

Usage of electronic journals (e-journals) versus print journals by healthcare professionals in H M Patel Centre for Medical Care and Education (HMPCME)

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Abstract

This article presents a study that seeks to examine the use of e-journals by the health care professionals of HMPCME and that of print journals which can be availed at the behest of library at Pramukhswami Medical College (PSMC), Karamsad, Gujarat-India. From this survey it was found that most of the research scholars i.e. (Doctors, Physicians, Medical officers, Interns, Post Graduate students, Residents) are referring to e-journals, as well as print journals from their departmental library as well as computer center in the central library. The main aim of consulting these journals is for retrieving information regarding research, dissertation, presentations, seminars, lectures, treatment protocols for unusual cases and journal clubs etc and largely to update their own knowledge. However, this study also reveals several inherent problems especially with the use of e-journals e.g. Computer illiteracy, lack of computer training, inability of retrieving particular/relevant health based information via various advanced databases like MD-Consult, EBSCO, ProQuest, Science Direct etc. Other mechanical deficits like slow downloading, slow connectivity, and subjective strain to eyes are also present while using e-journals. Moreover problems regarding subscription for a particular time phase are highlighted.

Keywords: e-journal/s, print journal/s, health care professionals, databases, online journals, information need, information retrieval.

Introduction

Health is a prime desire of man, and history records the efforts of men and nations to achieve healthy status. In recent years enormous growth has occurred in the business of providing health and medical care to our population. Medical knowledge is being translated into improved health and medical care programs and it has expanded at a phenomenal pace as the process of learning for understanding has been enhanced by the applications of technology. The ever-changing elements of modern technology make this age different from that of past age i.e. in the form of new technology, new inventions, virtual labs etc. This type of information is required by the medical professionals at different levels, in the field of medicine, regarding research, case studies, health policy statements, medical indicators, vital statistics, patient care etc.

provide health care information in various forms, one of them being e-journals.

Journals that are published exclusively in electronic format present an innovation in a way that scientific information is communicated easily to the community. Significant concerns remain regarding the transient nature of the electronically formatted material and since e-only journals have only recently become integrated into information science systems. These e-journals were first suggested some years ago as a possible means of revolutionizing the world of research journals. However, print journals have been used for decades and there is quite a bit of difference between the usage of e-journals and print journals within the information system.

The invention of computers has been an absolute blessing for individuals at various levels. Computers have made it possible to do most of the routine task of clinical practice in an efficient manner. They allow more time to pursue knowledge, and provide access to the sources of knowledge in short time as well. The Internet has opened up new ways of communication, so that keeping pace with the current happenings all over the world is simple, fast, free and convenient. Under such circumstances information technology has emerged as a boom to

E-journals offer several advantages that can not be offered to a printed version such as increased speed of production through electronic interaction between authors, editors, publishers and readers, fast downloading, printing, availability through computer networks and use of multimedia molecular models structure of molecules in 2D, 3D editing etc. On the other hand the use of print journals is time tested, has developed over several centuries and has evolved in specialized ways to fulfill their primary activities of easy and elaborate dissemination of information, quality control and

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recognition of authors. Accessing print journals articles involves a number of methods including the use of variety of both specialized and general indexes, library catalogues, key words searching, usage of Boolean operators, reference citing from other articles, recommendations from readers and colleagues and meticulous arrangement of print journals by Library. However, e-journals can be distributed more economically than print journals because the main cost of preparing the text, the review process and other like procedures are not as capital intensive as the cost of printing and mailing of print copy. Consequently it is usually hoped that the financial cost of the journals in the electronic environment could slow or reverse the escalating cost of scientific journals, in a print version.

In order to better understand the usage of e-journals versus the print journals in the health care domain, a study of health care professionals was undertaken to study their use of the two formats of journals. Details of the study are given below.

Materials and methods

A questionnaire was distributed amongst 194 Health care professionals of HMPCME, where questions regarding the use of print journals verses use of e-journals were asked to the Medical faculty of different specialties and different age groups. Questions regarding computer literacy, requirement of training, usage of computer and its purpose, usage of various medical databases were also asked. The study was carried out over 2 months (Sept–Oct; 2007).

Table-I

Category	Age group	Male	Female
Professor	36-62	10	17
Additional professor	38-55	02	05
Associate professor	26-46	09	09
Assistant professor	26-45	22	19
Tutor	23-54	12	12
MO/Resident	20-33	61	16

Table-II

Category	E-copy	Print copy	Both	No response
Professor	02	13	01	-
Additional professor	02	06	-	01
Associate professor	03	13	-	02
Assistant professor	17	21	-	03
Tutor	05	01	01	03
MO/Resident	21	46	-	10
Total	56 (28.86%)	106 (54.63%)	02 (1.03%)	19 (9.79%)

Same value can be depicted in the following figures (Figure-I, II, III)

Results

Out of 194, 19 people did not respond while the rest responded as depicted in Table-I. Results revealed that there was 28.86% utilization of e-journals vs. 54.63% use of print journals, while 1.03% for both respectively as shown in Table-II and the following figures respectively (Figure-I, Figure-II, Figure-III).

Figure-I

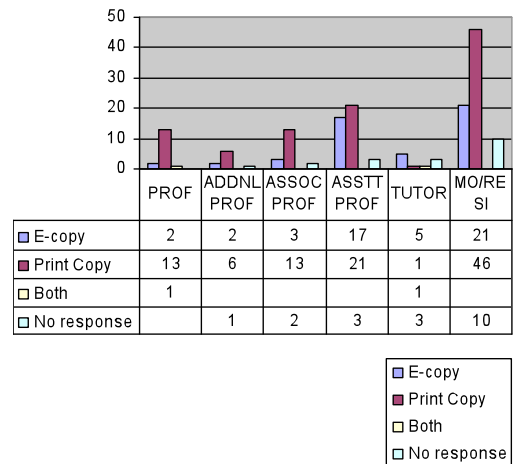


Figure-II

Usage statistics

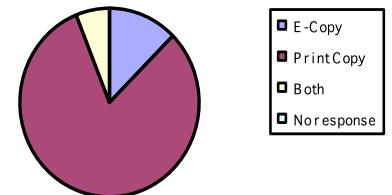
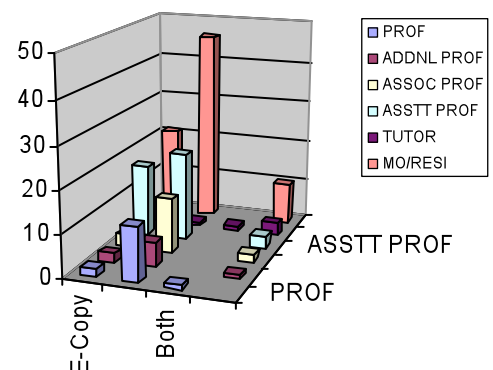


Figure-III



Discussion

In our study, the data reveals that there is more use of print journals (54.63%) as compare to e-journals (28.86%), which is similar to the study conducted by Roland F and Sandra L (2005) wherein print journals were much more in use than e-journals respectively. The usual expectations from any medical authorities are that once e-journals are introduced the use of journals available only in print would decrease. Nowadays even the publishers are also transforming towards this trend of print to e-journals, because online databases allow timelier literature searching, provide quick access to a greater number of databases and online journals from remote locations, and require fewer trips to the library than print collections [1].

The preference of print journals over e-journals or vice-versa may vary from institution to institution. The reason, as already mentioned, appears to be the recent introduction of online journals, not giving them sufficient time to demonstrate a change in the favour of use of e-journals for research by medical faculty. For instance, some faculty may not readily embrace the availability of online journals and continue to travel to the library for their information needs. Changes in faculty use patterns of the library have been observed by various researchers like Curtis, Weller and Hurd[2], who examined the faculty in the Health Sciences and Technology and reported that the faculty preferred accessing electronic database from their offices rather than going to the library. Simultaneously some of the researchers like Brennan, Hurd, Blecic and Weller [3] found that research practices have changed as a result of online databases and online journals.

A 2002 study by Sathe, Grady, and Giuse, examining the effect of journal format on the research process, found that fellows, medical students, and residents preferred online journals, while faculty preferred to use of print journals [4]. Sathe, Grady, and Giuse noted the reasons for using online journals versus print journals also varied. Reasons for patrons using the online journals included browsing journals (39%), checking references (41%), printing articles (58%), and reading articles (20%), and reading tables of contents (32%). The above findings contrasted with a 1997 study by Curtis, Weller, and Hurd who examined the faculty reading habits prior to online journals i.e. they reported that 78% of the health science faculty relied on personal subscriptions as a source of journal articles. These differences in numbers might reflect the rapid change in retrieving journal articles due to online access.

Although there is a growing no. of e-only journals being published online but our research still indicates a greater use of print journals as compared to e-journals. Tamy R. Seiebenberg et al on the other hand also conducted a study on print journals versus e-journals in various disciplines and found an increased utilization of e-journals as compared to print journals [5]. The main reason for these results appears that e-journals offer free access for a stipulated time period, and on the spot access without time lag.

The following Table highlights some of the valid merits and demerits of e-journals and print journals.

Table-III
(e-journals)

Merits	Demerits
Easily accessible	Non-availability of full text(Sometime)
Online submission	Subscription only for a fixed duration
Online editing	Poor quality of Portable Document File
Time Savings	No perpetual access
On spot access	Can not read at your leisure
Can download any article with/without payment	Continuity of content is disturbed
	Problems in downloading

Table-IV
(print journals) [6][7]

Merits	Demerits
Easily accessible	Increased time spent in searching information
Personified copy	Non-availability of Indexes in some journals
Legibility	Expensive according to no. of copies
No dependency on computer/electricity	Require more space
Can read at your leisure	
No need of link/continuity	
Can keep all printed versions to eyesight at a glance	

Conclusions

It seems that there is a growing use of e-journals over print journals but which is preferable over the other is a debatable issue. As suggested by some researchers, it is important for health science institutions to do their own study and determine the usage of e-journals versus print journals in various disciplines[8]. As this study did not show a significant decrease in use of print journals as compared to e-journal for research, we would like to suggest continued access to print journals rather than completely switching over to e-journals, particularly for those journals available only in print.

The usual perception in Health Science Management regarding e-journals usage is that they are highly cost effective from the point of commercialization and it is usually assumed that once e-only journals are introduced the faculty will use e-only format. However, this is not true at least in the current scenario, which depicts that at this point in time the medical faculty is in a state of flux, as on one hand there are print journals and on the other hand there are E-only journal databases available online. This time of flux however provides a great opportunity to study the changing patterns of research as well as more of training the faculty members in accessing E-journals by the library staff and specific vendors/aggregators for improving search skills[9].

It can be expected that with the passage of time, online journals will be better able to demonstrate an impact as a result of increased user acceptance and utilization. This will however only happen if the e-journals are open access, offer better connectivity, faster speed of Internet, and efficient communication between health care professionals and library staff as well as the availability of hardware[10].

The current need appears to be a hybrid of e-journals as well as print journals rather than following a single track direction. Recently some institutions have opted for 40% Print journals + 60% e-journals for the faculty/users. Quite a lot of concern has evolved regarding the use of e-journals and on the type of package that is preferred. Managerial authorities differ substantially from the medical faculty on this. Since this is a debatable issue for all health care institutions, there is a dire need to look into the pros and cons of MCI (Medical Council of India) limitations regarding this subject. More care has to be taken to make the rules and regulations in this regards to streamline the subscription process in all Health care institutions. However, respondents/faculty needs training in this aspect and Health Science Librarian has to play a key role to provide best possible information. *It is not enough to make progress; we must make it in right direction. In an ever-changing world of academic libraries e-journals no doubt serves as a valuable investment package in the field of Health Sciences and Medicine, print journals are equally useful and a valuable resource as well as a gold standard for research purposes.*

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