



Usage and Understanding of E-Resources by Medical Colleges, North India

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ABSTRACT

In times past, only the nobility had access to libraries and their collection of books. Sometime later, traditional libraries emerged, and through time they evolved into public institutions. Most of these public libraries were housed in imposing, historic structures. Traditional libraries gradually gave way to their digital counterparts. To all the more likely to comprehend what is going on of electronic assets at the Medical College in northern India, an overview was led. Questionnaires were sent online to a representative sample of 20 MBBS institutions in northern India for the purpose of data analysis. In this study, we look at how medical students utilize e-resources to get the information they need, and we break down the reasons why they use them, the advantages they get from doing so, how often they do so, what they use the information for, and the formats they prefer. In this article, we describe the findings of this survey.

Keywords: E-resources, Digital resources, Medical College libraries,

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I. INTRODUCTION

In the middle of the 1960s, libraries began incorporating electronic resources. Therefore, libraries need to abandon their antiquated methods of collection and adopt more cutting-edge techniques. Books, journals, and periodicals are now available in electronic versions in many digital and virtual libraries. In recent years, digital resources have become a crucial tool for academic work and classroom instruction. It's caused a huge upheaval across the board. E-resources is a term that has come to mean the same thing as web resources, digital resources, and online resources. In layman's terms, however, online resources are only those that can be accessed over the World Wide Web. Since the advent of the Internet in 1985, there have been several developments in the realm of electronic publication, from which electronic resources emerged. Electronic documents and other forms of digital media are gradually replacing their printed counterparts. Therefore, we may define electronic resources as those that are kept in an electronic format and accessible through computers. Electronic resources include a wide range of publication formats, from online public access catalogs to compact discs. Included in the category of "e-resources" are online databases, electronic journals, electronic books, electronic theses, internet resources, electronic mail publishing, wireless publishing, electronic linkages, web publishing, etc. A digital resource is any publicly accessible electronic product that provides access to information in textual, numerical, visual, or temporal form. Similarly, digital resources refer to any digital materials made accessible to library customers via an online database. Google, Yahoo, Alta Vista, etc. are just some of the search engines people use to find this stuff online. Because of the many benefits they offer in comparison to traditional library materials, e-resources have quickly become the most in-demand collection of materials in today's libraries. Because of the boundless accessibility of advanced data and correspondence innovation, students, teachers, and researchers may now access the information they need with minimum time and energy spent searching. Its fast growth has led to information technology has quickly become an indispensable resource for locating previously unavailable data. Some libraries' holdings have been completely converted to electronic information sources. Information resources, especially digital ones, have grown in importance and utilization throughout the years. Therefore, research on the many facets of e-resources and the problems associated with their usage by users, especially medical students, is essential. As technology continues to play an increasingly important role in medical science, new research is being conducted every day around the world. As a result, it is of paramount importance that medical students keep abreast of these developments and be familiar with the most recent innovations in the

field. So, to collect the new information of medical science, e-resources are the prime resources for the medical students.

II. LITERATURE REVIEW

Santhanalakshmi&Veerachamy (2019) medical students at both SRM Medical College (established in 2005) and Stanley Medical College in Chennai utilize online databases to research topics, according to a review of the institutions' e-resource practices. Many medical professionals rely on paid internet databases like PubMed Central, the British Medical Journal, and others. It has also been discovered that doctors and other medical professionals use the internet to stay abreast of developments in their area and to access and use electronic resources without being tied to a specific physical location.

Vijayalakshmi (2017) took a gander at the utilization of and purposes behind getting to electronic data assets by understudies and workforce at Trichy, India's Chennai Medical College. The study's overarching goal is to gain insight into the ways in which the library's patrons, including students and educators, make use of electronic databases. According to the results of this research, both students and teachers at CMCH and RC utilize digital resources. Also, it has been shown that medical students rely on online materials for continuing education and staying abreast of developments in their area.

Gaikwad (2017) research entitled Arts and Commerce College, Madha: A Study of Electronic Information Resource Awareness and Use was undertaken. In the age of Google, e-resources have become a tremendous bonanza for both librarians and library patrons. There is a wide range of electronic resource formats to choose from. Every part of the globe contributes to the information explosion, which is both rapid and relentless. Online materials are mostly used for educational purposes by students. The e-resources center has been very well received by the faculty. In a survey of PhD students, 100% reported familiarity with and use of UGC INFLIBNET -N-LIST consortium resources. The majority of the academics surveyed reported utilizing electronic materials in their work. Online materials are used by educators for both professional development and classroom instruction. Undergraduates rely on online materials to help them learn and expand their understanding of the world.

Bansal (2015) did a study on e-resource use by agricultural scientists in India's Himalayan area and discovered that electronic information has changed the method in which scientists and research scholars access information. Researchers currently depend vigorously on electronic data assets, investing significantly more energy in electronic assets than they did with printed hotspots for different data exercises. According to the report, researchers have a clear preference for digital formats but nevertheless maintain a stronghold on print publications. Among scientific databases, CAB Abstracts and AGRIS are the most popular choices. In addition, it has been decided that the Indian Council of Agricultural Research (ICAR) would create a unified database of online materials.

Priyadharshini et al. (2015) observed that there was an impressive expansion in the quantity of articles read from electronic diaries and books downloaded for disconnected perusing during their examination of e-asset utilization at Madurai's horticulture school and exploration focus. Many people use search engines like Yahoo, Google, AltaVista, etc., to locate online materials. Users' information demands are increasingly being met via the usage of digital resources, which has been shown to play a key role in the library. Electronic resources such as books, journals, and these are quickly replacing print publications. The information is obtained from online sources like Scopus and Emerald. Libraries should put resources into electronic assets to address the issues of their clients for research.

III. OBJECTIVES

The study's primary goal is to assess how well medical college users are using online resources. The particular goals of the research areas are:

- To determine how often and how long on average each user stays.
- To determine the reason for using electronic resources.
- To find out how satisfied users are with online resources.
- To identify the categories of consumers' preferred online resources

IV. METHODOLOGY

Because impartiality in any study inquiry cannot be attained until it is carried out in a highly methodical and planned way, the methodology is significant in scientific investigation. Adopting a study design, using standardized equipment and test methodologies, implementing solid processes for data collecting, carefully tabulating the data, and using relevant statistical techniques are all essential steps in conducting a scientific inquiry. There are many different ways to conduct a search for user research. These include surveys, observations, interviews, and archival materials.

MEDICAL EDUCATION IN NORTH INDIAN STATES:

(HARYANA, HIMACHAL PRADESH, PUNJAB, UTTARAKHAND, UTTAR PRADESH)

More than 100 State Medical Universities, State Government Medical Colleges, Institute of national Importance such as AIIMS (All India Institute of Medical Sciences) and many private Medical Colleges serve medical education to the society. Medical Education has seen major development during the last few years. Medical education institutions have grown rapidly in many states in recent years, necessitating a large pool of qualified technical and non-technical workers. Much emphasis has been placed on expanding modernization and reorienting medical education to meet the growing need for technically skilled professionals to fill the deficit. New medical facilities have been built, and others are being improved, to fulfill the goal. The new revolution towards this effort has also been noticed in the foundation of various medical institutions. The goal of this study was to collect data on the availability and utilization of electronic resources (e- resources) among undergraduate (MBBS), graduate (MD/MS), and faculty members at medical institutes in the five northern Indian states of Haryana, Himachal Pradesh, Punjab, Uttarakhand, and Uttar Pradesh. Information assumes a critical part in making clinical workforce, MD/MS (PG) understudies, and MBBS (UG) understudies more powerful and creative in the work market, for gathering data and staying up to date with the ongoing leap forwards, and web is turning into a significant human prerequisite with every one of its aspects.

A list of selected medical institutes is mentioned below:

Table 1: List of Medical College selected for Research work:

S.N.	Name Of Institute/University	Status	Courses	States
1.	Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh	Government	MBBS, MD	Uttar Pradesh
2.	Dr Ram Manohar Lohia Institute of Medical Sciences, Lucknow	Government	MBBS, MD	Uttar Pradesh
3.	Neta Ji Subhash Chandra Bose Subharti Medical College, Swami Vivekananda Subharti University, Meerut.	Private	MBBS, MD	Uttar Pradesh
4.	Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly	Private	MBBS, MD	Uttar Pradesh
5.	Pt Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences, Rohtak	Government	MBBS, MD	Haryana
6.	BPS Government Medical College for Women, Sonapat	Government	MBBS, MD	Haryana
7.	Maharishi Markandeshwar Institute of Medical Sciences and Research, Mullana	Private	MBBS, MD	Haryana

8.	SGT Medical College Hospital and Research Institute, Gurgaon	Private	MBBS, MD	Haryana
9.	Government Medical College, Patiala	Government	MBBS, MD	Punjab
10.	Government Medical College, Amritsar	Government	MBBS, MD	Punjab
11.	Dayanand Medical College and Hospital, Ludhiana	Private	MBBS, MD	Punjab
12.	Adesh Institute of Medical Sciences and Research, Bathinda	Private	MBBS, MD	Punjab
13.	Doon Medical College, Dehradun	Government	MBBS, MD	Uttarakhand
14.	Government Medical College, Haldwani	Government	MBBS, MD	Uttarakhand
15.	Himalayan Institute of Medical Sciences, Dehradun	Private	MBBS, MD	Uttarakhand
16.	Shri Guru Ram Rai Institute of Medical and Health Sciences and Shri Mahant Indires Hospital, Dehradun	Private	MBBS, MD	Uttarakhand
17.	Indira Gandhi Medical College, Shimla	Government	MBBS, MD	Himachal Pradesh
18.	Dr Rajendra Prasad Government Medical College, Kangra	Government	MBBS, MD	Himachal Pradesh
19.	Government Medical College, Nahan, Sirmour	Government	MBBS	Himachal Pradesh
20.	Maharishi Markandeshwar Medical College and Hospital, Solan	Private	MBBS, MD	Himachal Pradesh

OBJECTIVES OF THE STUDY:

1. Users Selected as Representative Samples from Medical School Libraries
2. A breakdown of respondents by occupation
3. Use a Wide Variety of Formal, Primary Sources of Information
4. Using a wide variety of tertiary formal sources of information
5. Relying on Unofficial Scanners for Data
6. The Best General and Secondary School Journals
7. Ease of Use and Familiarity with Online Full Text Journals
8. Why Use Online Materials and Tools
9. Comprehensive Data Service

KNOWLEDGE OF FREE ONLINE MATERIALS

Table 2 shows that the maximum possible number of respondents (196 out of 200) responded, the lowest percentage of respondents, 14 (7.27%), are familiar with open access electronic resources, do not know about free online.

Table 2 : Knowledge of open access online resources

S. No.	Response	Frequency	Percentage
1	YES	196	92.73%
2	NO	14	7.27%
Total		200	100%

PATTERN OF OPEN ACCESS ELECTRONIC RESOURCES

Table 3 displays the respondents' favorite open access electronic resources. Ninety-two (44.54%) of the total 200 respondents favored DOAJ, followed by forty (19.09%) who favored Bentham Open and eighteen (9.09%) who favored Med-know.

Table 3:Favoring Open Access Online Resources

S. No.	E Resources	Frequency	Percentage
1	DOAJ	92	44.54%
2	Bentham Open	40	19.09%
3	Med-know publication	18	9.09%
4	Pub Med	36	19.09%
5	Any Other	14	8.19%
Total		200	100%

Purpose of using the E-resources

Table 4 describes why it's important to use online materials. In a variety of contexts, GMC students turn to online materials. 112 (53.63 percent) of the 200 respondents use e-resources for learning, 64 (34.54 percent) use them for staying current, and just 4 (1.81%) use them for teaching.

Table 4 : reason for utilizing the online resources

S. No.	Propose	Frequency	Percentage
1	Research	20	10%
2	Education	112	53.63%
3	To update yourself	64	34.55%
4	Teaching	4	1.82
Total		200	100%

V. MAJOR FINDINGS

1. The DOAJ is used as the principal academic resource by the great majority of students who are acquainted with Open Access e-resources.
2. Daily use of electronic resources is common among MBBS students, with 34.09 percent doing so.
3. The vast majority of medical students (56.36%) use the online library from their own residences.
4. Most (53.63 percent) medical students rely on online materials for their studies.
5. The majority of medical students relied on their peers for help when accessing online materials.
6. Medical students have a significant challenge when attempting to use online resources due to the slow internet.
7. When it comes to the reliability of the material acquired, the vast majority of medical students (43.63 %) are not happy.
8. Most students (43.63 %) gain from the convenience of online/electronic resources because they allow them to quickly locate the material they need, and (25%) profit from the efficiency with which they may complete their assignments.
9. Most MBBS students (64.54 percent) prefer PDF format while reading content from e-resources.
10. The library catalog is used by 35% of medical students, whereas just 5% utilize electronic publications.

11. Three eighty-six percent of medical students report using just the most basic search strategies while gathering data.
12. The majority of students (56.81%) report using Access Medicine as an online resource inside the classroom.

VI. SUGGESTIONS

The following are a few recommendations made in light of the results:

1. The library should expand its resources to better serve its patrons.
2. It is important for libraries to provide occasional events to educate patrons on the many materials available to them, both in the physical library and online.
3. There has to be internet access available in the library so that kids may do their homework.
4. The library should renew its subscriptions to online resources on a regular basis.
5. The library should subscribe to additional electronic publications, and students should have access to the necessary infrastructure to use such periodicals.

VII. CONCLUSION

Even though the libraries of the surveyed medical schools and medical research institutes include a wide variety of papers and other print resources, most academic work is completed with the use of online resources written by established writers and published by respected scientific publications. Regardless of the approaches used, it is expected that clients would support ERM and seek out the quickest, easiest way to get information. Users are placing a premium on portability, shareability, and simplicity. In order for libraries to get the most out of their electronic resources, they need to implement effective management strategies. Electronic resource growth, albeit slower than anticipated, will nevertheless eventually compel libraries to transition to more and more electronic resources. The process of managing electronic resources is hard now, but thanks to new ways of thinking about these problems and a strong focus on standardization, it will become easier in the future.

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