Use of CD-ROM databases by faculty and students in the Nursing College Libraries: A Study

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Abstract

The purpose of the study is to explore the awareness and usage of CD-ROM Databases by the faculty and students of Nursing College Libraries. In order to collect the comprehensive and relevant data for the study, a well- designed questionnaire is used for collecting the primary data. The scope of the study is confined to selected five colleges, which are engaged in importing Degree level course in the field of Nursing. The study focused on the use of CD-ROM database by staff and students in Nursing College libraries functioning within the territorial jurisdiction of the Bangalore city.

CD-ROM Databases play the vital role for upgrading facilities and improving services to effectively meet the information needs of users. The present era is an era of information and knowledge revolution. Many electronic resources have been made most available in the libraries. The paper deals with Awareness of CD-ROM database, Reasons of not using of the CD-ROMs, Frequently use of CD-ROMs, Use of information sources on CD-ROMs, Borrow of CD-ROMs, Adequacy of CD-ROMs available, Opinion about CD-ROM databases, Purpose of accessing the CD-ROM databases , Comparison of CD-ROM databases with print sources, and Relevancy & accuracy of CD-ROM databases.

Introduction

We are living in the so called 'Information society' or 'information age' where information is one of the important factors of life. Everyone needs information about everything even in his day to day life. People need information right from organizational level to the personal level, from the highly educated and experience person to schoolchildren, from a very famous person to an ordinary person, for taking the right decision in every step of life. Information is a dynamic and unending resource that affects all disciplines and all walks of life. Information also supports education, research and development [1].

The modern era has created the way the people communicate with each other and the way information is accessed. It has rapidly become an established medium of communication and connects people across the globe, removing geographic boundaries and simplifying access to information. The electronic sources of information are becoming more and more important for the academic community in accessing information at right time and in the right form. Information is a dynamic and unending resource that affects all disciplines and all walks of life.

The information explosion in print and electronic media creates problem of current awareness, update, storage and retrieval of information. The need for quick processing and accessing of information has resulted in a variety of storage media such as microfilm, microfiche, compact disk etc. The invention of CD-ROM has proved the proverb "necessity is the mother of invention". CD-ROM technology was introduced in mid-1980s and became increasingly popular in the 1990s. This format is very useful for frequently used reference material such as encyclopedias, dictionaries, directories, journal archives and the like.

Although, the initial investment is high, CD-ROMs are cost-effective since they offer unlimited access to any number of users. CD-ROMs can be used on an individual computer with a CD-ROM drive or they can be mounted on a local network to be searched by a large number of users. The demand for CD-ROM technology continues to increase and most libraries offer information tools on CD-ROM. CD-ROM is one of the most popular and cheapest devices for storage of the information[2].

About CD-ROM

CD-ROM has rapidly become a popular medium for distributing a wide range of information. This is in part due to the relatively low cost and size of a disc in relation to the amount of information that can be stored on it. Libraries and information centers responded favorably and very quickly to CD-ROMs. They saw it as an easy and economical way of storing vast amount of information. With wide subject coverage and information type, it was seen by many as a cheaper alternative to online searching, especially in developing countries where high telecommunication costs make online searching restrictive. When used together, the CD-ROM data-bases can be used for retrospective searching, for refining search strategies and for end-user searching, whilst the online data-bases can be used for searching current information which is

not available on the CD-ROM databases. CD-ROM technology is well established and available in all kinds of libraries and information centers worldwide. It is seen by many as a good alternative to print and can be used by the end-users directly without the need for an intermediary. Crucially, the interactive way that information is presented makes CD-ROM one of the most versatile and memorable mediums for modern communication.

Benefits:

- Combines new or existing media assets (e.g. video, animation, photography, graphics, sound and text) to form a dynamic communication tool that is much more than the sum of its parts
- Interactivity encourages involvement, decision-making, instant feedback and understanding. Information found in this way, as a result of the user's own efforts, is more likely to be retained and acted on
- Stores a large amount of information which is easily accessible on a computer
- Easy to update
- Integrates with Internet technology
- Compact and portable
- Cost-effective distribution

Review of Related Literature

A review of literature reveals that there is a large amount of literature available on the Use of CD-ROM databases, but no in depth study has been done on the Use of CD-ROM databases in the Nursing colleges under study. The present study is an attempt to clearly establish and exhibihit the Use of CD-ROM databases by staff and students in the nursing colleges

A study of utilization of CD-ROM databases by the users' of Indian Institute of technology-Kharagpur: A Survey was conducted by Abdul Mannan Khan (2011)[3].The study reveals that most of the users consult CD- ROM databases not only for updating their knowledge but also for collecting relevant information for the study and research purposes. A majority of the users have become aware of CD-ROM databases through library staff, discussions with colleagues and from observation. The most popular search method for searching CD-ROM

databases is keyword followed by Boolean operators and phrases. Another study by Oduwole (2000)[4] investigated the use of CD-ROM databases in academic libraries in Nigeria. High cost of subscriptions to CD-ROM databases was ranked highest as the major constraint to CDROM use. He recommended joint ventures with CD-ROM producers/vendors and inclusion of substantive abstracts in CD-ROM databases as ways of improving the use of CD-ROM databases in academic libraries.

In case of the study by Tefera (1999)[5] who studied the use of CD-ROM services in Ethiopia indicated that academic libraries in Ethiopia use CD-ROM databases to a greater degree than other types of library responding to the survey (47% academic, 27% research and development, 27% non-government). Medline was the main CD-ROM product used.

Another similarly study conducted by MA Obaje, E Camble (2008)[6] on Use of CD-ROM databases by staff and students in the University of Jos Library. Analyses of study revealed that many staff and students were not properly informed of the existence of CD-Rom databases in the library and they use inappropriate search terms thereby retrieving irrelevant information. CD-ROMs are mostly used for literature search and teaching. Staff and students preferred the use of CD-ROMs to the use of printed materials, and the major problem with the use of CD-ROMs is inappropriate use of search terms. Researcher recommended among others, that University of Jos library should organize regular training workshops for staff and students on the use of CD-ROMs demonstrate and teach them how to form proper search terms for better information retrieval to meet their information needs as well as saving their time.

Scope and limitations of the study

The scope of the study is confined to selected five colleges, which are engaged in importing Degree level course in the field of Nursing. The study focused on the use of CD-ROM database by staff and students in Nursing College libraries functioning within the territorial jurisdiction of the Bangalore city

Objectives of the Study

The purpose of the study is to explore the awareness and usage of CD-ROM Databases by the faculty and students of Nursing College Libraries. The main objectives are to:

- To find out the purpose and the frequency of use of the CD-ROM database services by staff and students in Nursing College libraries
- To know the problems faced by the staff and students while using CD-ROM databases.
- To know the satisfaction level of the staff and students regarding the CD-ROM database services.
- To find out users' opinion regarding CD-ROM database collections.

Methodology

In order to collect the comprehensive and relevant data for the study, a well- designed questionnaire is used for collecting the primary data. In order to find out the extent of use and the purpose of use of CD-ROMs database in nursing college libraries, the questionnaire was designed keeping in view the objectives of the study. The questionnaire has divided into 2 sections viz. Section-1 focuses on general information of respondents, section-2 concerns about the use of CD-ROM database.

The questions were simple, including number of options with assurance that the data collect will be kept in confidential and used only for study. Thus all possible efforts were made to collect free and frank opinion from the students as well as faculty. The questionnaires, which were prepared, were distributed to selected students and faculty of nursing colleges. Total 250 questionnaires were distributed and out of which 210 questionnaires were received. The duly filled questionnaires were further used for data analysis and the analyzed data has been presented in form of table and graphs.

Significance of the Study

CD-ROMs were introduced in developed countries at least two decades ago and much research was done at the time into their use. On the other hand, the use and subsequent study of CD-ROM databases in areas like India by users in libraries are still relatively new. This study helps to find out the extent of use and the purpose of use of CD-ROMs database in Nursing College Libraries. The study put forward some important suggestions derived from the analyses of data which will in turn help to improve CD-ROM databases services of the library.

Analysis of the data

Analysis of the data gathered through the questionnaire, which was designed to collect data from faculty and students of nursing colleges in Bangalore City. The data analysis is based on questionnaire responses of 210 faculty and students of Nursing colleges. Questionnaire consisted of two sections viz. Section-1, focuses on general information of respondents, section-2 concerns about the use of CD-ROM database and e-journals. The information thus collected is analyzed and presented in the form of tables and graphs.

General information

Demographic characteristics of respondents

Table-1: Demographic characteristics of respondents.

Demography of respondents (n=210)		Counts	Percentage
Gender	Male	56	26.66
	Female	154	73.33
Age	<25	143	68.09
	26-3	37	17.61
	31-35	21	10
	36-40	04	1.9
	41-45	04	1.9
	<50	01	0.47
Colleges	MSRINER	50	23.80
	DCN	50	23.80
	KCN	40	19.04
	KIN	50	9.52
	ACCN	20	23.80
Designation	Faculty	105	50
	Students	105	50

Note: Number given in parenthesis represents the percentage
MSRINER-M.S.Ramaiah Institute of Nursing Education & Research
DCN- Diana College of Nursing
KCN-Karnataka College of Nursing
KIN-Kempegowda Institute of Nursing
ACCN-Ambigara Chowdaiah College of Nursing

The data summarized in the table-1 demonstrates the demographic characteristics of respondents. It shows that out of 210 respondents' 73.33% are male respondents and 26.66% are female of respondents selected from five nursing college libraries. The respondents are selected randomly from MSRINER, DCN, KIN, KCN, and ACCN. 68.09% of respondents come under the age group of below 25 years. 10% of respondents come under the age group of 26-30 years. 17.61% of respondents come under the age group of 31-35. Equal numbers of (50% each) respondents are faculty & students.
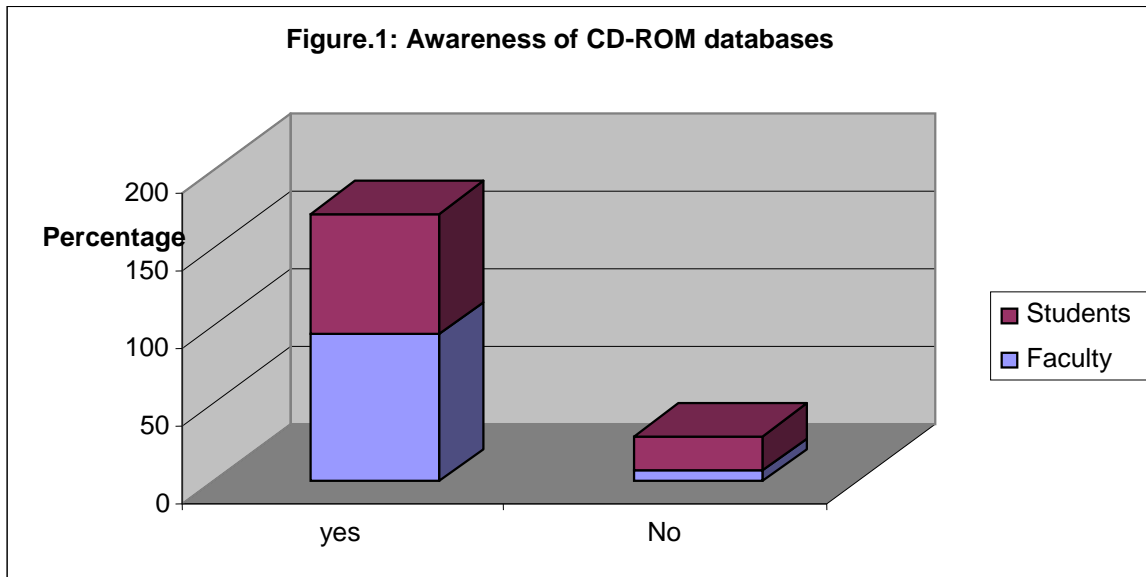
Use of CD-ROM database

Awareness of CD-ROM database

Table-2: Awareness of CD-ROM database

Respondents	Awareness	
	Yes	No
Faculty(n=105)	99(94.28)	06(5.71)
Students(n=105)	81(77.14)	24(22.85)
Total (n=210)	180(85.71)	30(14.28)

Note: Number given in parenthesis represents the percentage

The data on the awareness of CD-ROM databases among the respondents is presented in table-2. It shows that 86.53% of respondents are aware of CD-ROM databases and only 14.42% of respondents are not aware of CD-ROM databases. In case of faculty 94.28% and 78.64% of student respondents are aware of CD-ROM databases

Figure.1: Awareness of CD-ROM databases

Reasons of not using of the CD-ROMs.

Table-3: Reasons of not using of the CD-ROMs.

Reasons	Respondents		
	Faculty (n=06)	**Students (n=24)**	**Total (n=30)**
I don't know how to use CD-ROMs	05(83.33)	11(45.83)	16(53.33)
I have my own collection of CD-ROMs	-	03(12.5)	03(10)
I don't get the relevant information required for my use on CD-ROMs	-	02(8.33)	02(6.66)
There will be rush in library whenever I go for using CD-ROMs	01(16.66)	03(12.5)	04(13.33)
Library staff are not cooperative /assist me in making use of the CD-ROMs	01(16.66)	05(20.83)	06(20)
Lack of time		04(16.66)	04(13.33)

Note: Number given in parenthesis represents the percentage

   In the study the respondents were asked also to mention the reasons for not using the CD-ROMs. The data summarized in the table-3 clearly shows that majority 53.33% of the respondents reported that they don't know how to use the CD-ROM. 20% of respondents opined that the library staff is not cooperative/assist in making use of the CD-ROMs and also 13.33% each of respondents opined that they have their own collection of CD-ROMs.

Frequency of use of CD-ROMs.

Table-4: Frequently use of CD-ROMs.

Frequently	Respondents		
	Faculty (n=99)	Students (n=81)	Total (n=180)
Daily	11(11.11)	16(19.75)	27(15)
Once in two days	07(7.07)	08(9.87)	15(8.33)
Twice in a week	13(13.13)	09(11.11)	22(12.22)
Once in a week	11(11.11)	12(14.81)	23(12.77)
Twice in two week	06(6.06)	05(6.17)	11(6.11)
Once in a month	03(3.03)	09(11.11)	12(6.66)
Occasionally	48(48.48)	22(27.16)	70(38.88)

Note: Number given in parenthesis represents the percentage

In order to assess the frequency of use of CD-ROMs, the respondents were asked to indicate any one out of seven categories of time lag. 38.88% of respondents used CD-ROMs occasionally and only 15% of respondents used it daily. More than (12%each) of respondents used the CD-ROMs twice in a week and once in a week. (Table-4)

Use of information sources on CD-ROMs.

Table-5: Use of information sources on CD-ROMs.

Information Sources	Yes		Total (n=180)
	Faculty (n=99)	Students (n=81)	
Full- text journals	66(66.66)	53(65.43)	119(66.11)
Thesis & dissertations	72(72.72)	21(25.92)	93(51.66)
Books	61(61.61)	69(85.18)	130(72.22)
Biographies	39(39.39)	28(34.56)	67(37.22)
Abstracting & indexing journals	65(65.65)	30(37.03)	95(52.77)
Reports	36(36.36)	35(42.20)	7139.44)
Dictionaries	38(38.38)	54(66.66)	92(51.11)
Encyclopedia	24(24.24)	46(56.79)	70(38.88)
Directories	23(23.23)	25(30.86)	48(26.66)
Maps & atlases	17(17.17)	22(27.16)	39(21.66)

Note: Number given in parenthesis represents the percentage

Total number is more than 100 percentage because multiple choice questions

The data regarding the use of information sources on CD-ROM databases is presented in table-5. Majority of respondents opined that they use books (72.22%) using CD-ROMs. 66.11% opined for full text journals and then 52.77% of respondents for abstracting and indexing journals. In case of faculty 72.72% of respondents for thesis & dissertations, whereas students 85.18% of respondents for books

Borrow of CD-ROMs

Table-6: Borrow of CD-ROMs

Respondents	Borrow	
	Yes	No
Faculty(n=99)	49(49.49)	50(50.50)
Students(n=81)	32(39.50)	49(60.49)
Total (n=180)	81(45)	99(55)

Note: Number given in parenthesis represents the percentage

Table-6 demonstrates the borrowing of CD-ROMs available in the library. 45% of the respondents preferred to borrow CD-ROMs from their library but 55% of respondents reported that they are not borrowed the CD-ROMs in their library. It is mainly shows that maximum of respondents are not borrowed the CD-ROMs in their respective of libraries.

Adequacy of CD-ROMs collection

Table-7: Adequacy of CD-ROMs collection.

Respondents	Adequate		
	Yes	No	Can't say
Faculty(n=99)	51(51.51)	04(4.04)	44(44.44)
Students(n=81)	42(51.85)	06(6.06)	37(45.67)
Total (n=180)	93(51.66)	10(3.33)	81(45)

Note: Number given in parenthesis represents the percentage

Table-7 demonstrates the adequacy of CD-ROMs. 51.66% of respondents agreed that there is adequate CD-ROMs collection in the library. Only 3.33% of respondents opined that CD-collection is not adequate.

Opinion about CD-ROM databases

<p style="text-align:center">Table-8: Opinion about CD-ROM databases.</p>

Respondents	Opinion		
	Better than print	**Not Better than print**	**Same as that of print**
Faculty(n=99)	93(93.93)	01(1.01)	05(5.05)
Students(n=81)	72(88.88)	03(3.03)	06(6.06)
Total (n=180)	165(91.66)	04(2.22)	11(6.11)

<p style="text-align:center">Note: Number is given in parenthesis represents the percentage</p>

Table -8describes the opinion about CD-ROM databases. 91.66% of respondents opined that CD-ROM databases are better than print version. Only 2.22% of respondents opined that CD-ROM databases are not better than print versions. 93.93% of faculty and 88.88% of student respondents opined that CD-ROM databases are better than print version.

Purpose of accessing the CD-ROM databases

Table-9: Purpose of accessing the CD-ROM databases

Purpose	Yes		Total (n=180)
	Faculty (n=99)	**Students (n=81)**	
To search bibliographical information	45(45.45)	38(46.91)	83(46.11)
To browse table of contents	25(25.25)	35(43.20)	60(33.33)
To browse only abstracts	28(28.28)	32(39.50)	60(33.33)
Access the full text of articles whose details are already known	62(62.62)	56(69.13)	118(65.55)
Access the full text of articles after searching from the databases	59(59.59)	38(46.91)	97(53.88)

<p style="text-align:center">Note: Number given in parenthesis represents the percentage</p>

The purpose of accessing the CD-ROM databases is presented in table-9. It is evident from the table that 65.55% of respondents used for access full text of articles whose details are already known. 53.88% of respondents used it to access the full text of articles after searching from the databases and 46.11% of respondents to search bibliographical information.

Comparison of CD-ROM databases with print sources.

Table-10: Comparison of CD-ROM databases with print sources.

Respondents	Factors					
	a	**b**	**c**	**d**	**e**	**f**

Respondents		a	b	c	d	e	f
Faculty (n=99)	1	49(49.49)	25(25.25)	22(22.22)	25(25.25)	19(19.19)	26(26.26)
	2	47(47.47)	63(63.63)	72(72.72)	64(64.64)	77(77.77)	71(71.71)
	3	02(2.02)	11(11.11)	05(5.05)	10(10.10)	03(3.03)	02(2.02)
	4	01(1.01)	-	-	-	-	-
	5	-	-	-	-	-	-
Students (n=81)	1	23(28.39)	12(14.81)	11(13.58)	13(16.04)	19(23.45)	17(20.98)
	2	56(69.13)	60(74.07)	63(77.77)	56(69.13)	57(70.37)	53(65.43)
	3	02(2.46)	08(9.87)	05(6.17)	09(11.11)	04(4.93)	08(9.87)
	4		01(1.23)	02(2.46)	03(3.70)	01(1.23)	03(3.70)
	5	-	02(2.46)	-	-	-	04(4.93)
Total (n=180)	1	72(40)	37(20.55)	33(18.33)	38(22.38)	38(21.11)	43(23.88)
	2	103(57.22)	123(68.33)	135(75)	120(66.66)	134(74.44)	124(68.88)
	3	04(2.22)	19(10.55)	10(5.55)	19(10.55)	073.88)	10(5.55)
	4	01(0.55)	01(0.55)	02(1.11)	02(1.11)	01(0.55)	03(1.66)
	5	-	02(1.11)	02(1.11)	02(1.11)	-	04(2.22)

Note: Number is given in parenthesis represents the percentage

1- Strongly   Agree   2- Agree
3-Disagree4-Strongly   Disagree 5-Not Responded

a- It is easy and convenient to search CD-ROM databases than print version.
b- Search time CD-ROM database is very less than print sources.
C-Search output of CD-ROM database is always consistent.
d- CD-ROM database supports Boolean Operators (AND, OR NOT, etc) for making a query more specific.
e- By getting an updated CD-ROM within a short time we get access to latest data.
f-Users need assistance while searching CD-ROM Based database.

Table-10 illustrates the comparison of CD-ROM databases with print sources. It shows that majority (75%) of the respondents agreed that by getting an updated CD-ROM within a short time we get access latest data. Whereas 74.44% of respondents agreed that the search output of CD-ROM databases is always consistent. 68.88% of respondents agreed that users need assistance while searching CD-ROM based databases. In case of faculty, 77.77% of respondents agreed that getting an updated CD-ROM within a short time we get access latest data, whereas 77.77% of students agreed that the search output of CD-ROM databases is always consistent.

Relevancy & accuracy of CD-ROM databases.

Table-11: Relevancy & accuracy of CD-ROM databases

Respondents	CD-ROM Databases			
	Strongly Agree	Agree	Disagree	Strongly Disagree

Faculty (n=99)	33(33.33)	66(66.66)	-	-
Students(n=81)	18(22.22)	61(75.30)	01(1.23)	01(1.23)
Total (n=180)	51(28.33)	127(70.55)	01(0.55)	01(0.55)

Note: Number given in parenthesis represents the percentage

The respondents were asked to express their frank opinion about the relevancy and accuracy of CD-ROM databases by considering to use, time taken, relevancy and accuracy of output the CD-ROM databases. For this question majority of respondents (70.55%) are agreed and 28.33% of respondents are strongly agreed with the relevancy and accuracy of CD-ROM databases (Table-11).

Findings of the study

The major findings of the study are
1. Result shows that 85.71% of respondents are aware of CD-ROM databases and only 14.28% of respondents are not aware of CD-ROM databases. In case of faculty 94.28% and 77.14% of student respondents are aware of CD-ROM databases.

2. 53.33% of the respondents reported that they don't know how to use the CD-ROM. 20% of respondents opined that the library staff are not cooperative/assist me in making use of the CD-ROMs and only 13.33%each respondents opined that they have their own collection of CD-ROMs.

3. It is evident from the results of the study that 38.88% of respondents used CD-ROMs occasionally and 15% of respondents used it daily. 72.22% of respondent's opined that they use of books sources using CD-ROMs. 66.11% opined for full text journals and then 52.77% of respondents used for abstracting and indexing journals. In case of faculty 72.72% of respondents used for thesis & dissertations, whereas students 85.18% of respondents for books.

4. 45% of the respondents preferred to borrow CD-ROMs in their library but 55% of respondents reported that they are not borrowed the CD-ROMs in their library. It mainly

shows that maximum of respondents are not borrowed the CD-ROMs in their respective of libraries. 51.66% of respondents agreed that the adequate of CD-ROMs available.

5. 91.66% of respondents opined that CD-ROM databases are better than print version. Only 2.22% of respondents opined that CD-ROM databases are not better than print versions. 93.93% of faculty and 88.88% of student respondents opined that CD-ROM databases are better than print version.

6. It is clear from the study that 65.55% of respondents used to access the full text of articles whose details are already known. 53.88% of respondents used it to access the full text of articles after searching from the databases and 46.11% of respondents to search bibliographical information.

7. Majority (75%) of the respondents agreed that it is by getting on updated CD-ROM within a short time we get access latest data. Whereas 74.44% of respondents agreed that the search output of CD-ROM databases is always consistent. 68.88% of respondents agreed that users need assistance while searching CD-ROM based databases. In case of faculty, 77.77% of respondents agreed that getting an updated CD-ROM within a short time we get access latest data, whereas 77.77% of students agreed that the search output of CD-ROM databases is always consistent.

8. Results from the study shows that (70.55%) are agreed and 28.33% of respondents are strongly agreed with the relevancy and accuracy of CD-ROM databases.

Conclusion and Recommendations

In recent years, the new information technologies, especially microcomputers and optical technologies have been dynamically developed. The combination of these two technologies have dramatically changed information delivery and access to information. A CD-ROM database can provide access to more than 500 MB of data on a single 3.5 inch optical disk. A growing number of databases are becoming available in CD-ROM format. The power of CD-ROM technology has made it possible for libraries to provide affordable and fixed-cost database services for its patrons. The widespread use of CD-ROM in libraries has not only significantly improved the way in which library patrons access information but has also created new challenges for library professionals. Since the respondents felt that the CD-ROM databases are easy and convenient to search than the printed sources and the search time of CD-ROM databases is very less than

printed sources. The library administrators and collection development specialists should remember that although the academic community accepts the printed sources as a suitable tool for the academic work they do not consider it as sufficient resources in either quality or quantity of research information available. Therefore, librarians must continue to develop electronic information resources along with print sources. Librarians should work in conjunction with subject faculty to select appropriate CD-ROM databases for students, research scholars and faculty use. CD-ROM Database services by adding more resources and facilities will provide strong information support for the education, research, and extension programmes

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List of Nursing Colleges:

➤ M.S.Ramaiah Institute of Nursing Education & Research
➤ Diana College of Nursing

- ➢ Karnataka College of Nursing
- ➢ Kempegowda Institute of Nursing
- ➢ Ambigara Chowdaiah College of Nursing

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