Challenges in accessing e-resources by the faculty members of nursing colleges in Bangalore

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ABSTRACT

This study evaluates the difficulties in accessing electronic information resources (EIRs) by the faculty members of nursing colleges in Bangalore. The research aims to understand the extent of EIR awareness, frequency of use, challenges faced while accessing e-resources, and overall impact on teaching and research. Through a mixed-methods approach, involving surveys and interviews, the study provides insights into the adoption and effectiveness of EIRs in enhancing academic and professional activities among nursing faculty.

KEYWORDS: Nursing Colleges, Faculty Members, Electronic Resources, Problems in using e-resources, etc.

1. INTRODUCTION

Health information systems' primary goals are to intervene and provide information. The purpose of the information should be to support decision-making in healthcare settings. In addition to producing a vast amount of data, the information system can promptly deliver the appropriate information to the appropriate individual. Nursing education is vital because it prepares nursing students with the knowledge, skills, and critical thinking abilities required to provide safe and competent care in a complex and ever-changing environment. It also assists nurses in improving the quality of nursing care by integrating evidence-based practices while satisfying the requirements of patients. Nursing education is critical to the advancement of the nursing profession because it ensures that nurses have the skills required to satisfy the needs of the healthcare system. It also contributes to the development of advanced practice registered nurses (APRNs), who can broaden the nursing profession's tasks and functions to improve quality of treatment. Nursing education also helps to generate and disseminate nursing knowledge through research, which benefits the profession. Overall, nursing education is critical for developing competent healthcare professionals and encouraging high-quality patient care.

Nursing faculty members today require up-to-date, empirically supported knowledge that is relevant to their evidence-based learning. For healthcare workers, efficient information searching and having access to the most recent, pertinent information are essential. The most recent technological advancements were attempted to be used to

nursing library resources and services in an attempt to resolve these issues. One of the most important sources of scientific knowledge, electronic databases have made it possible to obtain qualitative and quantitative data more rapidly and precisely.

2. SIGNIFICANCE OF THE STUDY

The nursing profession and professionals have their own quality and identity. The point of patient care, trainers/teachers, and nursing professionals have completely depended on the internet and computer-based technology. To study, to train, and to practice for all purposes, they are using computer-based technology and electronic resources. There are crores of resources available on the internet related to nursing and nursing professionals, such as e-journals. e-databases and videos. The authors of this study analyzed frequency and problems/challenges of accessing electronic information resources among the nursing professionals at Bangalore city and presented the results in this article.

3. OBJECTIVES OF THE STUDY

The present study was carried out based on the following objectives

- ✓ To find out the frequency of using electronic resources
- ✓ To find out the problems while accessing the electronic information resources.

4. SCOPE, METHODOLOGY, AND LIMITATIONS OF THE STUDY

4.1 Scope:

The scope of this study is confined to faculty members of Nursing colleges affiliated to Rajiv Gandhi University of Health Science, Bangalore. For the study purpose, 119 nursing college faculty members were selected.

4.2 Sample:

A total of 1150 structured questionnaires were distributed among faculty members of 119 nursing colleges in Bangalore, out of which 947 filled questionnaires were received back, with a response rate of 82.35%. Among 947 questionnaires, 853 (90.07%) questionnaires were filled by female respondents, and the remaining 94 (9.93%) questionnaires were filled by males.

4.3 Methodology:

4.3.1 *Tool employed*

To study the frequency of use of electronic resources among faculty members of nursing colleges at Bangalore city, the researcher was consulted experts in the fields and developed questionnaires using a frequency scale "Daily", "2-3 times In a week", "Once in a week", "2-3 times In a month" and "Once In a month". Further, to analyze the problems while accessing the electronic information resources among faculty members, the researcher were included related questions with Likert scale "Strong Disagree", "Disagree", "Neither agree nor disagree", "Agree", and "Strong Agree" in the questionnaires. The questionnaires were then distributed to collect the data.

4.4 Procedure

The researchers of this study obtained the data from respondents with prior permission. They were asked to read/understand the questions mentioned in the questionnaire and select the best option for each statement. The researchers have also explained the importance of the study to respondents. Further, the researchers scrutinized the data and fed responses to the datasheet for statistical analysis.

4.5 Limitations

The present study is limited to the questions on frequency, problems, and satisfaction level in accessing electronic information in nursing colleges in Bangalore city.

5. DATA ANALYSIS

The following table presents the demographic data of the faculty members of nursing colleges in Bangalore

Table 1: Gender-wise distribution of respondents

Gender	No. of questionnaires received	Response rate in percentage
Male	94	9.93%
Female	853	90.07%
Total	947	100%

The above table shows that 853 (90.07%) are 'Female' respondents, and the remaining 94 (9.93%) are 'Male respondents. This substantial gender imbalance indicates a predominantly female faculty workforce in the nursing field within these colleges, aligning with the general trend of higher female representation in nursing professions.

Table 2: Age-wise distribution of respondents

Age (in Years)	Numbers	Percentage
25-35	257	27.14%
36-45	435	45.93%
46-55	172	18.16%
56 above	83	8.76%
Total	947	100%

The above table shows the age-wise distribution of respondents between 25 years and 56 years and above. Out of the 947 faculty members, 257 (27.14%) comes under the age group of 25 to 35 years, 435 (45.93%) belong to '36-45 years', 172 (18.16%) come under '46-55 years', the remaining 83 (8.76%) of the sample represent 'Above 55 years' of age group.

Table -3: Designation-Wise Distribution of Respondents

Sl. No.	Designation	Male	Female	Total
1	Lecturers	39 (41.49%)	343 (40.21%)	382 (40.34%)
2	Assistant Professors	27 (28.72%)	325 (38.10%)	352 (37.17%)
3	Associate Professors	15 (15.96%)	124 (14.54%)	139 (14.68%)
4	Professors	13 (13.83%)	61 (7.15%)	74 (7.81%)
	Total	94 (100%)	853 (100%)	947(100%)

The above table presents the designation-wise distribution of faculty members of nursing colleges in Bangalore. Among the respondents, 382(40.34%) Lecturers, 352 (37.17 %) Assistant professors, 139 (14.68 %) Associate professors, and 74 (7.81 %) Professors, respectively. Overall, the majority of the respondents are female, and the remaining are male. This indicates a substantial predominance of female faculty members across all designations. The highest proportion of female faculty is seen in the Lecturer and Assistant Professor categories.

Table 4: Frequency of using electronic resources

Resources	Daily	2-3 times In a week	Once in a week	2-3 times In a month	Once In a month	Total
E-Journals	123 (12.99%)	295 (31.15%)	252 (26.61%)	173 (18.27%)	104 (10.98%)	947 (100%)
E-Books	155 (16.37%)	196 (20.70%)	212 (22.39%)	242 (25.55%)	142 (14.99%)	947 (100%)
E-Conferences Proceedings	105 (11.09%)	185 (19.54%)	267 (28.19%)	206 (21.75%)	184 (19.43%)	947 (100%)
E-Teaching Materials	595 (62.83%)	112 (11.83%)	103 (10.88%)	108 (11.40%)	29 (3.06%)	947 (100%)
E-Standards/Specifications	75 (7.92%)	161 (17.00%)	121 (12.78%)	239 (25.24%)	351 (37.06%)	947 (100%)
E-Tutorials	342 (36.11%)	253 (26.72%)	232 (24.50%)	73 (7.71%)	47 (4.96%)	947 (100%)
Databases	169 (17.85%)	266 (28.09%)	282 (29.78%)	126 (13.31%)	104 (10.98%)	947 (100%)
E-Thesis and Dissertations	92 (9.71%)	132 (13.94%)	237 (25.03%)	340 (35.90%)	146 (15.42%)	947 (100%)
E-Patents	19 (2.01%)	33 (3.48%)	82 (8.66%)	179 (18.90%)	634 (66.95%)	947 (100%)
Subject Gateway/ E Portals	146 (15.42%)	151 (15.95%)	183 (19.32%)	255 (26.93%)	212 (22.39%)	947 (100%)
Altmetrics	125	141	172	198	311	947

	(13.20%)	(14.89%)	(18.16%)	(20.91%)	(32.84%)	(100%)
Open source literature	497 (52.48%)	143 (15.10%)	196 (20.70%)	89 (9.40%)	22 (2.32%)	947 (100%)
E-Reference Resources (Dictionaries, Encyclopaedias, etc)	89 (9.40%)	281 (29.67%)	254 (26.82%)	189 (19.96%)	134 (14.15%)	947 (100%)

The above table shows that the maximum number of 295 (31.15%) respondents have accessed e-journals 2-3times in a week, and the minimum 104 (10.98%) of respondents have accessed once in a month. The 242 (25.55%) to 196 (20.70%) number of respondents have access to eBooks between 2-3 times in a month, once in a week and 2-3 times in a week frequency. The average 267 (28.19%) number of respondents accessed E-Conferences Proceedings once in week, and least 105 (11.09%) have accessed daily. The highest 595 (62.83%) of respondents have accessed e-teaching materials on a daily basis, while the lowest number, 29 (3.06%), accessed them once a month.

Maximum number of 351 (37.06%) respondents have accessed e-standard and specifications once in a month and minimum 75 (7.92%) of respondents have accessed on daily basis. The 342 (36.11%) and 47 (4.96%) number of respondents have access to tutorials daily and once a month, respectively. The average 282 (29.78%) number of respondents accessed databases once in week and least 104 (10.98%) have accessed once in a month. The Maximum number of 340 (35.90%) respondents have accessed e-thesis and dissertations 2-3 times in month and minimum 92 (9.71%) of respondents have accessed on a daily basis. The highest 634 (66.95%) of respondents have accessed e-patents once in a month, while the lowest number, 19 (2.01%), accessed them on a daily basis.

The 255 (26.93%) and 146 (15.42%) number of respondents have accessed Subject Gateway/ E Portals 2-3 times in a month and on a daily basis, respectively. The average 311 (32.84%) number of respondents accessed altimetric once a month, and least 125 (13.20%) have accessed daily. A maximum of 497 (52.48%) respondents have accessed open source literature daily, and a minimum of 22 (2.32%) of respondents have accessed it once a month. The highest 281 (29.67%) of respondents have accessed E-Reference Resources (Dictionaries, Encyclopaedias, etc) 2-3 times a week, while the lowest number, 89 (9.40%), accessed them on a daily basis.

Table 5: Problems while accessing the electronic information resources.

Problems while accessing e-resources	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
Lack of Electronic Information Resources/digital resources	118 (12.46%)	147 (15.52%)	113 (11.93%)	206 (21.75%)	363 (38.33%)	947 (100%)
Lack of Searching Skills (IT knowledge) to effectively utilize the service/ e-resources	97 (10.24%)	116 (12.25%)	117 (12.35%)	157 (16.58%)	460 (48.57%)	947 (100%)
Lack of Computers, printers,	70	91	98	417	271	947

and IT facilities	(7.39%)	(9.61%)	(10.35%)	(44.03%)	(28.62%)	(100%)
Poor connectivity (Low bandwidth)	103 (10.88%)	110 (11.62%)	200 (21.12%)	319 (33.69%)	215 (22.70%)	947 (100%)
Lack of Clear structure and display of materials	121 (12.78%)	168 (17.74%)	336 (35.48%)	183 (19.32%)	139 (14.68%)	947 (100%)
Lack of assistance from library staff	108 (11.40%)	315 (33.26%)	355 (37.49%)	81 (8.55%)	88 (9.29%)	947 (100%)
Lack of relevant content finding	100 (10.56%)	122 (12.88%)	137 (14.47%)	408 (43.08%)	180 (19.01%)	947 (100%)
Restricts / Restricted access to the type of materials	59 (6.23%)	120 (12.67%)	140 (14.78%)	437 (46.15%)	191 (20.17%)	947 (100%)

For the statement "Lack of Electronic Information Resources/digital resources", the majority, 363 (38.33%) of respondents have strongly agreed, and a minimum of 113 (11.93%) of respondents have neither agreed nor disagreed. Among 947 respondents, 460 (48.57%) of respondents have strongly agreed and 97 (10.24%) respondents strongly disagree with the statement "Lack of Searching Skills (IT knowledge) to effectively utilize the service/ e-resources". When the statement is "Lack of Computers, printers, and IT facilities", 7.39% of respondents responded strongly disagreed, and 44.03% of respondents agreed. The majority of 33.69% of respondents have agreed, and 10.88% of respondents strongly disagree with the statement "Poor connectivity (Low bandwidth)".

When the statement is "Lack of Clear structure and display of materials", the majority, 336 (35.48%) of respondents have neither agreed nor disagreed, and a minimum of 121 (12.78%) respondents have strongly agreed. Among 947 respondents, 355 (37.49%) have neither agreed nor disagreed, and 88 (9.29%) strongly agree with the statement "Lack of assistance from library staff". When the statement is "Lack of relevant content finding", a minimum of 10.56% of respondents responded strongly disagreed, and a maximum of 43.08% of respondents agreed. The majority of 46.15% of respondents have agreed, and 6.23% of respondents strongly disagree with the statement "Restricts / Restricted access to the type of materials".

6. FINDINGS OF THE STUDY

➢ Majority of faculty of nursing colleges at Bangalore City are accessing e-teaching materials, e-tutoring, and open source literature on a daily basis.

➢ Majority of faculty members are accessing e-journals and e-reference resources 2-3 times a week.

➢ Majority of faculty members are using subject gateways/ E portals, e-thesis and dissertations, and eBooks 2-3 times in a month

➢ Majority of faculty members have strong agreement towards the statements "Lack of Electronic Information Resources/digital resources", and "Lack of Searching Skills (IT knowledge) to effectively utilize the service/ e-resources."

7. RECOMMENDATIONS OF THE STUDY

Based on the analysis of the study, the researcher recommended the following recommendations.

➢ Nursing colleges and their Libraries may subscribe to a greater number of journals and databases to encourage faculty to use them more frequently to obtain current, up-to-date knowledge.

➢ Libraries may conduct orientation classes more frequently

➢ Colleges may purchase a larger number of ICT products

8. CONCLUSION

The respondents' frequency of use of e-resources differs significantly among the faculty of nursing colleges in Bangalore city. Publishers may also waive subscription fees for underdeveloped colleges. The use of electronic information resources by nursing faculty in Bangalore is extensive and beneficial, significantly contributing to teaching and research activities. Addressing the challenges related to technical support and training can further enhance the effective utilization of these resources. Future research could explore the impact of specific EIR tools on student outcomes and extend the study to other regions for comparative analysis.

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