# Association for Information Systems AIS Electronic Library (AISeL)

All Sprouts Content Sprouts

10-22-2008

## Specific Use of Internet Amongst Health Care Professionals in a Rural Tertiary Medical College of India

Mayank Trivedi Sardar Patel University, spulib@yahoo.com

Anuradha Joshi

Pramukhswami Medical College, anu sujai@yahoo.com

Follow this and additional works at: http://aisel.aisnet.org/sprouts all

#### Recommended Citation

Trivedi, Mayank and Joshi, Anuradha, "Specific Use of Internet Amongst Health Care Professionals in a Rural Tertiary Medical College of India" (2008). *All Sprouts Content.* 210.

http://aisel.aisnet.org/sprouts\_all/210

This material is brought to you by the Sprouts at AIS Electronic Library (AISeL). It has been accepted for inclusion in All Sprouts Content by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

## **Specific Use of Internet Amongst Health Care Professionals** in a Rural Tertiary Medical College of India

Mayank Trivedi Sardar Patel University, India Anuradha Joshi Pramukhswami Medical College, India

#### **Abstract**

INTRODUCTION: The study was conducted at Pramukhswami Medical College in Karamsad (Gujarat, India) from November-August 2007 to assess the Computer and Internet usage amongst health care professionals. OBJECTIVE: To identify the knowledge of Computer and Internet of health care professionals of Pramukhswami Medical College and to understand the information-seeking behavior. We have observed the search habits of Internet users at PSMC. Efforts are on to find the search requirements related to the use of the Internet information. METHODS: They were given a questionnaire to collect the data. RESULTS: Results show that all the respondents are using the Internet frequently because. They use the Internet in different ways, such as accessing to online journals, downloading text, chatting, discussion, E-mail services and for finding related references. It is revealed that the professionals of PSMC are getting quality information through the Internet. It is observed that the Google and Yahoo search engines are more widely use compared to other search engines. CONCLUSION: The study revealed that high computer usage among health care professionals in an institution with good computer facilities. The majority expressed their willingness to undergo further training

**Keywords:** Internet usage, Internet access, Search engines, Search strategy, Information searching, Browsers, Digital information, Information seeking behavior, India, Gujarat.

**Permanent URL:** http://sprouts.aisnet.org/8-5

Copyright: Creative Commons Attribution-Noncommercial-No Derivative Works License

Reference: Trivedi, M.J., Anuradha, S.J. (2008). "Specific Use of Internet Amongst Health Care Professionals in a Rural Tertiary Medical College of India," . Sprouts: Working Papers on Information Systems, 8(5). http://sprouts.aisnet.org/8-5

## Specific use of Internet amongst Health Care Professionals in a rural tertiary Medical College of India

#### Abstract:

INTRODUCTION: The study was conducted at Pramukhswami Medical College in Karamsad from November-August 2007 to assess the Computer and Internet usage amongst health care professionals. OBJECTIVE: To identify the knowledge of Computer and Internet of health care professionals of Pramukhswami Medical College and to understand the information-seeking behavior. We have observed the search habits of Internet users at PSMC. Efforts are on to find the search requirements related to the use of the Internet information. METHODS: They were given a questionnaire to collect the data. RESULTS: Results show that all the respondents are using the Internet frequently because. They use the Internet in different ways, such as accessing to online journals, downloading text, chatting, discussion, E-mail services and for finding related references. It is revealed that the professionals of PSMC are getting quality information through the Internet. It is observed that the Google and Yahoo search engines are more widely use compared to other search engines. CONCLUSION: The study revealed that high computer usage among health care professionals in an institution with good computer facilities. The majority expressed their willingness to undergo further training.

Key Words: Internet usage, Internet access, Search engines, Search strategy, Information searching, Browsers, Digital information, Information seeking behavior, India, Gujarat.

## **Introduction:**

The Internet is the world's largest network of Information, Communication and Services. Although the internet is widely used in medicine and has made significant impact in research, training and patient care. Few studies have explore the extent to which only physicians use internet resources for the purpose of health information for the patient care as well as for teaching purposes. The library and information science research community has carried out a substantial body of work examining health care professionals' information needs, information -seeking behavior and use. [1]

Among Health care professionals, knowledge about telemedicine, evidence based medicine(EBM) and problem based learning(PBL), good clinical practices, open access journals, Medline, Medscape, Cochrane reviews, e-medicine, MD-consult, ProQuest Medical Library(PML) etc have to be assessed.

The health care people, why do they seek health information? The reasons are, they need to be updated for the current development in medical field all over the globe. They need to obtain answers to patient's specific questions and they need information for teaching materials for undergraduate (UG) and postgraduate (PG) and for research. Regarding evidence based medicine for all rational purposes. [2,3]

In the past the health care people tried to take help from printed materials such as books, journals, handbooks, monographs held in personal libraries and also from friends.[4,5,6] However, due to increase in the pace of health care research and the introduction of computers and internet many new electronic information resources and systems are now available. Due to the easy availability of the internet there is an increased possibility of immediate access to the most recent and reliable results of clinical research in every day medical practice in developing countries as well as developed countries. However, internet is still only available to a minority of health care professionals in developing countries like India and often it is not available when actually needed. There are number of problems regarding its connectivity and speed.

Simultaneously, it is also crucial that patients have an adequate medical information to educate, sensitize and to prepare themselves before going for any medical procedure. As we all know that the introduction and popularization of internet is changing the way health care providers and the general public searched for and retrieve medical information. The internet makes possible immediate access to and acquisition of encyclopedic information.

We therefore focus our study on the central research question that is regarding specific purpose for internet use, wherein we assessed which databases/websites are frequently used.

#### **Material & Methods:**

The Pramukhswami Medical College (PSMC) and Shree Krishna Hospital (SKH) managed by HM Patel Centre for Medical Care and education (HMPCER)were established in 1987 and is one of the oldest institutions for tertiary health care teaching in

Gujarat, one of the western states of India. The attached teaching hospital is 500 bedded hospitals with various Medical specialty, subspecialty and super specialty running various consulted clinics. Pramukhswami Medical College is running undergraduate and postgraduate courses. Our study population consisted mainly of Professors, Additional Professors, Associate Professors, Assistant Professors, Tutors and Residents.

194 Health Care Professionals at the PSMC and HMPCER, Karamsad, Gujarat, India were given an anonymous standardize questionnaire regarding information/usage of internet for various databases like PubMed, Medscape, Proquest Medical Library(PML), Directory of Open Access Journals(DOAJ), E-Medicine, Free Journals for Doctors (FJ4D), Amedeo, IndMed, Multiple(EBM, Cochrane Reviews, Telemedicine etc.) were assessed.

The questionnaire elicited Information mainly on the use of /rather specific use of internet in health care providers as mentioned above for the purpose of teaching, providing medical care, providing patient care and knowledge updating.

The study period for eliciting the above information was June-2007 to Aug-2007. During this period, 200 questionnaires were distributed to all eligible respondents. Informed consent was given by return of completed questionnaire (194), the remaining did not respond.

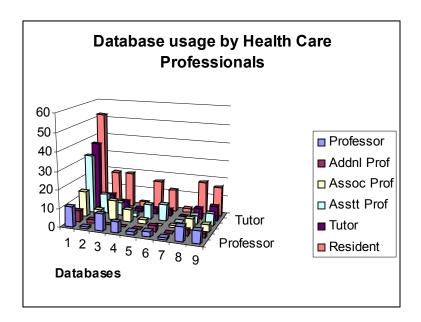
The questionnaires were reviewed for completeness and analyzed by percentage application.

## **Results and Discussion:**

TABLE-I: Internet usage among Health care providers

	Pubmed	Medscap	PML	DOAJ	eMedicine	FJ4D	Amedeo	IndMed	Multiple
Designation	1	2	3	4	5	6	7	8	9
Professor	11(5.67)	1(0.51)	9(4.60)	6(1.03	2(1.03)	3(1.54)	1(0.51)	8(4.12)	7(3.67)
				)					
Addnl Prof	6(3.09)	2(1.03)				3(1.54)		3(1.54)	2(1.05)
Asso. Prof.	14(7.21)	5(2.57)	11(5.67	7(3.67	2(1.03)		1(0.51)	6(3.09)	4(2.06)
			)	)					
Asstt Prof	32(16.49	11(5.67)	7(3.67)	2(1.03	8(4.12)	9(4.60)	00	5(2.57)	7(3.67)
	)			)					
Tutor	17(8.76)	8(4.12)	5(2.57)	2(1.03	3(1.54)	3(1.54)	00	6(3.09)	8(4.12)
				)					
Resident	52(26.80	19(9.79)	19(9.79	3(1.54	16(8.24)	12(6.18)	2(1.03)	18(9.27)	16(8.24)
			)	)					

**Diagram** 



Internet usage is widespread among physicians. However, use of online EBM resources such as the Cochrane library, clinical evidence and up-to-date was very minimal. Awareness and training in the use of EBM resources for patient care is needed. Introduction of EBM in to the existing curriculum would enhance the ability of physicians to acquire, appraise and use EBM resources to solve patient's health problems. The Internet is a powerful tool in the hands of health-care providers and is also available to health-care users. However, many patients that could actually benefit from proper use of the Internet are unfamiliar with new technologies [7].

It was observed that most of the users in our survey were residents using PubMed (26.80%) indicating that the services provided by the internet or useful for their research work, dissertation purpose. However in of the study held in Iran by Asefeh Asemi[7]. It is depicted that internet utilization for research work purpose is 28% [8].

#### **Conclusion:**

Internet usage is widespread among physicians, however, use of online EBM Resources such as the Cochrane Library, Clinical Evidence and Up-to-date was very Minimal. Awareness and training in the use of EBM resources for patient care is needed. Introduction of EBM into the existing curriculum of Medical Council of India would enhance the ability of physicians to acquire, appraise and use EBM resources to solve Patient's health problems. Concluding it would be helpful if the use of computer is taught at all level of the staff. Library professionals on the campus may take initiatives to improve the Information searching on the Internet process among the Computer users. Librarians may take initiatives to prepare the list of subject website. Data useful to researchers, link to free on line database on the Library WebPages necessary. And the Library should introduce Network literacy program. [9]

#### **REFERENCES:-**

- [1] Devin B, Nilan M. Information needs and uses JMLA 2003, 91:203-215. PubMed Abstract/PubMed Central full text/
- [2] Hewins ET: Information needs and use studies. JMLA 2003, 91:203-215. PubMed Abstract/PubMed Central full text/
- [3] Gruppen LD: Physicians Information seeking: Improving Relevance through Research.

BMLA 1990, 78:165-172. PubMed Abstract/PubMed Central full text/

- [4] Thompson ML: Characteristics of information resources preferred by primary care PhysiciansBMLA 1997,85:187-192. PubMed Abstract/PubMed Central full text/
- [5] Koller M, Peltenburg M, Joachim E, Steurer J: Use of internet by medical doctors in Switzerland.

Swiss Med wkly 2001, 131:251-254. Pubmed Abstract/PubMed Central full text/

- [6] Haug JD: Physicians' preferences for information sources: a meta-analytic study. BMLA 1997, 85:223-232. Pubmed Abstract/PubMed full text/
- [7] Mitretek Systems, Health Information Technology Institute. Criteria for assessing the quality of health information on the Internet. 1999.

Http://hitiweb.mitretek.org/docs/criteria.html

- [8] Asemi, A. Information searching habits of Internet users: A case study on the Medical Sciences University of Isfahan, Iran. Webology 2(1), article 10. http://www.webology.ir/2005/v2nl/a10.html
- [9] Winker MA, Flanagin A, Chi-lum B, White J, Andrews K, Kennett RL, et al. Guidelines for medical and health information sites on the internet: principles governing AMA web sites.

JAMA 2000; 283(12): 1600-1606(free full text)[Medline]

### TITLE PAGE:

"Specific use of Internet amongst Health Care Professionals in a rural tertiary Medical College of India" **AUTHOR:** 

\*DR MAYANK TRIVEDI

\*\*DR ANURADHA JOSHI

\*UNIVERSITY LIBRARIAN, SARDAR PATEL UNIVERSITY, VALLABHVIDYANAGAR-388120, GUJARAT, INDIA

\*\*ASSISTANT PROFESSOR,

DEPARTMENT OF PHARMACOLOGY,

PRAMUKHSWAMI MEDICAL COLLEGE.

KARAMSAD-388325, GUJARAT, INDIA

### **CORRESPONDENCE AND REQUEST FOR REPRINTS TO:**

DR MAYANK TRIVEDI, UNIVERSITY LIBRARIAN, SARDAR PATEL UNIVERSITY,

VALLABHVIDYANAGAR, GUJARAT, INDIA(388120).

Phone: +91-2692-226874 Cell: +919426952224

E-mail: spulib@yahoo.com

**WORD COUNT:** 1227 excluding title page and abstract but including references.

SHORT RUNNING HEAD: "Specific use of Internet amongst Health Care Professionals in a rural tertiary Medical College of India"

# 芽|Sprouts

## 芽|Sprouts

#### Working Papers on Information Systems | ISSN 1535-6078

#### Editors:

Michel Avital, University of Amsterdam Kevin Crowston, Syracuse University

#### Advisory Board:

Kalle Lyytinen, Case Western Reserve University Roger Clarke, Australian National University Sue Conger, University of Dallas Marco De Marco, Universita' Cattolica di Milano Guy Fitzgerald, Brunel University Rudy Hirschheim, Louisiana State University Blake Ives, University of Houston Sirkka Jarvenpaa, University of Texas at Austin John King, University of Michigan Rik Maes, University of Amsterdam Dan Robey, Georgia State University Frantz Rowe, University of Nantes Detmar Straub, Georgia State University Richard T. Watson, University of Georgia Ron Weber, Monash University Kwok Kee Wei, City University of Hong Kong

Sponsors: Association for Information Systems (AIS) AIM itAIS Addis Ababa University, Ethiopia American University, USA Case Western Reserve University, USA City University of Hong Kong, China Copenhagen Business School, Denmark Hanken School of Economics, Finland Helsinki School of Economics, Finland Indiana University, USA Katholieke Universiteit Leuven, Belgium Lancaster University, UK Leeds Metropolitan University, UK National University of Ireland Galway, Ireland New York University, USA Pennsylvania State University, USA Pepperdine University, USA Syracuse University, USA University of Amsterdam, Netherlands

University of Dallas, USA University of Georgia, USA

Viktoria Institute, Sweden

University of Groningen, Netherlands University of Limerick, Ireland University of Oslo, Norway University of San Francisco, USA University of Washington, USA

Victoria University of Wellington, New Zealand

#### Editorial Board:

Margunn Aanestad, University of Oslo Steven Alter, University of San Francisco Egon Berghout, University of Groningen Bo-Christer Bjork, Hanken School of Economics Tony Bryant, Leeds Metropolitan University Erran Carmel, American University Kieran Conboy, National U. of Ireland Galway Jan Damsgaard, Copenhagen Business School Robert Davison, City University of Hong Kong Guido Dedene, Katholieke Universiteit Leuven Alan Dennis, Indiana University Brian Fitzgerald, University of Limerick Ole Hanseth, University of Oslo Ola Henfridsson, Viktoria Institute Sid Huff, Victoria University of Wellington Ard Huizing, University of Amsterdam Lucas Introna, Lancaster University Panos Ipeirotis, New York University Robert Mason, University of Washington John Mooney, Pepperdine University Steve Sawyer, Pennsylvania State University Virpi Tuunainen, Helsinki School of Economics Francesco Virili, Universita' degli Studi di Cassino

#### Managing Editor: Bas Smit, University of Amsterdam

#### Office:

**Sprouts** University of Amsterdam Roetersstraat 11, Room E 2.74 1018 WB Amsterdam, Netherlands Email: admin@sprouts.aisnet.org