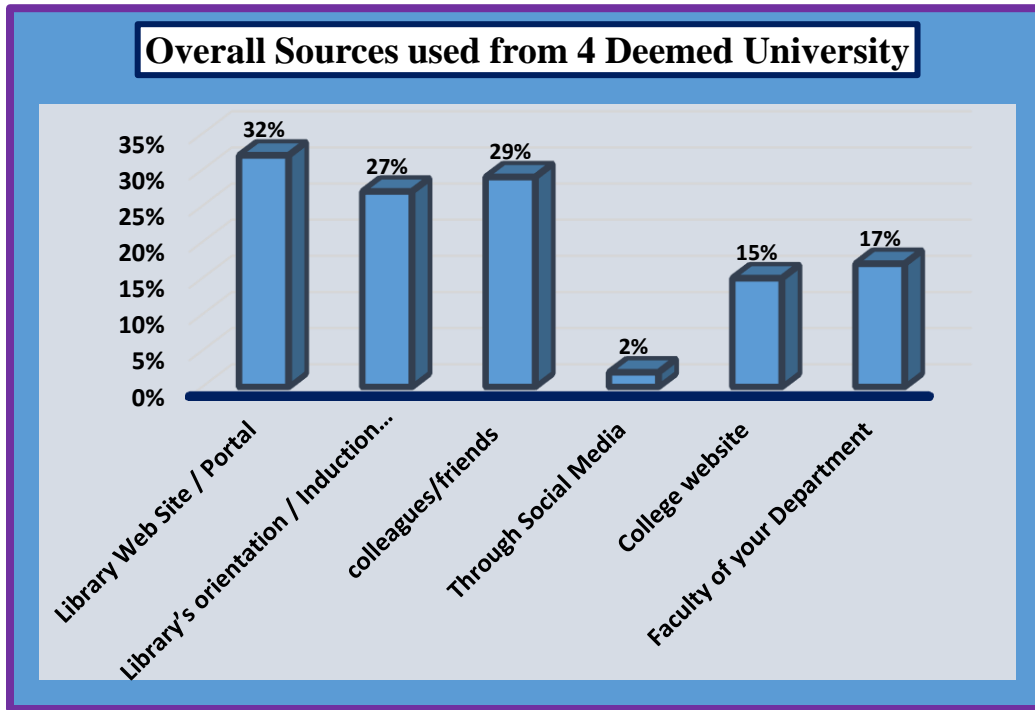**Figure 1: Descriptive Statistics of Respondents from Different Medical Deemed Universities**
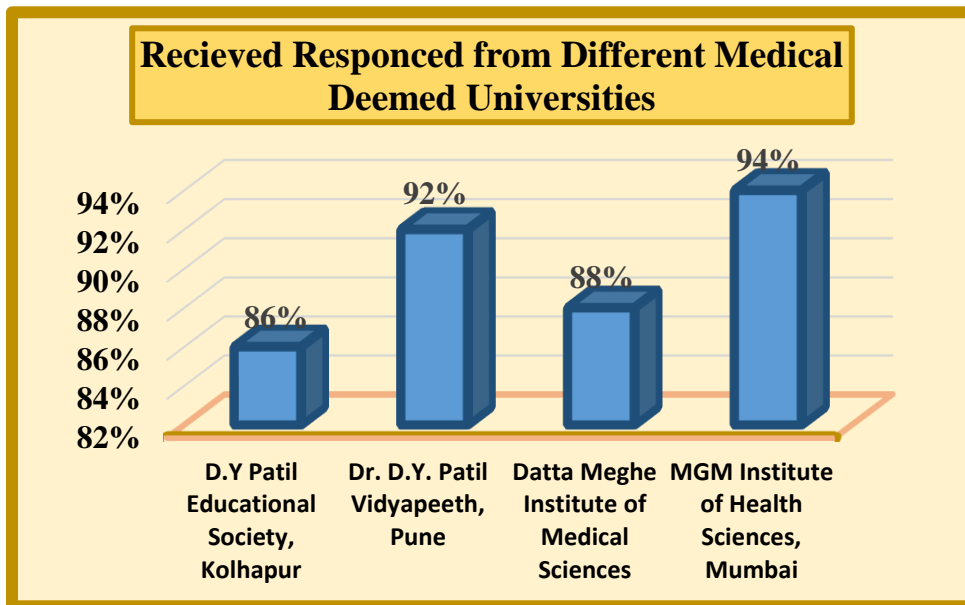
Source of information about the e-resources

Table 2: Descriptive Statistics of Respondents Source of information about the Digital Resources

Sources of Information	Overall Sources used from 4 Deemed University	Percentage
Library Web Site / Portal	59	32
Library's orientation / Induction programs	49	27
Your colleagues/friends' Colleagues	53	29
Through Social Media	3	1
College website	28	15
Faculty of your Department	31	17

Table 2 explains the source of information about Digital resources by the medical deemed University students. The majority of sources for students 32% Library Web Site / Portals, 27% Library orientation / Induction programs, 29% colleagues /friends Colleagues, 22.232% Faculty of Department, 15% College websites, 1.67% Through Social Media used for getting information about Digital Resources.

Figure 2: Descriptive Statistics of Respondents Source of information about the Digital Resources
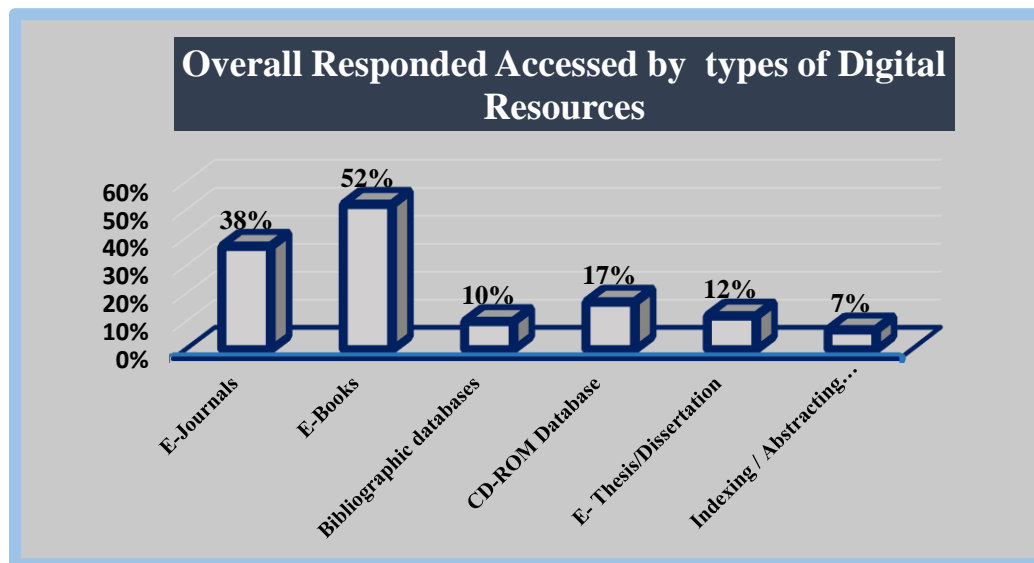

Usage as per types of Digital Resources

Table 3: Descriptive Statistics of Respondents Accessed by types of Digital Resources

Type of E-Resources	Overall Responded Accessed by types of Digital Resources	Percentage (%)
E-Journals	68	38
E-Books	95	52
Bibliographic databases	18	10
CD-ROM Database	31	17
E- Thesis/Dissertation	22	12
Indexing / Abstracting Database	13	7

Table 3 shows the types of e-resources access.38% of respondent's access E-journals, 52% of respondent's access E-books, 10% of respondent's access Bibliographic databases, 17% of respondent's access CD – ROM Databases. 12 % of respondent's access E- Thesis/Dissertation and 7% respondents access Indexing & Abstracting Databases Majority of respondent's access in Electronic Books for Digital resources.

Figure 3: Descriptive Statistics of Respondents Accessed by types of Digital Resources

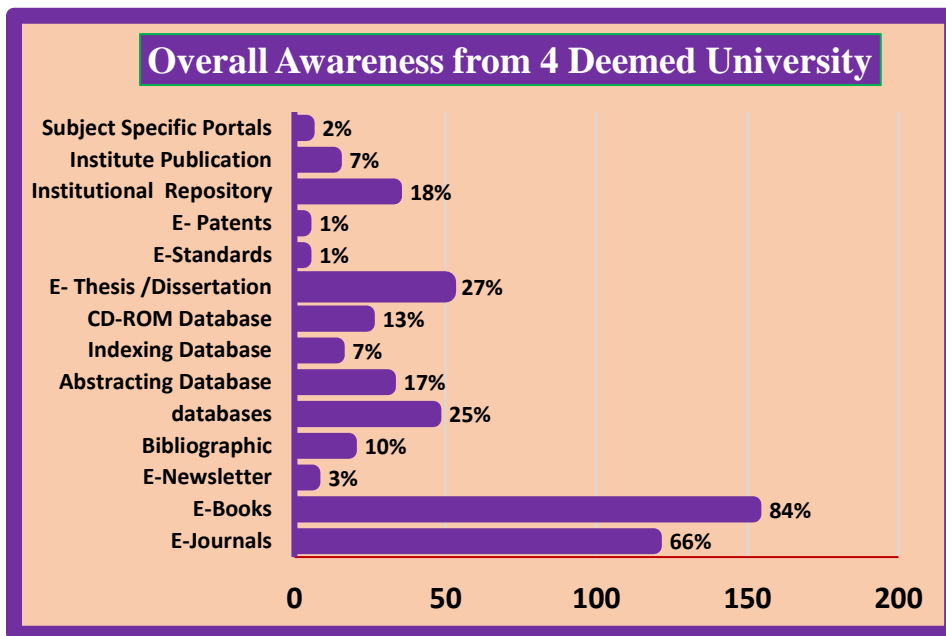## User Awareness and Usage of E-resources and Services

Table 4: Descriptive Statistics of Respondents' Awareness of Digital Resources and Services of Medical Colleges

Digital Information Resource	Overall Awareness from 4 Deemed University	Percentage(%)
E-Journals	119	66
E-Books	152	84
E-Newsletter	6	3
Bibliographic	18	10
databases	46	25
Abstracting Database	31	17
Indexing Database	14	7
CD-ROM Database	24	13
E- Thesis /Dissertation	50	27
E-Standards	3	1
E- Patents	3	1
Institutional Repository	33	18
Institute Publication	13	7
Subject Specific Portals	4	2

This table shows how many respondents know the type of databases mentioned in the

questionnaire. Different databases were asked from the respondents, and the respondents responded as 84% E-Books, 66 % were known about E-Journal, 13% were known about CD-ROM Databases, 17% were known about Abstracting & Bibliographic Database, 7% were known about Indexing Databases, 18% were known about Institutional Repositories,27% were known about E Thesis, this table showed very less awareness about E standard & E-Patents

Figure 4: Descriptive Statistics of Respondents' Awareness of Digital Resources and Services of Medical Colleges

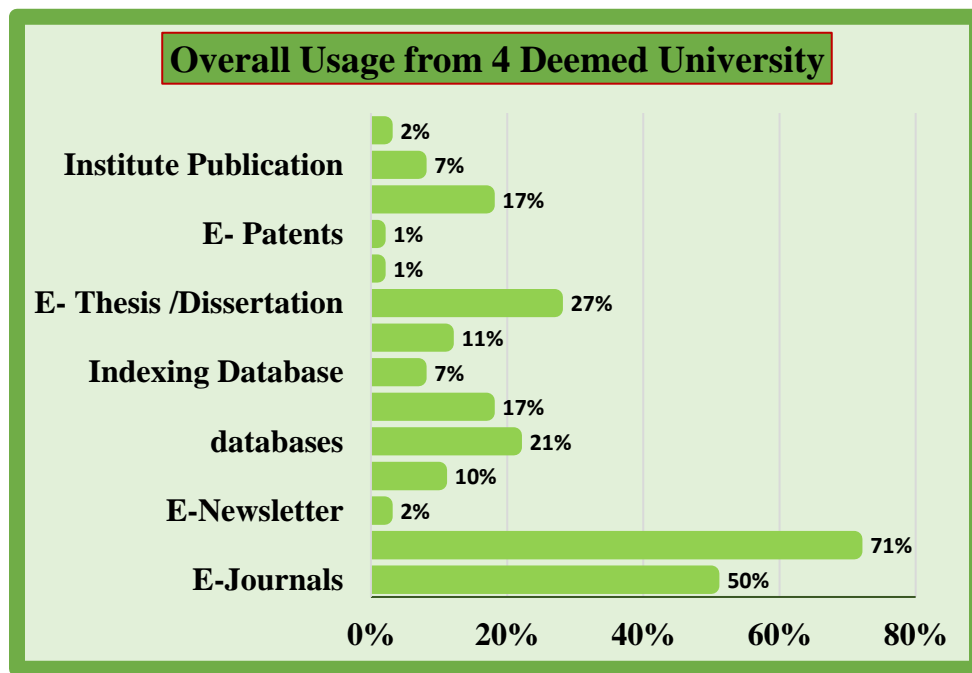## Usage of Digital Resources and Services of Medical Colleges

Table 5: Descriptive Statistics of Respondents' Usage of Digital Resources and Services of Medical Colleges

Digital Information Resource	Overall Usage from 4 Deemed University	Percentage (%)
E-Journals	90	50
E-Books	129	71
E-Newsletter	4	2
Bibliographic	18	10
databases	39	21
Abstracting Database	31	17
Indexing Database	14	7
CD-ROM Database	20	11
E- Thesis /Dissertation	44	24
E-Standards	3	1

E- Patents	3	1
Institutional Repository	31	17
Institute Publication	13	7
Subject Specific Portals	4	2

This table shows how many respondents know the type of databases mentioned in the questionnaire. Different databases were asked from the respondents, which the respondents responded as 71% were E-Books, 50 % were known about E-Journal, 24% were known about E Thesis, 21 &% databases Used,11% were known about CD-ROM Databases, 17% were known about Abstracting & Bibliographic Databases, 7% of were known about Indexing Database, 17% were known about Institutional Repository, this table showed very less usage about E standard & E-patented

Figure 5: Descriptive Statistics of Respondents' Usage of Digital Resources and Services of Medical Colleges


Purposes of Using Digital Resources and Services

Table 6: *Descriptive statistics of Respondents for Purposes of Using Digital Resources and Services*

Purpose	Overall Purpose of Using Medical Digital Resources and Services	Percentage (%)
Learning	110	61

For searching the literature for research	72	40
For updated Subject Knowledge	51	28
To write research papers	87	48
For Career Development	42	23
For preparing assignments	134	74

The participants were prompted to state why they were using the online tools and services. The majority of respondents (74%) have used online tools and services to prepare assignments.. Most participants (61%) were using e-resources & services for Learning. 48% of respondents were used to prepare for research work. 40% of respondents were used to prepare for searching the literature for research and other Using purpose presented in (Table 6).

Figure 6: *Descriptive statistics of Respondents for Purposes of Using Digital Resources and Services*
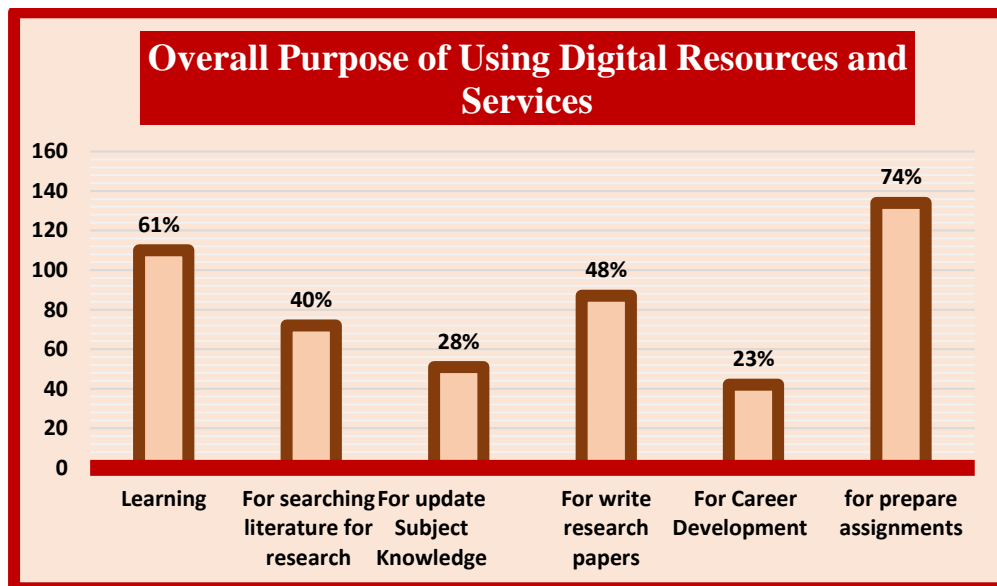
## Frequency of visits to the Library

Table 7: Descriptive statistics of Respondents of Frequency of visit to the Library (Colleges wise)

Frequency	Frequency of visits to the Library	Percentage (%)
Daily	73	40.56
Twice a week	42	23.34
Weekly	27	15
Monthly	14	7.78

Occasionally	15	8.34
Never	9	5

Medical deemed university-wise analysis displays that preponderance of users from D.Y Patil Educational Society, Kolhapur, Datta Meghe Institute of Medical Sciences, Wardha. Dr. D.Y. Patil Vidyapeeth, Pune, and MGM Institute of Health Sciences, Mumbai Majority of the users from the college of 40.56% have given priority to daily frequency, another 23.34% visit library Twice a week; 15% of users visit the library Weekly, 8.34% visitor at occasionally, and 7.78% have given priority on monthly, apart from this, about 5% users never visit the Library.

Figure 7: Descriptive statistics of Respondents of Frequency of visit to the Library (Colleges wise
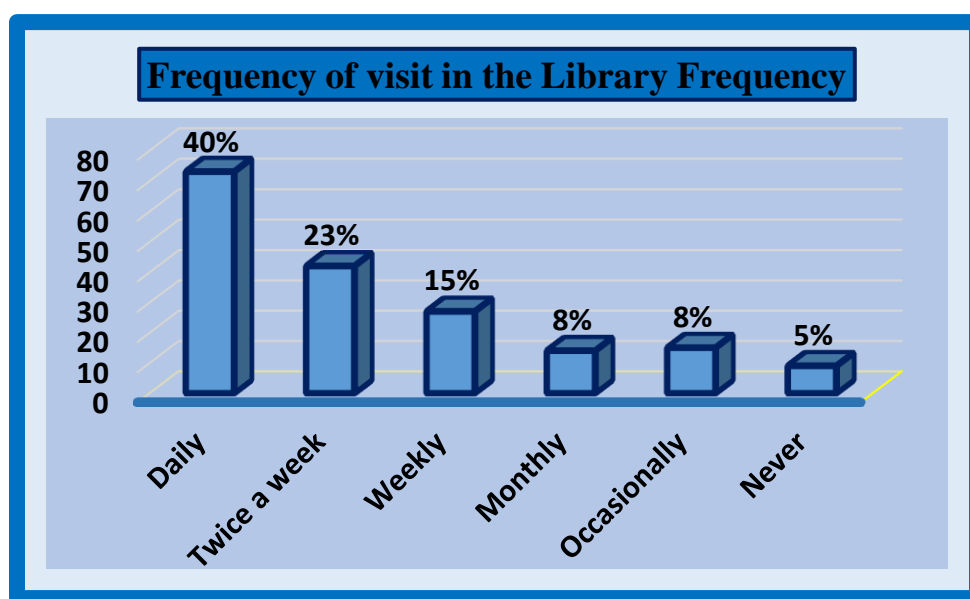

Purpose of visiting the Library

Table 8: Descriptive statistics of Respondents of Purpose of Library Visits

Purpose	Overall Purpose	Percentage (%)
To get the printout of the required material	60	33
To know the availability of material	30	16
To get material for class assignments	135	75
To Issue and return of books	169	93

To get literature for research	118	65
To Newspaper Reading	85	47

The overall analysis of the responses to the query regarding the purpose of their Library visit reveals that the first and foremost purpose of the visit by the user's community of the various selectedcollege's libraries. Most users visit the Library for the issue and return of books (93%). Thus the users (75%) were given second ranking to the data collection for writing assignments on specific information in their subject fields. Thus the users (65%) were given a third ranking to get literature for research, about (47%) of users are supported newspaper reading.

Figure 8: Descriptive statistics of Respondents of Purpose of Library Visits
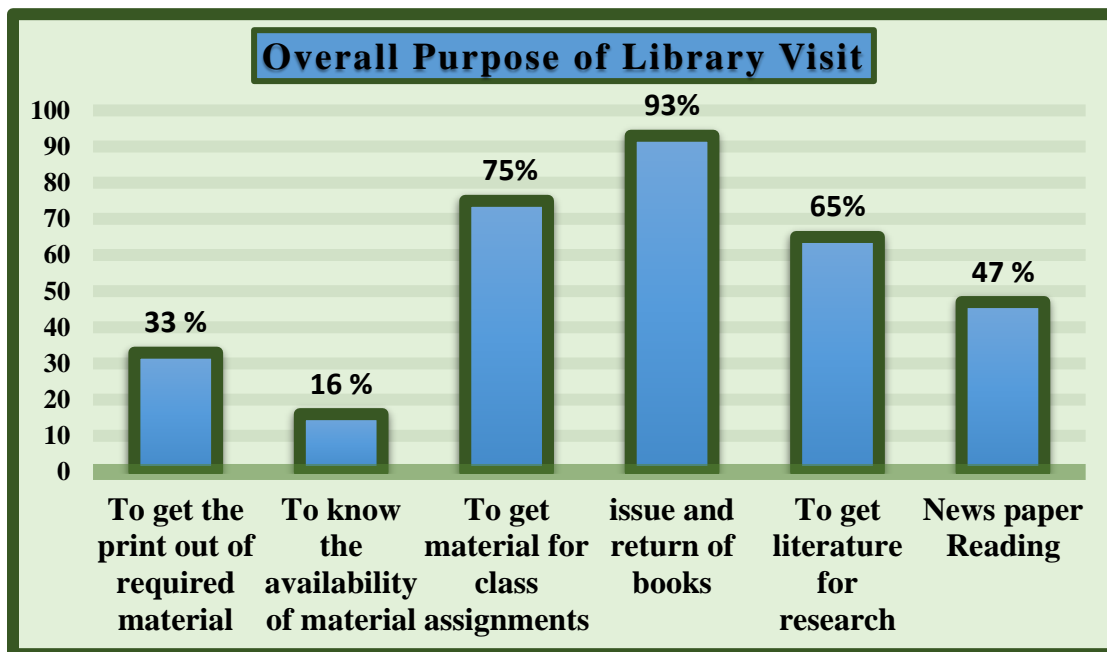
## Satisfaction with Digital Information Resources and Services

Table 9: Survey respondents' satisfaction with digital information resources and services, in terms of descriptive statistics

Satisfaction Level	Overall, Satisfaction	Percentage (%)
Very Satisfied	45	25
Satisfied	63	35
Neutral	44	24.45

Dissatisfied	10	5.56
No Opinion	18	10

Table 9 shows the respondents' satisfaction with the services and resources for digital information that are readily available. According to the table, most respondents (35%) are satisfied students., (and 25%) are very satisfied students. This table also shows that only 5.56% percent respondents are unhappy with the current digital information resources and services.

Figure 9: Descriptive statistics of Respondents of Satisfaction with Digital Information Resources and Services
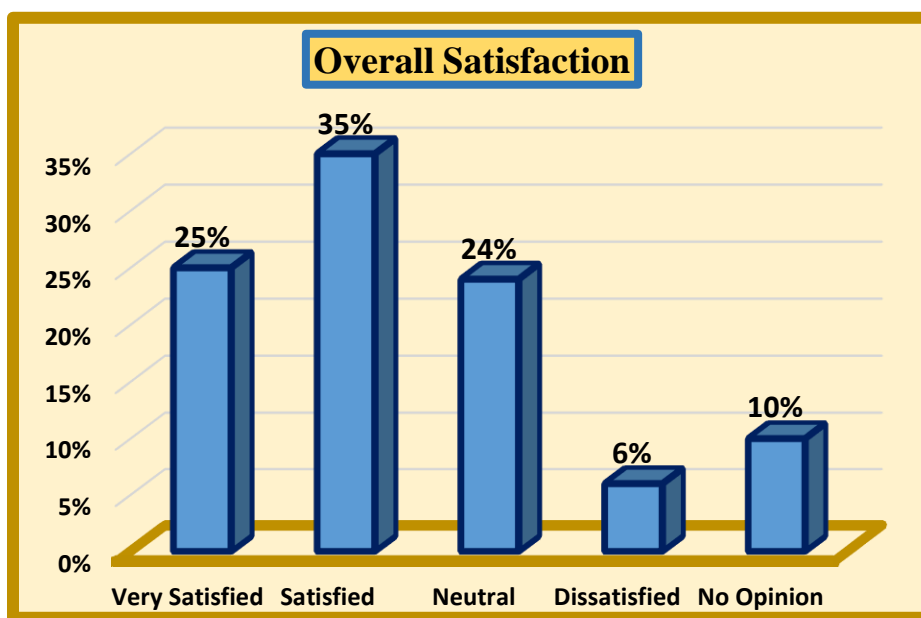
Barriers to accessing the Digital Resources

**Table 10: Descriptive Statistics of Respondents' Barriers to accessing the Digital Resources**

Barriers	Overall Barriers	
Slow Internet Speed	45	25
Lack of Access to Internet facility	55	30
Lack of training/ orientation to access and use Digital Resources	70	39
Unavailability of latest computers in Lib/Comp. Lab.	65	36
Electricity failure	29	16

Non-availability of full-text access to most of the journals	70	38

Table 10 illustrates how medical students are distributed in accordance with the difficulties they have using digital information resources and services.

It is clear from Table 10, which displays the medical students' perspectives on obstacles to using digital resources. Most medical students (39%) claimed that there was a "Lack of training/ orientation to access and use of Digital resources." (38%) Full-text access to the majority of journals is not available, there are 36 percent less modern computers in the library and computer lab, 30 percent fewer Internet facilities are available, 25 percent of responses to the slow internet speed, and 16.11 percent more electrical outages.

Figure 10: Descriptive Statistics of Respondents' Barriers to accessing the Digital Resources
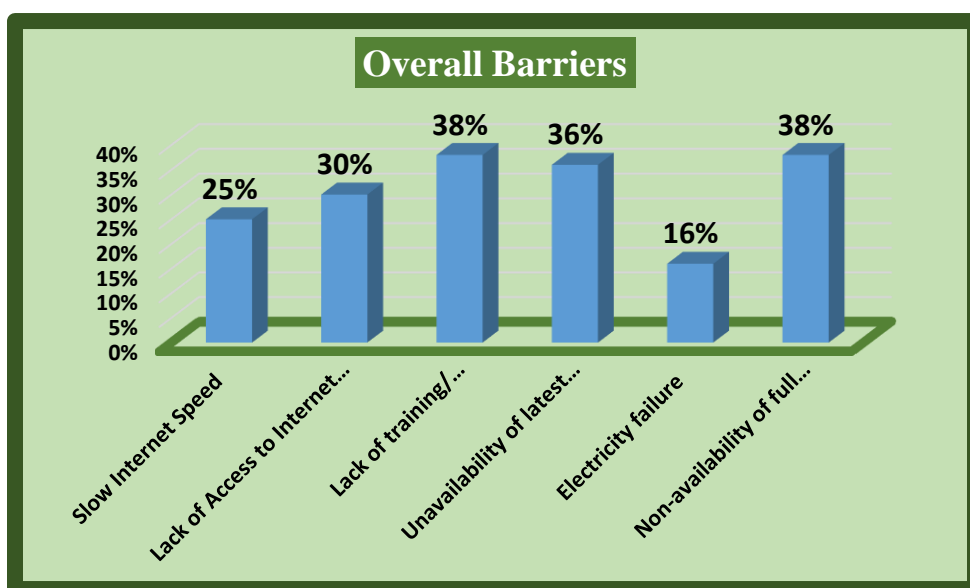
Conclusions

Digital resources have dramatically altered medical information use, storage, and preservation. The Medical Deemed University Libraries of Maharashtra patrons heavily use electronic resources. Technology has transformed information discovery and sharing. It shows that most teachers and students use online tools to find crucial information. The Medical Considered University of Maharashtra's students' needs user education, orientation classes, workshops, seminars, and more to correctly use the study's e-resources. 180 of 200 randomly distributed student questionnaires with excellent responses were returned. Observation, interviews, and questionnaires provided data. Processed and tabled results were conclusions. Information professionals must use modern tools to manage papers. Professionals must establish websites and institutional repositories. Library staff must advise and train clients to maximize information use. This study asked Maharashtra medical university library clients about their utilization of digital resources. The survey found that library patrons commonly use digital materials. E-resources help

library users locate, retrieve, and share research. Electronic resources increased their research output. E-databases, e-research reports, and e-journals were the most popular. Yet, due to their high cost, infrastructural changes may encourage research scientists to employ these technologies more often.

Organized regular information literacy training emphasizing electronic information retrieval will improve electronic resource use and promote awareness of its many benefits. If consumers want to search independently, they need instruction.

Training on advanced search strategies, restricted vocabulary, and educational use should be provided to simplify electronic search operations. Improve computer literacy and information retrieval skills as information communication technology evolves. This study demonstrated that the evaluated libraries provide a wide range of digital services and materials. Digital forms satisfy users while saving libraries time and money. The rapid advancement of technology has created new issues for libraries and information centers. The information revolution has made it necessary to find new means of advertising library materials and services in order to satisfy user information needs. In order to suit users' information needs, librarians have purchased the most recent equipment and publications.

Suggestion

The following recommendations are made to improve the usage of digital resources among medical students in light of the thorough study's findings.

1. To help patrons better use their information resources, the Library should offer an online help menu on the search page.
2. The Library and Information Centre should notify users when new print and electronic materials become available.
3. Medical schools should regularly schedule seminars, workshops, and orientation programs to keep staff and students up to date with the most recent information technology.
4. To make it simpler and faster to access digital resources, libraries should install more computer terminals.
5. The Library has to regularly evaluate and assess how well the digital resources are meeting the users' demands for information.
6. The Library has a strong infrastructure and knowledgeable staff. Responses from the relevant colleges should glean as much advice from them as possible about how to use the digital resources.

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