

Use of internet by the teaching faculty of Peshawar Medical College, Peshawar, Khyber Pakhtunkhwa, Pakistan

Saeedullah Jan,¹ Abid Hussain,² Muhammad Ibrahim,³ Sarah Saeed⁴

Abstract

This study was planned to examine the hard and soft form of learning resources available on the internet accessed by the teaching faculty. This study was conducted at the Peshawar Medical College, Peshawar, Pakistan from January 2 to April 2017. As the target population was not too large, no sampling technique was employed and census-based approach was adopted. For data collection, the pre-tested questionnaire was distributed among 115 faculty members of both basic and clinical sciences groups with a response rate of 66(57.39%). Data was analysed using SPSS. Among the respondents, 38(57.6%) were males and 28(42.4%) were females. A majority 51 (77.27%) of the respondents used the internet for teaching and research. Library was the most frequently 22 (33.33%) used place for the internet use. Low internet speed, virus on computers and a lack of modern trainings were the major barriers. E-journals, e-books, online databases and theses and dissertations were the major sources consulted by the participants.

Keywords: Use of internet, E-resources, Satisfaction, Faculty member, Peshawar Medical College.

Introduction

The Peshawar Medical College (PMC) came into being in 2006 and is run by Prime Foundation, which is not owned by an individual but has a board of directors comprising expert medical professionals and educationists. The college is recognised by Pakistan Medical and Dental Council and affiliated with Riphah International University Islamabad. Besides Bachelor of Medicine, Bachelor of Surgery (MBBS), the PMC offers Doctor of Philosophy (PhD) and Master of Philosophy (MPhil) programmes in basic medical sciences and training of Fellow of College of Physicians and Surgeons Pakistan-II (FCPSP-II) in general medicine and general surgery.

The use of internet has brought revolutionary change in human life with a major impact on their ideas and

behaviour. It has affected each and every aspect of mankind. This amazing technology has now become the natural part of our lives and has transfigured every field of world routine. Undeniably, it has brought dramatic increase in the advancement of learning and education, especially higher education. In Pakistan, most of the higher education institutes have acquired this high bandwidth technology for the promotion of education and research.¹ Faculty members are bound to rely on this emerging technology, not only for self-learning, preparation of lectures, enhancement of research, but also for new teaching methods and styles. Internet use among the faculty members of Islamia University, Bahawalpur, was much more than expected.² Singh revealed in a study that e-journals and online databases are the most frequently used e-resources.³

Sakina, Khalid Mahmood and Farzana stated that the facility of internet was emerged in 1995 by Digicom in Karachi. The internet facility is now available in each and every big city of Pakistan with Wi-Fi facility and high gigabits per second points of presence (giga POP).⁴ Citing the statistics of Internet Service Providers of Pakistan, a study reported there are 15 million mobile internet users, 25 million internet users and 1.7 million broadband internet connections in Pakistan.⁵ Saeed Ullah evaluated use of the internet by faculty members at the Bacha Khan University, Charsadda, and recommended the provision of alternative power supply for smooth functioning of the internet.⁶ The current study was planned to examine the hard and soft form of learning resources available on the internet accessed by the teaching faculty.

Methods and Results

This study was conducted at the Peshawar Medical College (PMC), Peshawar, Pakistan from January to April 2017. A pre-tested questionnaire was used for data collection (Annexure). The target population was the teaching faculty comprising professors, associate professors, assistant professors and senior registrars of the PMC. Staff other than above was excluded. The instrument was distributed among the total 115 teaching faculty members. Based on the previous studies, it was calculated that 15 minutes was the maximum time required for completing the

.....
¹Department of Library and Information Science, Khushal Khan Khattak University, Karak, KP, ²⁻⁴Peshawar Medical College, Peshawar.

Correspondence: Muhammad Ibrahim. Email: pmclibrary@hotmail.com

Table-1: Purpose of internet.

Purpose of Internet Use	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Std. Error
Email	66	1.00	2.00	1.3788	0.48880	0.511	0.295
Social Networking	66	1.00	2.00	1.6970	0.46309	-0.877	0.295
Sports	66	1.00	2.00	1.9394	0.24043	-3.769	0.295
Career Development	66	1.00	2.00	1.7879	0.41194	-1.441	0.295
Research and Teaching	66	1.00	2.00	1.0909	0.28968	2.913	0.295
Recreation and News	66	1.00	2.00	1.7273	0.44877	-1.045	0.295

Std: Standard.

Table-2: Resources on internet used by teaching faculty.

Resources on internet	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Database	66	1.00	2.00	1.6515	0.48014	0.231
Conference Proceeding	66	1.00	2.00	1.9091	0.28968	0.084
E-Journals	66	1.00	2.00	1.4242	0.49801	0.248
Standards & Patents	66	1.00	2.00	1.9848	0.12309	0.015
Reference Work	66	1.00	2.00	1.3333	0.47502	0.226
E-Books	66	1.00	2.00	1.4848	0.50360	0.254
Technical Reports	66	1.00	2.00	1.8333	0.37553	0.141
Theses & Dissertations	66	1.00	2.00	1.6515	0.48014	0.231

Std: Standard.

questionnaire. The first part of the data collection instrument dealt with the demographic information of the respondents. The major focus of the remaining questions was on the usage of internet by the teaching faculty. Emails, text messages, telephone calls and physical meetings with the teaching faculty were used as follow-up tools. The reported response rate was 66(57.39%). The gender-wise response from males and females was 38(57.6%) and 28(42.4%), respectively. Another study reported the gender-wise response rate for male and female as 28.60% and 71.4% respectively.⁷ The collected data was scrutinised, filtered and analysed using SPSS version16.0.

It was observed in this study that library was the most frequently 22 (33.33%) used place for the internet. However, a study reported that home was the most common place for using the internet.⁸

The current study found that the trend of cyber cafe for internet usage was decreasing day by day. Another also reported that only one percent of university students were using the internet at cafes.⁹ One study reported that a majority of the internet users were using cyber cafe at universities.¹⁰

As for the satisfaction level of internet users, the current

study found that a majority of participants were partially satisfied with internet facilities available in the premises of the college, with the mean rating being 27 (41%). A reasonable number of the users are fully satisfied with the current facilities of the internet. A few teachers 14 (21.21%) were not satisfied with the use of the internet at the PMC.

As it is obvious that the internet is a multifaceted technology with a variety of information sources, the respondents were asked about the purpose of using the technology. Email, social networking, sports, career development, research and teaching and recreation and news were the options given to the participants. A majority of the faculty members were surfing for research and teaching 51 (77.27%), followed by sports 14 (21.21%). It was also reported that email and social networking were the less searched items, followed by recreation and news. Some of the respondents 04 (06.60%) were also surfing the net for career development (Table-1).

It was also found that the respondents tried to access various resources on the internet. They preferred to search conference proceedings, standards and patents, databases, technical reports, reference works and e-journals. It was also observed that medical professionals were least interested in e-books, thesis and dissertations (Table-2).

ANNEXURE: RESEARCH QUESTIONNAIRE**Use of Internet by the Teaching Faculty of Peshawar Medical College
Peshawar, Khyber Pakhtunkhwa, Pakistan**

*Responses will be used purely for research purposes without identification.
Therefore feel absolutely free to provide your candid opinions.*

Q. 1. Gender:

- ☐ Male ☐ Female

Q. 2. Where do you use Internet?

- ☐ Department ☐ Library ☐ Cyber Cafe
☐ Home ☐ Mobile Phone

Q. 3. How frequent do you use the Internet?

- ☐ 2 - 3 Times in a Day ☐ Once in a Day ☐ Once in a Week
☐ Once in a Month ☐ Rarely

Q. 4. Are you satisfied from internet facilities at PMC?

- ☐ Fully Satisfied ☐ Partially Satisfied ☐ Least Satisfied
☐ No Comments

Q. 5. For which purpose you use the internet?

- ☐ Email ☐ Career Development
☐ Social Networking ☐ Research and Teaching
☐ Sports ☐ Recreation and News

Q. 6. Please rate the internet for academic pursuit.

- ☐ High ☐ Average ☐ Low
☐ Very Low ☐ Uncertain

Q. 7. Which resources do you use on the internet?

- ☐ Database ☐ Reference Work
☐ Conference Proceeding ☐ E-Books
☐ E-Journals ☐ Technical Reports
☐ Standards and Patents ☐ Theses and Dissertations

Q. 8. Which barriers do you face in the use of internet?

- ☐ Slow speed ☐ Lack of enough computer terminals
☐ Virus on Computers ☐ Lack of Proper Training
☐ Finance ☐ Social and Religious Factors
☐ Power dependencies

Q. 9. From which sources of information you are most satisfied.

- ☐ Internet ☐ Books
☐ Research Journal ☐ Experts
☐ Newspapers ☐ Other. _____

Q. 10. Suggest how to eradicate the barriers in the use of internet?

- ☐ High bandwidth internet connections ☐ Update Antivirus software
☐ Uninterruptible Power Supply (UPS)/ Generator ☐ Reasonable budget
☐ Proper and periodic training on emerging trends ☐ Up-to-date Hardware

Thank You Very Much for Your Cooperation

The respondents were asked regarding barriers and problems they faced while using the internet. A majority of them identified slow speed as the most common issue to the smooth usage of the internet. A reasonable number of respondents pinpointed virus on computers as another issue hampering the use of the internet. Power failure was also considered as a problem by some of the faculty members. A lack of proper training was also considered as a hindrance by a few professors. Finance, social and religious factors were rarely cited as problems to internet usage. The collected data explored that the internet was on top among the sources of information used by the teaching faculty of the PMC, followed by books and research journal, respectively.

Several options were given to the teaching faculty of the PMC to record their opinions about the possible solutions, including high bandwidth internet connections, uninterruptible power supply (UPS)/generator, proper and periodic training on emerging trends, updated antivirus software, reasonable budget and up-to-date hardware. Proper and periodic training on emerging trends and updating of anti-virus software can also be considered as solutions to the problems encountered with the internet.

Conclusion

The provision of right information to the right person at right time and at right place is the basic right of each individual in a society. Being a noble and dignified slot of a society, medical faculty members should be given this right. Internet has a dominant role in the provision of latest and timely information to the society. Efforts should be made to provide this amazing and wonderful facility to teaching faculty of the PMC. Various barriers in their way should be eradicated. Access to the Higher Education Commission's (HEC) digital library should also be given to the teaching faculty for the fulfilment of their information needs. The provision of authentic and quality information to the teaching community will improve the level and standard of medical education in the college in particular and the country in general.

The revolutionary invention of the internet has affected all spheres of human life. The teaching faculty of the PMC is engaged in the positive usage of the internet. However, we found that a majority of the professors were moderately satisfied with its use. Some of the problems identified by the respondents were: power failure, a lack of training facilities and virus on computers. Installation of powerful UPS/generator/solar system, periodic and proper training, allocation of appropriate budget and the provision of latest hardware and software could address

these issues. A reasonable number of participants used the internet for teaching, research, career development and as a frequent source of information. The application of the internet in the academic activities has resulted into quality and standard education. It assists in broadening the vision and subject command of the teachers which ultimately enhanced the level of understanding of students. The positive usage of internet will definitely contribute to national building.

Disclaimer: None.

Conflict of Interest: None.

Source of Funding: None.

References

1. Bashir S, Mahmood K, Shafique F. Internet use among university students: a survey in University of the Punjab, Lahore. *Pak J Lib Info Sci.* 2008; 9:49-65.
2. Bhatti R. Internet use among faculty members in the changing higher education environment at the Islamia University of Bahawalpur, Pakistan. *Library Philosophy and Practice.* [Online] [Cited 2017 February 22]. Available from: URL: <http://digitalcommons.unl.edu/libphilprac/314/>.
3. Singh V. Use of E-Resources by the faculty members and research scholars of department of computer science and mathematics of Jamia Millia Islamia University, Delhi: A study. *Lib Prog Inter.* 2013; 33:235-50.
4. Bashir S, Mahmood K, Shafique F. Internet use among university students: a survey in University of the Punjab, Lahore. *Pak J Lib Info Sci.* 2008; 9:49-65.
5. Arif M, Ameen K, Rafiq M. AIOU Web Based Services Usage: Distance Learners' Perspective. *Pak Lib Info Sci J.* 2017; 48:40-56.
6. Jan SU. Use of Internet by the Teaching Faculty of Bacha Khan University, Charsadda Khyber Pakhtunkhwa. *Res J Lib Sci.* 2015; 3:7-11.
7. Kumar A, Kalia R. Use of Internet by the Faculty and Academic Staff Members: A Survey Study of Swift Group of Colleges Rajpura in the Disciplines of Medical Science. *International Research: J Lib Info Sci.* 2016; 6:8-14.
8. Naz F, Malik KI, Zaman R, Younis S, Malik M. Use of internet by medical students in their basic and clinical skills. *Pak J Med Res.* 2011; 50:34-40.
9. Chhachhar AR, Khushk GM, Chachar AA, Qureshi B. Internet usage among university students in Pakistan. *J Basic and Applied Sci Res.* 2013; 3:31-5.
10. Islam MA, Hussain MJ. Access and use of the internet among undergraduate students in the Faculty of Arts, University of Dhaka, Bangladesh. *Pak J Info Manag Lib.* 2016; 13:57-64.