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ABSTRACT

21st century is considered as the "era of technology". Technology has modernized the field of education. Modern students prefer to use digital resources in their routine studies. The study was conducted to find the "Use of Digital Resources by Medical Students of Services Institute of Medical Sciences Lahore". The descriptive data analysis technique was used in this research work to answer the research questions for the fulfillment of research objectives. A group of 276 students was selected among which a total of n=126 respondents were male with a total percentage of 45.7% whereas the total number of female respondents who participated in the study were 150 in number with a cumulative percentage of 54.3%. The results revealed that majority of students (160 out of 272) was aware with the use of both types of resources like electronic and print. Moreover 38% responded that subscribed e-journals/database were available in the library of their medical colleges. Overall awareness regarding use of e-resources among medical students of services institute of medical was good. Medical students are highly depending on information technology; although the electronic resources have not completely replaced the hard form of books but still utilization of electronic resources by medical student and residents is very high, even the result of research demonstrates that more than half students like to use the internet- resources rather than print resources. The findings of this study showed that students were aware with the use of both type of resources.

INTRODUCTION & PROBLEM STATEMENT:

The expanded volume of data in electronic arrangement propels understudies to figure out how to look, select and utilize a wide assortment of assets as do the possibilities for data proficiency in the instructive setting. Understudies' capacity to proficiently abuse electronic data assets is a key issue in advanced education (Togia & Tsigilis, 2010). As indicated by Romanov and Aarnio (2006) a significant objective of clinical instruction is to empower understudies to continue their insight into clinical science by turning out to be deep rooted students. Information and abilities in data chasing and the utilization of electronic databases (one sort of electronic data asset) are fundamental in such manner.

Recent couple of decades have indicated that electronic databases have exhibited exceptionally helpful in the clinical calling. Updated information is very much essential for the medical students (Romanov & Aarnio, 2006). Proof based medication gives indistinct techniques that can be trailed by undergrad and postgraduate instruction just as proceeding with clinical training for experts (Baikady & Jessy, 2014). A research by Pessah and Venturella (1995) reports that clinical understudies looked to satisfy their data needs by utilizing reading material yet on issues identifying with medicines they were bound to turn to the utilization of online diaries instead of clinical course books. It likewise appears as though web crawlers command understudies' data looking for techniques. Clinical understudies have been accounted for to utilize the Internet close to as much for social correspondence as they accomplish for their training (M. I. Bhat & M. V. Mudhol, 2014; Griffiths & Brophy, 2005). The capacity to viably use electronic data assets among wellbeing science understudies may assist them with enhancing the nature of their learning and medicinal services administrations when they become experts. There is along these lines a need to decide utilization in explicit settings of preparing for healthcare experts.

The Services Institute of Medical Sciences (SIMS) was established in 2003 at Lahore. It was founded primarily to provide and promote medical education, learning and research. The SIMS is one of the prestigious public sector medical institutions attached with Services Hospital Lahore. The SIMS is one of the esteem educational institutional among public medical college which offer the undergraduate

program of MBBS. The College has a size of 1010 MBBS students and comprises of seven basic department (Pathology, Pharmacology, Forensic Medicine, Community Medicine, Anatomy, Biochemistry and Physiology). The College Library was established in 2006 and is accountable for providing reachable library resources and for expose services with books and e-resources. It serves the educational and research needs of students, faculty and staff. Reassuringly, the utilization of electronic data assets has impelled various exploration contemplates overall for example (Baro, Endouware, & Ubogu, 2011;M. I. Bhat & M. V. Mudhol, 2014; Griffiths & Brophy, 2005; Togia & Tsigilis, 2010). A portion of these examinations concentrated on get to. Satisfaction demeanor and looking through aptitudes (M. I. Bhat & M. V. Mudhol, 2014; Griffiths & Brophy, 2005). Others likewise explicitly centered around clinical science understudies (Anaraki & Babalhavaeji, 2013; I. Bhat & M. V. Mudhol, 2014). A considerable lot of these examinations reasoned that extra exploration concentrating on different gatherings of the scholarly network, is required so as to get an exhaustive knowledge into the utilization of electronic data assets by understudies (Baro et al., 2011; Togia & Tsigilis, 2010). From perceptions it appears that there is an absence of very much prepared staff with proper aptitudes and a deficient ICT framework among others that may deny understudies of getting to the quality and current data for their scholarly exercises. Moreover, the College has not considered understudies' interests with respect to bought in electronic data assets so as to guarantee dynamic educating learning cooperation and utilizing such assets in finishing tasks and leading exploration. This may add to an improvement in the under-use of the electronic databases to which school buys in. Hence, it is necessary to discover the utilization of computerized assets among the clinical understudies.

STUDY-OBJECTIVES:

- To examine the awareness about digital resources by the students of medical colleges
- To find out the purposes behind the use of digital resources by medical students

RELATED LITERATURE:

Many studies have been conducted by several researchers and authors on use of e-resources by medical professionals and students. As Egle, Smeenge, Kassem, and Mittal (2015) stated that the modern age group of medical students and residents are highly depending on information technology; although the electronic resources have not completely replaced the hard form of books but still utilization of electronic resources by medical student and residents is very high, even the result of research demonstrate that more than half students like to use the internet base resources rather than prints. Sivathaasan, Murugathas, and Chandrasekar (2014) conducted a study, the result of study revealed that there is significant use of electronic resources among medical students because they can get the information within short time and conveniently from E-resources as compare to printed sources. Moreover, medical students attract to use the electronic resources due to ease to use, search and access of updated and huge amount of information anywhere with low cost.

Medical students of University of Sharja have positive behavior towards use the different electronic resources like Medline Databases, Science Direct, Springerlink, Journals@OVIDSP, EBM Databases, Lippincott & Wilkins nursing & Alliedhealth profession, WHO resources and other E-journals and books (Boumarafi, 2010).In addition, Anasuya (2017) and Baro et al. (2011) observed that students were fully aware with the use of digital resources and other information resources of library which they can use inside and outside of the medical college of Delta University. The use of electronic resources is becoming high due to advancement in information technology, but in Pakistan the Higher education commission (HEC) spending a part of budget to acquire the electronic resources to promote the research activities in Pakistan. A study was conducted by Bhatti (2014) under the title of internet-based information usage of pattern of pediatricians: A survey of south Punjab, Pakistan. The results of the study showed that most of the child specialist doctors use the internet for getting medical related information, searching literature and online medical guidelines. Further, majority of participants start to search their relevant information via different electronic and web-based resources i.e. Google scholar, yahoo, Medline / Pubmed and E-medicine & Medscape databases. Further Bhatti and Javed (2014) articulated in their research about the experience of internet use by medical Postgraduate Students (PGS) of

Nishtar Medical College. The results revealed that PGS frequently use the internet for education and research purpose.Jadoon et al. (2011) documented that medical students and doctors were interested to use the internet and online databases and result of this research revealed that most of the medical students are not mostly using the electronic resources frequently while doctors use very frequently for their research purpose. The use of digital databases in developed countries differs from one developed country to other developed country. For example, as per students report the purpose of use of different databases is different on different level of students.

A study has been conducted Romanov and Aarnio (2006) under the title of "A survey of the use of electronic scientific information resources among medical and dental students. The results found the 24% of medical students and 19% of dental students searched phone system for study purpose while 32 % and 24 % research analysis. The authors further explored that full text articles were also used by medical students 33%. Remaining 12 % never used the full text article. Awareness of the use of E-databases leads the use of databases. For example, the Aristotle University of Thessaloniki, Greece conducted a study which discovers the awareness and use of electronic databases by graduate students in education the result showed that the major number of respondents used internet search engines rather than special databases and full text resources. It is very interesting to say, that approximately 50% of participants had never used the digital resources (Togia & Tsigilis, 2010). The researchers further described that only 6.8% became familiar with e-resources by getting training program in library (Togia & Tsigilis, 2010).

Previous studies which have been conducted on the purpose of use of electronic resources showed that there are many purposes behind the use of E-resources. According to Habiba and Chowdhury (2012), university students use E-resource regularly for assignments, preparing the presentations, enhance and update the professional knowledge. Now days, digital databases are providing the access of different kind of information resources. The major purpose of use the electronic resources by medical students and research scholar is to get the access of image databases, statistical databases, newspaper articles, dissertations & thesis, books, maps, conference papers, abstract, books reviews and standard for their research and studies (Naqvi, 2012). Likewise, Sethi and Panda (2012) stated that purposes behind the use of e-resources by life scientist is same because they used it for preparation of seminars, presentations, to get the relevant

information for their specialized area of interest, further result revealed that users use it for career growth.

Pandian and Geetha (2018) noted that huge number of students are using the e-resources for writing the articles, preparing the projects and study notes. Authors further revealed that they also use the digital resources for preparing the seminars and conferences, obtaining the latest information and writing the books reviews. Kumar and Anjaiah (2018)) argued in his study under the title of "Use Patterns of E-Resources by the Faculty, Research Scholars and Professional Students of University College of Engineering, Osmania University, Hyderabad Telangana State– A Case Study". The results revealed that the major part of users of electronic resources use it for their project works further participants said that they also used it for fulfilling the need of research and a smaller number of respondents used digital resources for preparations of the examinations and enhancing the general subject knowledge.

Therefore, in the short sense we can say that e-resources can be used for different purposes by students, teachers, staff, and doctors etc. It just depends upon on the user's needs and demands. As per above mentioned prior reviewed literature students use it to prepare the presentations, assignments while postgraduate students and research scholars used it for preparing the research papers of conference, writing the dissertation, theses and research articles.

METHODOLOGY

Research design and procedure:

The aim of this study is to investigate the use of E-resources by medical students of Services Institute of Medical Sciences, Lahore. This study is quantitative in nature. Survey research technique was utilized to meet objectives of the study.

Population of Study

This study was conducted on Services Institute of Medical Sciences, Lahore, and a public Medical college in Lahore, Pakistan with a 1010 enrolled students in 5 years MBBS program.

Sample of the Study

There were 1010 undergraduate medical students who are currently enrolled in 5 years program of MBBS in Services Institute of Medical sciences, Lahore. The sample of this research was calculated by using Taro Yamane (Yamane, 1967) formula with 95% confidence level and 5% margin of error. The calculation of sample size was done by using the formula of Yamane as given below:

$$n = \frac{N}{1 + N(e)^2}$$

In formula:

n = sample size

N = total number of population

e = Margin of error (%)

$$n = \frac{1010}{1 + 1010(0.05)^2}$$

$$n = 287 \text{ (Rounded)}$$

After the calculation, the samples was 286.524 MBBS students.

Sampling technique

The simple random sample technique was used to select the participants from whole population. According to the (Wildemuth (2009)) simple random sample is a form of probability sampling in which every participant of whole population have equal chance for selection.

Instrument for the study

The nature of this research is quantitative. It was choosen to utilize the questionnaire to gather the data from target population.

Pilot study

Pilot study was conducted on small level. It helped to find out flaws and problems in the instrument which was used for collecting the data. To check the reliability of data collection tool in local set up, it was distributed to few numbers of students in different classrooms randomly. Students were approached in wards, classrooms, seminars rooms and during round in patient wards of hospital. Twenty students filled-up the questionnaire. They were also requested not to fill the questionnaire again in final data gathering process.

Reliability of the instrument

There were four sections to check the knowledge management practices of doctors of services hospital Lahore. Cronbach's alpha coefficient was applied on whole questionnaire to check the reliability of tool. The worth of Cronbach's alpha was 0.817, that is excellent.

Data collection

The initial step of data gathering was the circulation of questionnaire to students of Services Institute of Medical Sciences Lahore. According to the Yamane formula, the sample size was 287 (28.4%) out of 1010 (100%) students. There were 286 questionnaires that were distributed among the MBBS students of 5 years. Participants were approached in lecture halls, demonstrator rooms, during delivering the lecture, and they were also approached in library while studying.

Data Analysis

Collected information was entered in software which is Statistical Package for Social Sciences (SPSS 22.0). Different codes were allotted to different demographical items. Descriptive statistics was used to analyze and summarize results of the study.

DATA ANALYSIS

Demographic Information

This section represents the demographics information of respondents.

Table 1

Gender distribution

Gender	Frequency	Percentage%
Male medical students	126	45.7%
Female medical students	150	54.3%
Total	**276**	**100.0%**

The above table shows the gender representation of respondents that participated in the study. We see that a total of n=126 respondents were male with a total percentage of 45.7% whereas the total number of female respondents which participated in the study were 150 in number with a cumulative percentage of 54.3%. Hence it is concluded that the female respondents were large in number.

Table 2

Respondents' study year 1

Study Year	Frequency	Percentage%
1st year students	47	17.0%
2nd year students	49	17.8%
3rd year students	44	15.9%
4th year students	76	27.5%
5th year students	60	21.7%
Total	**276**	**100.0%**

The above table shows the respondents study year distribution which participated in the study. The above table shows that 1st year students were n=47 in number with a total percentage of 17.0% of the total population, whereas 2nd year students were n=49 i.e.17.8%, 3rd year students were n=44 i.e. 15.9%, 4th year students were n=76 i.e. 27.5% and 5th year students were n=60 with a cumulative percentage of 21.75. Researchers concluded that the maximum number of respondents who participated in the study were from $4^{th\ year.}$

Awareness about use of Digital resources

The given tables represent the use of electronic and print resources usually used by the respondents, availability of e-resources and their familiarity with the digital databases available.

Table 3

Gender of respondents' use electronic resources for study purpose

		Use electronic resources for study purpose		
		Yes	No	Total
Gender of	Male students	85	41	126
respondents	Female students	94	56	150
Total		**179**	**97**	**276**

The table above represents the use of electronic resources for the study purpose. The male students that responded as yes that they use electronic resources for the study purpose were n=85 whereas female respondents were 94. On the other hand, we see that the respondents who said that they don't use the electronic resources for their study purpose were total 97 with the distribution as 41 respondents were male whereas 56 respondents were female. Hence the results shows that the more students were intended to use electronic resources for study purpose.

Table 4

Gender of respondents' Use print resources for study purpose

| | | Use print resources for study purpose | | |
		Yes	No	Total
Gender of	Male students	73	53	126
respondents	Female students	97	53	150
Total		**170**	**106**	**276**

The table given above represents the use of print resources for the study purpose. The male students who responded as yes that they use print resources for the study purpose were n=73 whereas female respondents were 97. On the other hand, we see that the respondents that said that they don't use the print resources for their study purpose were total 106 with the distribution as 53 respondents were male whereas 53 respondents were female. Hence the results shows that the more students were intended to use print resources for study purpose.

Table 5

Gender of respondents' Use of both electronic and print resources for study purpose

| | | Use both electronic and print resources for study purpose | | |
		Yes	No	Total
Gender of	Male students	69	57	126
respondents	Female students	89	61	150
Total		158	118	276

The table above represents the use of both type of resources for the study purpose. The male students that responded as yes that they used both type of resources for the study purpose were n=63 whereas female respondents were 89. On the other hand, we see that the respondents who said that they don't use the both type of resources for their study purpose were total 118 with

the distribution as 57 respondents were male whereas 61 respondents were female. Hence the results show that the more students were intended to use both type of resources for their study purpose.

Table 6

Availability different kinds of electronic resources in library

Research Skills	Yes	Percentage%
Subscribed E-Journals/Databases	105	38%
Free Online resources	99	35.9%
E-books	146	52.9%
CD-ROMs	53	19.2%
E-Thesis	74	26.8%
Videos/Lectures	43	15.6%

The above table represents the availability of different kinds of electronic resources in library. The results shows that 105 respondents with a total percentage of 38% responded that subscribed e-journals/database were available in the library of their medical college. For free online resources n=99 i.e. 35.9% responded as yes that free resources were available in the library, for e-books 52.9% responded yes with n=146, for CD-ROMs n=53 i.e. 19.2% respondents responded as yes, for e-thesis 26.% with a total number of 74 respondents responded as yes and only 15.6% respondents with cumulative number of 43 responded as that video lectures were available in their library. Hence we see that according to the respondents 'perception subscribed e-journals / databases and e-books were present in large amount in library.

Table 7

Information about availability of e-resources in library

Sources of information	Yes%	Total
Through library websites	13%	276
Through library notices, training	42.8%	276
Through Classmates	42.0%	276
Through personal knowledge and experience	27.9%	276
Through conferences/ seminars	9.8%	276
Referred personally by librarian/library staff	38.4%	276
Library visit	39.5%	276

This table shows that how respondents get information about the availability of electronic resources in library. Different statements were asked from the respondents, on which the respondents responded as though library website 13% respondents get information, through library notices, training 242.8% respondents get information, through classmates 42.0% respondents get information. 27.9% respondents get information through personnel knowledge and experience, 9.% respondents get information through conferences and seminars, 3.4% respondents responded as they get information from being referred personally by librarian or library staff and 39.55 respondents responded as they get information by visiting library. The results show that respondents get more information about library e-resources from classmates and library notices and training.

Table 8

Awareness regarding following databases

Sources of information	Yes%	Total
ProQuest Dissertation & Thesis	21.0%	276
Ebrary	15.6%	276
IMF E Library	16.7%	276
SIAM	13.0%	276
Taylor & Francis Journals	19.2%	276
Wolter Kluwers OVID SP	33.3%	276
American Chemical Society	9.8%	276
ISI Web of Knowledge	26.1%	276
Elsevier (Science Direct)	31.2%	276
Springer-Link	21.7%	276
Wiley-Blackwell journals	27.2%	276

This table shows that how much respondents are aware regarding the type of databases mentioned in the questionnaire. Different databases were asked from the respondents on which the respondents responded as 21.0% were known about ProQuest dissertations and Theses, whereas 15.6 % were known about Ebrary, 16.7% were known about IMF E Library, 13.05% were known about SIAM, 19.2% were known about Taylor & Francis journals, 33.3% were known about Wolter Kluwers OVID OP, 9.8% were known about American chemical Society, 26.1% were known about ISI Web of Knowledge, 31.2% were known about Elsevier(Science Direct), 21.7% were known about Springer Link and 2.7.2% were known about Wiley Black well journals. The results show that medical students were aware about Wolter Kluwers OVID SP and ISI Web of Knowledge among all other databases mentioned in the questionnaire.

Purpose of use of Digital resources

A scale was adopted to check the purpose of using digital resources by the respondents. The results for the purposes asked in the questionnaire are discussed as below:

Table 9

Keeping you update in the interested subject

Scale	Frequency	Percentage
Strongly Disagree	52	18.8
Disagree	36	13.0
Uncertain	66	23.9
Agree	85	30.8
Strongly Agree	37	13.4
Total	276	100

The respondents were asked that if the use of digital resources was helpful for keeping themselves updated in their interested subject. The 18.8% respondents n=52 responded as that they strongly disagreed with the statement. 13.0% respondents n=36 responded as that they disagree with the statement, 23.9% respondents n=66 responded as that were uncertain regarding the statement, 30.8% respondents n= 85 responded as that they agreed with the statement whereas 13.4% respondents n=37 responded as that they strongly agreed with the statement. The results showed that responded agreed regarding the statement asked that the digital resources keep themselves updated in the interested subject.

Table 10

Research purposes i.e. writing thesis, articles, and books etc.

Scale	Frequency	Percentage
Strongly Disagree	24	8.7
Disagree	58	21.0
Uncertain	81	29.3
Agree	83	30.1
Strongly Agree	30	10.9
Total	276	100

The respondents were asked that if the use of digital resources was helpful for research purpose i.e. writing thesis, articles, and books, etc. The 8.7% respondents n=24 responded as that they strongly disagreed with the statement. 21.0% respondents n=58 responded as that they disagree with the statement, 29.3% respondents n=81 responded as that were uncertain regarding the statement, 30.1% respondents n= 83 responded as that they agreed with the statement whereas 10.9% respondents n=30 responded as that they strongly agreed with the statement. The results showed that responded agreed regarding the statement asked that the digital resources helped them in carrying out their research purpose i.e. writing thesis, articles, and books. etc.

Table 11

Downloading the articles, journals and books.

Scale	Frequency	Percentage
Strongly Agree	30	10.9
Disagree	59	21.4
Uncertain	57	20.7
Agree	105	38.0
Strongly Agree	25	9.1
Total	**276**	**100**

The respondents were asked that if the use of digital resources was helpful for downloading the articles, journals and books. The 10.9% respondents n=30 responded as that they strongly disagreed with the statement. 21.4% respondents n=59 responded as that they disagree with the statement, 20.7% respondents n=57 responded as that were uncertain regarding the statement, 38.0% respondents n= 105 responded as that they agreed with the statement whereas 9.1% respondents n=25 responded as that they strongly agreed with the statement. The result showed that responded agreed regarding the statement asked that the digital resources were useful for downloading the articles, journals and books.

Table 12

Purpose of leisure reading

Scale	Frequency	Percentage
Strongly Agree	26	9.4
Disagree	61	22.1
Uncertain	100	36.2
Agree	77	27.9
Strongly Agree	12	4.3
Total	**276**	**100**

The respondents were asked that if the use of digital resources was helpful for leisure reading. The 9.4% respondents n=26 responded as that they strongly disagreed with the statement. 22.1% respondents n=61 responded that they disagreed with the statement, 36.2% respondents n=100 respondents were uncertain regarding the statement, 27.9% respondents n= 77 responded that they agreed with the statement whereas 4.3% respondents n=12 responded as that they strongly agreed with the statement. The results showed that respondents agreed regarding the statement asked that the digital resources were a source of leisure reading for them.

Table 13

Preparing the assignments/ presentations

Scale	Frequency	Percentage
Strongly Agree	33	12.0
Disagree	37	13.4
Uncertain	45	16.3
Agree	86	31.2
Strongly Agree	75	27.2
	276	100

The respondents were asked that if the use of digital resources was helpful for preparing the assignments/ presentations. 12% respondents n=33 responded that they strongly agreed with the statement. 13.4% respondents n=37 responded that they disagree with the statement, 16.3% respondents n=45 responded that were uncertain regarding the statement, 31.2% respondents n= 86 responded that they agreed with the statement whereas 27.2% respondents n=75 responded that they strongly agreed with the statement. The result showed that respondents agreed regarding the statement asked that the digital resources were used for preparing the assignments/ presentations.

DISCUSSION:

The main aim of this study was to know the use of e-resources by medical students at Services Institute of Medical Sciences, Lahore. The results of the study revealed that majority of students (160 out of 272) was aware with the use of both types of resources like electronic and printed. Different type of E-resources used by medical students showed that 105 respondents with a total percentage of 38% responded that the subscribed e-journals/database were available in the library of their medical college. For free online resources n=99 i.e. 35.9% responded as yes that free resources were available in the library, for e-books 52.9% responded yes with n=146, for CD-ROMs n=53 i.e. 19.2% respondents responded as yes, for e-thesis 26.% with a total number of 74 respondents responded as yes and only 15.6% respondents with cumulative number of 43 responded as that video lectures were available in their library. Hence we see that according to the

respondents 'perception subscribed e-journals / databases and e-books were present in large amount in library.

13% respondents get information though library websites, 24.8% through training, 42.0% respondents get information through classmates. 27.9% respondents get information through personnel knowledge and experience, 9.% respondents get information through conferences and seminars, 3.4% respondents responded they get information from being referred personally by librarian or library staff and 39.55 respondents responded they get information by visiting library. The results show that respondents get more information about library e-resources from classmates and library notices and training.

The results further showed awareness of different kinds of e-databases of which the participants had awareness. 21.0% were aware of ProQuest dissertations and Thesis, whereas 15.6 % were aware of Ebrary, 16.7% were familiar with IMF E Library, 13.05% knew about SIAM, 19.2% knew about Taylor & Francis journals, 33.3% knew about Wolter Kluwers OVID OP, 9.8% knew about American chemical Society, 26.1% knew about ISI Web of Knowledge, 31.2% knew about Elsevier (Science Direct), 21.7% knew about Springer Link and 2.7.2% knew about Wiley Black well journals. The results showed that medical students were aware of Wolter Kluwers OVID SP and ISI Web of Knowledge.

Overall awareness regarding use of e-resources among medical students of services institute of medical was good. Egle et al. (2015) mentioned that the modern age group of medical students and residents are highly depending on information technology; although the electronic resources have not completely replaced the hard form of books but still utilization of electronic resources by medical student and residents is very high, even the results of research demonstrate that more than half students like to use the internet base resources rather than print information resources.

Moreover, the result showed that more than 70% participants responded agreed regarding use of digital resources helped them in carrying out their research purpose i.e. writing thesis, articles, and books, etc. Findings showed about the use of e-resources for research purpose. Findings about the use of e-resources for downloading the articles, journals and books was overall positive

because response rate of major number of students showed that they actively used the e-resources for downloading the articles, journals and books for research purpose. The finding further showed that students also used the e-resources for preparing the exams, assignments, presentations etc.

Following recommendations are made in light of findings of the study:

- Information literacy workshops should be conducted by library professionals for the library users to enhance their searching capabilities.
- Seminars within the campus should be held in order to provide basic searching skills so that library resources could be utilized more effectively and more efficiently.
- Library professionals should prepare a list of e-resources subject wise so that the required needs of patrons could be fulfilled without any hurdle.
- For enhancing the knowledge of library professionals, training workshops should be arranged so that they can perform well to provide better services to their users effectively and efficiently.

DIRECTIONS FOR FUTURE RESEARCH

Directions for future research have been discussed below related to the current study such as:

- E-literacy skills of library professionals as well as library users should also be investigated which were not covered by the present study.
- Role of social websites such as blogs used for scholarly communication of academics should also be explored.
- This study can get better results by using qualitative research design. Focus groups and interviews can be carried out to find the users opinions regarding the objectives of the current study in future.
- Longitudinal studies should be done in order to check the library professionals' seriousness towards the institute betterment in sense of enhancing the inner capabilities of users.

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