

Use and Impact of E-Resources among Faculty and Postgraduate Students in Selected Nursing College Libraries in Mangalore, Karnataka

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Abstract

Electronic resources are an invaluable asset in the health sciences field of academic activities. They have altered the conduct of teaching and learning by allowing faculty and postgraduates a wide range of opportunity for accessing accurate and timely information. This paper examined the use of e-resources by nursing faculty and postgraduates in selected nursing college libraries in Mangalore, Karnataka. It also assessed the users' level of satisfaction, usefulness and impact of e-resources on teaching, learning and research. A well structured questionnaire was administered to 288 nursing professionals to elicit their opinion and collect primary data for the study. A total number of 238 filled in questionnaires were received showing an overall response rate of 82.6%. The paper revealed that nursing professionals use various types of e-resources and it does have a favourable impact on their academic work, but they faced various problems while accessing these resources.

Keywords: CINAHL; Consortia; E-resources; Impact; Mangalore; Nursing; Use.

Introduction

Growth in information and communication technologies has brought in revolutionary changes in the publishing and communication of information. In the past the kings and rulers, the nobility, upper castes and the erudite had access to information and knowledge. Today the floodgates are open and it is available within the reaches of the masses. Information today cuts across geographical borders and is available all the time thanks to the electronic and internet media. Technology has also enabled rapid developments of computers from large mainframe computers to smaller, faster and sleeker ones. They are assuming newer forms from desktops, laptops, and palmtops and will soon be embedded in other technologies and even in human beings. The combination of computers and communication has enriched education by way of providing electronic resources for teaching learning and research.

Health science libraries have been early adopters

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of electronic resources due to their need for high quality and timely information. Access to e-resources has changed what users actually read and use. It has decreased the time spent in searching for information [1]. Electronic resources have been well accepted in the health sciences fraternity and have become a vital component in their teaching learning and clinical activities [2]. The nursing professionals are the backbone of the healthcare sector and require information to meet their educational and clinical needs. Nursing is an information intensive speciality and nurses use the internet for various educational purposes like literature searches, academic information, drug information and for patient education [3]. Nursing students use online databases like CINAHL and Pubmed but preferred to use the print and human resources as they were readily available and easily accessible [14]. A study of 140 nursing students by Mehdi [5] et al indicated that usage of electronic resources was low due to lack of access to a computer and lack of skills in searching. It was recommended to have user training sessions to enable the nursing students to develop better skills to use the computer and search the databases. All these studies indicate that the nursing professionals are not making effective use of the electronic resources. The nursing libraries are spending sizeable portion of their budget in procuring e-resources in addition to the print. Little is known whether the nursing students and faculty in the nursing colleges libraries are using these resources, if they are using whether

they are satisfied with the available e-resources and what is the impact of using these resources on their academic activities. This survey based study is an attempt to investigate the use of e-resources, extent of satisfaction of the users and to highlight the problems faced by the users in accessing them.

Nursing Education in Karnataka

Nursing education in India is governed by the Indian Nursing Council (INC). It advises the government of India on nursing matters prescribes national education syllabi and specifies minimum quality criteria for educational institutions. State level Nursing Councils inspect and accredit training institutions, monitor rules of professional conduct and maintain an active register. Nursing is also represented by a number of state and city based organisations, including the national Trained Nurses Association of India (TNAI). The Indian Nursing Council recognized programmes are the undergraduate (BSc., Post Basic BSc. Nursing), Postgraduate (MSc. Nursing, MPhil) and Phd. in Nursing which are accepted worldwide. Other than these other recognized programmes are ANM, GNM and various speciality courses like Psychiatry, Orthopaedic and rehabilitation, Cardio thoracic, operation room, Emergency and Disaster, critical care, neuroscience, oncology and neonatal nursing. Usually, the ANM and GNM qualified nurses work as nurses in primary health centres and hospitals, whereas the BSc. and MSc. graduates are involved in education and teaching related positions in colleges and universities. The demand for nurses has shown a significant jump in the recent years both nationally and internationally. India is emerging as one of the largest producers of qualified nurses in the world. The maximum number of nursing institutes are managed by the private sector, especially in the southern Indian States [6]. Even though traditionally, Kerala was the hub of nursing education, it has been now challenged by the state of Karnataka which boasts of several nursing colleges and schools. Mangalore in the Dakshina Kannada district of Karnataka is a hub of professional education to which nursing colleges have been recently included. Students from all over India come to Mangalore to pursue quality nursing education [7]. There are 18 colleges in Mangalore permitted by the Indian Nursing Council to admit students. These colleges offer Masters Courses in nursing [8].

Literature Review

Several studies have been conducted on the use of

e-resources by faculty, research scholars and students all over the world. Haridasan and Khan [9] analysed the usage of e-resources, level of satisfaction and barriers faced by social scientists at National Social Science Documentation Centre (NASSDOC), India. The study revealed that large number of research scholars was using e-resources for their research work. Majority of the users were satisfied with the availability of e-resources at NASSDOC. Mostofa [10] found that majority of the students in selected private universities in Bangladesh use e-resources for education and research. Selvaraja and Sarasvathy [11] assessed the use and impact of e-resources in Research and Development (R & D) institutions in Mysore, Karnataka and concluded that e-journals and websites are the most important e-resources preferred by the scientists for their research work. Major problems faced by the researchers were lack of knowledge to use search engines. Okiki and Asiru [12] identified the challenges faced in using e-resources by postgraduates in six universities in Nigeria and found that slow internet connectivity, power outage and lack of computer skills were some of the problems faced by the users. Rehman and Ramzy [13] studied the awareness and use of e-resources among health care professionals at Health Sciences Centre of Kuwait University. The study revealed that low skill levels, time constraints and lack of awareness about the e-resources were the primary problems faced by the users.

Objectives of the Study

- To examine the various types of e-resources used by nursing faculty and postgraduates.
- To assess their level of satisfaction with regard to availability and accessibility of e-resources.
- To determine the perceived impact of use of e-resources on study and teaching activities
- To find out the problems faced by the nursing professionals.

Methodology

A survey based method of research was used to determine the use of e-resources. The survey was conducted by means of a structured questionnaire and interview method wherever required. The questionnaires were distributed to 288 nursing faculty members and postgraduate students. The data collected through the questionnaire has been analysed and interpreted using the SPSS statistical software version 13. The results are presented in the form of tables and figures.

Data Analysis

Characteristics of the Respondents

A total of 238 completed questionnaires were received showing a response rate of 82.6%, out of which 154 were faculty members and 84 were postgraduate students from selected Nursing colleges in Mangalore. Female faculty and postgraduates comprised 85.1% and 90.5% respectively of the total population. Male faculty and postgraduates included 14.9% and 9.5% respectively. Majority of postgraduates (86.9%) and faculty members (46.1%) were in age group of below 30 years. The faculty with MSc Nursing qualifications comprised 61%, BSc.

Nursing were 28.6%, PBBSc. Nursing were 5.2%, PhD were 3.9% and those with MPhil qualifications were only 1.3%. Majority of the postgraduates had a BSc Nursing (92.9%) or a PBBSc degree (7.1%).

Frequency of Use of E-Resources

This is the most important feature related to the assessment of the usefulness of e-resources. An attempt was made to learn about the frequency of use of e-resources. Table 1 reveals that majority of nursing faculty used e-journals (30.25%), web resources (28.15%), bibliographic databases (26.07%), online databases (21.10%) and e-theses and dissertations (19.75%) daily.

Table 1: Frequency of using e-resources

Types of E-resources	Academic status	Daily	2-3 times a week	2-4 times a month	Rarely	Never
E-books	Faculty	25 (10.5%)	111 (46.65%)	0	15 (6.3%)	2 (0.84%)
	Postgraduates	7 (2.94%)	62 (26.05%)	0	14 (5.88%)	2 (0.84%)
E-journals	Faculty	72 (30.25%)	69 (28.99%)	0	7 (2.94%)	1 (0.42%)
	Postgraduates	48 (20.17%)	40 (16.81%)	0	0	1 (0.42%)
E-newspapers	Faculty	25 (10.5%)	83 (34.89%)	1 (0.42%)	30 (12.6%)	0
	Postgraduates	12 (5.04%)	67 (28.15%)	1 (0.42%)	18 (7.56%)	1 (0.42%)
E-theses & dissertations	Faculty	47 (19.75%)	82 (34.45%)	3 (1.26%)	20 (8.4%)	1 (0.42%)
	Postgraduates	35 (14.71%)	43 (18.07%)	0	6 (2.52%)	1 (0.42%)
CD/DVDs	Faculty	22 (9.24%)	59 (24.79%)	10 (4.2%)	55 (23.10%)	6 (2.52%)
	Postgraduates	8 (3.39%)	36 (15.12%)	0	37 (15.54%)	5 (2.10%)
Bibliographic databases	Faculty	62 (26.07%)	72 (30.25%)	0	14 (5.88%)	0
	Postgraduates	43 (18.06%)	46 (19.32%)	0	1 (0.42%)	0
Online databases	Faculty	50 (21.10%)	89 (37.39%)	0	8 (3.36%)	0
	Postgraduates	35 (14.71%)	41 (17.98%)	0	9 (3.78%)	4 (1.68%)
Image databases	Faculty	38 (15.97%)	103 (43.28%)	0	0	9 (3.78%)
	Postgraduates	24 (10.08%)	62 (26.05%)	0	0	2 (0.84%)
Web resources	Faculty	67 (28.15%)	74 (31.1%)	2 (0.84%)	6 (2.52%)	1 (0.42%)
	Postgraduates	40 (16.8%)	44 (18.49%)	0	3 (1.26%)	1 (0.42%)
Consortia Service	Faculty	8 (3.36%)	96 (40.32%)	4 (1.69%)	41 (17.23%)	3 (1.26%)
	Postgraduates	7 (2.94%)	38 (15.97%)	4 (1.69%)	29 (12.18%)	8 (3.36%)
OPAC	Faculty	3 (1.26%)	73 (30.68%)	5 (2.1%)	58 (24.37%)	12 (5.04%)
	Postgraduates	2 (0.84%)	34 (14.29%)	5 (2.1%)	34 (14.28%)	12 (5.04%)

Institutional repository	Faculty	8 (3.36%)	83 (34.88%)	4 (1.69%)	37 (15.55%)	11 (4.62%)
	Postgraduates	3 (1.26%)	36 (15.12%)	5 (2.1%)	32 (13.44%)	19 (7.98%)
Library Websites	Faculty	4 (1.68%)	98 (41.18%)	2 (0.84%)	46 (19.33%)	2 (0.84%)
	Postgraduates	6 (2.52%)	43 (18.07%)	5 (2.1%)	23 (9.66%)	9 (3.78%)
Others		0	0	0	0	0

Postgraduates used e-journals (20.17%), bibliographic databases (18.06%), web resources (16.8%), e-theses and dissertations (14.71%) and online databases (14.71%) daily. Faculty used e-books (46.65%), image databases (43.28%), library websites (41.18%) and consortia service (40.32%) 2-3 times a week. Postgraduates used e-newspapers (28.15%), e-books (26.05%) and image databases (26.05%) 2-3 times a week. CDs/DVDs were rarely used by Faculty (23.10%) and postgraduates (15.54%). OPAC (5.04%) and institutional repositories (7.98%) was never used by Faculty and postgraduates respectively.

Purpose of Use of E-Resources

Nursing professionals were asked about the purpose of using the e-resources. Table 2 shows that 96.8% of the faculty use e-resources for teaching, 78.6% for research work and 71.4% for making presentations at conferences and seminars. Postgraduates use e-resources mainly for their postgraduate studies (97.6%), for research (96.4%) and for writing assignments and making presentations (86.9%). Few faculty (35.7%) and postgraduates (16.7%) used e-resources to locate evidence based medicine resources.

Table 2: Purpose of using e-resources

Purpose of use of e-resources	Faculty N (%)	Postgraduates N (%)	Total
Teaching	149 (96.8%)	0	149 (62.6%)
Postgraduate studies	0	82 (97.6%)	82 (97.6%)
Making presentations	110 (71.4%)	73 (86.9%)	183 (76.9%)
Research	121 (78.6%)	81 (96.4%)	202 (84.9%)
Writing assignments	5 (3.2%)	73 (86.9%)	78 (32.77%)
Consulting, advising others	69 (44.8%)	39 (46.4%)	108 (45.4%)
Improve healthcare skills	98 (63.6%)	37 (44%)	135 (56.7%)
Locate Evidence based medicine	55 (35.7%)	14 (16.7%)	69 (29%)
Others	0	0	0

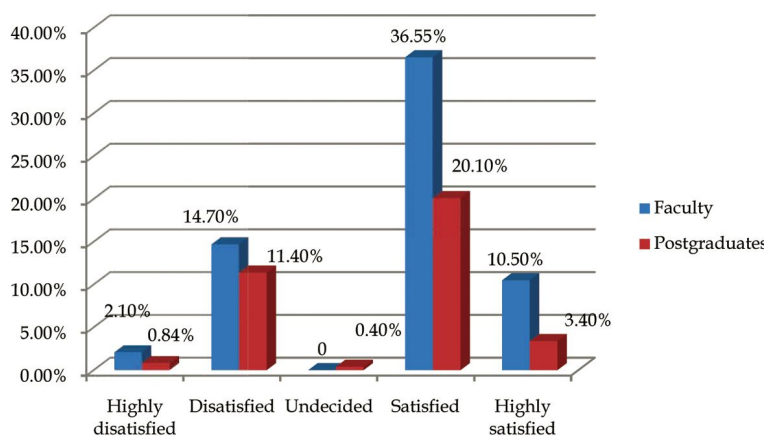


Fig. 1: Satisfaction with e-resources

Satisfaction with E-Resources

The respondents were asked about their satisfaction levels with the use of e-resources. Figure 1 indicates that 47.05% of the faculty and 23.57% of the postgraduates were satisfied. Dissatisfaction levels among postgraduates was much lower as compared to the faculty.

Usefulness of E-Resources in Teaching Learning Activities

E-resources form an important component of the teaching and learning process of faculty members and students in an academic institution. Table 3 reveals the usefulness of the e-resources to the nursing faculty and postgraduates. It is seen that majority of the faculty (60.5%) and postgraduates (34.45%) were

of the opinion that e-resources are useful in the teaching learning process.

Impact of E-Resources on Teaching Learning Activities

The respondents were asked if the use of e-resources had any impact on the teaching learning activities of the faculty and postgraduates. Table 4 indicates that more than half of the faculty (56.73%) opined that there was an improvement in their academic activities with the use of e-resources. Postgraduates (35.29%) also felt that e-resources improved their learning process.

Problems Faced in Accessing E-Resources

There are various problems faced while using e-resources. The respondents were requested to identify their problems when they used the e-resources. Table 5 shows that the most common problem faced by the faculty was their inability to use the e-resources (60.4%).

An equal number of faculty (57.8%) had problems searching for information online and their not being aware of the e-resources. Postgraduates felt that lack of training (67.9%) to use the e-resources was the major obstacle. They too felt that inability to use the e-resources (65.5%) and unawareness about the e-resources (60.7%) was hampering them to use the e-resources effectively.

Table 3: Usefulness of e-resources in teaching learning activities

Level of usefulness	Faculty	Postgraduates	Total
Not at all useful	0	0	0
Not Useful	6 (2.5%)	0	6 (2.5%)
Undecided	4 (1.7%)	2 (0.84%)	6 (2.5%)
Useful	117 (49.16%)	63 (26.47%)	180 (75.6%)
Extremely useful	27 (11.34%)	19 (7.98%)	46 (19.3%)

Table 4: Impact of e-resources on teaching learning activities

Impact level	Faculty	Postgraduates	Total
Very little	0	0	0
little	16 (6.72%)	3 (1.26%)	19 (8%)
Undecided	0	0	0
Improved	102 (42.86%)	68 (28.57%)	170 (71.4%)
Highly improved	33 (13.87%)	16 (6.72%)	49 (20.6%)

Table 5: Problems faced in accessing e-resources

Problems faced in accessing e-resources	Faculty	Postgraduates
Unfamiliar with e-resources	82 (53.2%)	42 (50%)
Not aware of e-resources	89 (57.8%)	51 (60.7%)
Don't know how to use e-resources	93 (60.4%)	55 (65.5%)
Selecting search terms	89 (57.8%)	27 (32.1%)
Poor internet connectivity	23 (14.9%)	30 (35.7%)
Limited number of computers	32 (20.8%)	45 (53.6%)
Inaccessibility of e-resource	35 (22.7%)	28 (33.3%)
Too many passwords to remember	62 (40.3%)	12 (14.3%)
Lack of training	74 (48.1%)	57 (67.9%)
Time consuming	67 (43.5%)	31 (36.9%)
Others	0	0

Results and Discussion

This study investigated the use of e-resources by nursing professionals, their level of satisfaction, influence of electronic resources on their academic activities and problems faced by them. It is observed that majority of nursing faculty (30.25%) and postgraduates (20.17%) used the more popular electronic resources like e-journals daily. The reason for this maybe due to easy accessibility of the e-journals and its benefits of searching and links to various other references. It is seen that the main reason the faculty use the e-resources is for teaching (96.8%) and for research work (78.6%). Postgraduates use

them mainly for their postgraduate studies (97.6%) and for research purpose (96.4%). Few faculty and postgraduates use them for locating evidence based medicine resources. The faculty (47.05%) were more satisfied with the accessibility and availability of e-resources than the postgraduates (23.57%). Majority of the faculty (60.5%) and postgraduates (34.45%) were of the opinion that e-resources are useful in the teaching learning process. More than half of the faculty (56.73%) felt that there was an improvement in their academic activities with the use of e-resources. Postgraduates (35.29%) also felt that e-resources improved their learning process. The faculty faced many problems while using the e-resources like their inability to use the e-resources (60.4%) problems of

searching for information online (57.8%) and their not being aware of the e-resources. Postgraduates felt that lack of training (67.9%) to use the e-resources was the major obstacle. They too felt that inability to use the e-resources (65.5%) and unawareness about the e-resources (60.7%) was hampering them to use the e-resources effectively.

Conclusion

There is no doubt that e-resources are indispensable in the teaching learning environment especially in the discipline of nursing. This study reveals that e-journals, web resources, bibliographic databases, online databases and e-theses and dissertation were the important e-resources used by the nursing professionals. The respondents used these e-resources mainly for their studies, teaching and research work and majority of them were satisfied with the available e-resources. Though the respondents had problems in searching for information online, inability to use the e-resources and not being aware of the e-resources majority of them felt that using e-resources had a favourable impact on their learning and teaching activities. It is recommended that training programs and information literacy sessions may be conducted to train the users to use the e-resources optimally and to create an awareness of the e-resources available in the nursing libraries. E-resources are here to stay and it is very important that nursing professionals learn to use and access current and accurate information as key providers of primary care for treatment of patients.

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