

Information Seeking Behaviour of Medical Undergraduate Students in India

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Abstract

The purpose of this study is to investigate the information seeking patterns of medical students at Sree Narayana Institute of Medical sciences (SNIMS), Kerala State, India. A questionnaire was designed and administered to the randomly selected 120 medical students of the four batches of the course to investigate their information-seeking behaviour. The investigator could collect 120 filled in questionnaires from the respondents that constituted a response rate of 91.66 per cent. The data collected through questionnaires were analysed through simple statistical techniques. The survey reveals that nearly half of the students visit the library 2-3 times a week and use the library mainly for reading reference books and text books. The findings show that, although similarities exist between female and male students of MBBS students with regard to information-seeking behavior, there are significant differences as well. This paper highlights the student's perspective on information seeking behaviour. Paper establishes the importance of a cross-sectional study in understanding the difference in students' gender wise information needs.

Keywords: Information seeking behavior, Medical students, Undergraduate students India

Introduction

Krikelas (1983) defines information-seeking behavior as “any activity of an individual that is undertaken to identify a message that satisfies a perceived need. In other words, information seeking begins when someone perceives that the current state of possessed knowledge is less than that needed to deal with some issue (or problem).” Wilson (2000) described ‘information seeking behaviour’ as “the totality of human behaviour in relation to sources and channels of information, including both active and passive information-seeking and

information use”. Sheeja (2010) stated that, “information-seeking behavior and information needs differ among user groups belonging to different profession”. The information seeking behaviour of medical students is an important area in this respect. This study is aimed to investigate the information seeking behaviour of medical undergraduate students of a Medical College in Kerala, India.

Medical profession is a noble occupation which encompasses, “a variety of health care practices evolved to maintain and restore health by the prevention and treatment of illness in

human beings”. The basic course in medicine is Bachelor of Medicine and Bachelor of Surgery (MBBS) which is “five and a half years long” and its “curriculum is oriented towards training students to undertake the responsibilities of a physician of first contact who is capable of looking after the preventive, curative and rehabilitative aspect of medicine”. Moreover, the profession demands lifelong learning. Thus information seeking skills are crucial to a problem based learning curriculum. Bigdeli (2004) emphasized that it is vital for those engaged in the medical profession to acquire the necessary skills to retrieve the most recent information in this field. The understanding of how medical students seek information for their information needs is important for librarians to organize, process, and manage the information system.

Background of the study

Medical education in India has come a long way since independence. “Medical schools in India produce the largest number of doctors than anywhere else in the world (30,408 from 271 medical schools), corresponding to the rapid proliferation of medical colleges in the last two decades, especially within the private sector (Sood, 2008)”. Medical education is regulated by the “Medical Council of India - a statutory body with the responsibility of establishing and maintaining high standards of medical education and recognition of medical qualifications in India (<http://www.mciindia.org>)” as well as by the Universities. Presently India has 356 colleges imparting MBBS course (MCI, 2013). Out of this 162 are government medical colleges and 192 are private colleges. This study attempts to reveal “information seeking behavior” of MBBS students studying in a private medical college named as SNIMS established in 2009 and situated in Chalakka, Ernakulam district, Kerala

State. The college is affiliated to Kerala University of Health Sciences.

The SNIMS library is an essential part of the college that satisfies the information needs of students and faculty members. The library collection consists of books, periodicals, popular magazines, reference books, bound volumes, digital collections and other documents and it provides a wide range of information services. The library is fully automated with MINFO library management software developed by Leedhar Technologies, Ernakulam.

Objectives

- To understand the “information seeking behavior” of medical students;
- To explore and examine “the key sources of literature” more often consulted by medical students;
- To ascertain the “level of awareness” of medical students on library services available to them and
- To examine the existence of gender wise difference in information seeking behavior of medical students.

Review of related studies

A vast amount of literature is available on “information seeking behavior” and information needs of undergraduate students in various disciplines (Fidzani, 1998; Majid and Tan, 2002; Callinan, 2005; Baro, Onyenania & Osaheni, 2010; Catalano, 2013). Compared to other disciplines, a small number of studies embarked on information seeking behavior of medical students. The studies on ‘information seeking behaviour of medical students’ undoubtedly emphasized the importance of the medical library’s role in developing life-long learning skills (Graves and Seliq, 1986; Pelzer and Leysen, 1988; Rankin, 1992). Rankin’s

(1992) study found that medical students use textbooks most often to meet their information needs. Adedibu and Gboyega (1997) investigated information needs and information seeking patterns of medical students at Lautech, Nigeria. They used questionnaire for data collection and found that, “70 per cent medical students spent more than three hours in the library to consult books that are relevant to their areas of specialization, and 68 per cent of this students seek library staff for various assistance in the course of searching for books”.

Ajayi (2004) conducted a study on library use and information seeking behavior of medical students at of Obafemi Awolowo University. The study adopted systematic random sampling technique and the result showed that, “the library was most frequently used for studying and for making photocopies of materials. The respondents relied on textbooks and handouts for current information instead of using indexes or abstracts for recent literature”. The study suggested implementing advance library instruction programme for medical curriculum. A study on Information literacy of medical students studying in the problem-based and traditional curriculum by Eskola (2005) revealed that, “medical students used printed sources such as books and journals, electronic resources such as databases and the Internet, media sources such as TV and radio, and people”. A survey of ‘information seeking behaviour of the medical students’ at Ajmal Khan Tibbiya College, Aligarh Muslim university by Fatima and Ahmed (2008) found that, majority of the students make use of news papers, books and journals. Personalized information services were marginally used by the medical students. They also emphasized the need for library orientation.

Mehdi *et al* (2010) attempted a study on, “how medical students manage their information needs in unscheduled and high-

acuity environments at teaching hospitals affiliated with the Iran University of Medical Sciences”. Questionnaire and observation methods were used to collect data from the sample population of seventy medical students. The study found that, “students’ major information needs were related to a specific patient. They preferred prepared information sources such as patients’ charts. They also depended on patients and colleagues”. The study further reported that the time limitations, poor access to computers, and lack of Internet searching skills were the major barriers to information retrieval from electronic resources.

Baro, Endouware and Ubogu (2011) analysed, ‘awareness and use of online information resources by medical students at Delta State University in Nigeria’ and found that, “majority of the students neither aware nor use the online medical information resources such as: MEDLINE, HINARI, CINAHL databases and NUC virtual library as sources of information to retrieve materials related to medical literature”. The study also pointed out that, “the major factors of ineffective use of online information resources were lack of skills to use the online information resources, lack of time, poor user education programmes, and slowness of server”. Shah’s (2011) study on library usage at an Indian medical college revealed that consultation of text books was the major reason of library visit by the students. The students were satisfied with the library facilities. Azhar (2011) conducted survey to investigate, “the information needs and information seeking behavior of prospective undergraduate medical students at the College of Medicine, King Saud Bin Abdulaziz University, Riyadh”. The study revealed that, “variety of methods is used by the students to meet their information needs and they visited the library for study purposes, photocopying of materials and taking print-outs of required

online information". The study further revealed that, "the undergraduate medical students relied on textbooks and handouts for current information, rather than using indexes or abstracts for review of current and up-to-date literature". Tunde's (2012) study on information seeking and usage behaviours of medical practitioners within the teaching hospital at the University of Ilorin (UII) in Kwara State, Nigeria suggested that the librarians at the school should provide supplemental services to aid medical personnel in their information queries.

The review of literature on "information seeking behaviour of medical students" provides insights on the pattern and priority of use of information sources. However, the number of studies on Indian medical students is very less. While the ISB of the different communities have been frequently addressed, there is little documentation on the information seeking of medical students' community. This study promises to provide another precise contribution in the afore said direction.

Methodology

This study was undertaken to discover the information-seeking behaviour of medical undergraduates at SNIMS. The data on the existing resources, services and facilities of the SNIMS library was collected from the librarian through structured interview supplemented by physical verification through personal visit. To examine information seeking behavior of medical students a questionnaire based survey was designed and distributed to a random sample of 120 MBBS students out of a total number of 400 students. 110 questionnaires were completed and returned by the students. The data collected through questionnaires were analysed through simple statistical techniques.

Findings

General characteristics of the respondents

Out of 110 respondents 69 (62.7 percent) were female students and 41 (37.3 percent) were male students. Majority (59 percent) of the students come under the age group of 21 and above.

Frequency of library visit

Nearly half of the students 51 (46.36 percent) visit the library 2-3 times a week. 29 (26.36 percent) students use the library every day. The analysis also shows that more than half of the female students use the library 2-3 times a week. Compared to male students female students (43.7 percent) spend more time in the library. Overall, 40 (36.36 percent) students spend more than 4 hours in the library and 37 (33.63 percent) students spend three hours in the library. 17(15.45 percent) students spend nearly one hour in the library.

Purpose of library visit

Majority (71.8 percent) of the MBBS students use the library for the purpose of reading reference books. Very few percent of students use the library for general purposes such as Internet browsing, Newspaper reading, etc. More than half of the students (57.3 percent) pointed out that their second preference for visiting library is to use the text books. Hence the study revealed that students use SNIMS library mainly for reading reference books and text books.

Major information sources utilized

Major information sources utilized by respondents are reference books (61.8 percent) and text books (30.9 percent). Table 1 and Figure 1 shows the gender wise analysis of use of information sources utilized by medical students. The result shows male students make use of all kind of information sources than female students.

Table 1. Major information sources utilized

Information sources	Male	Female	Total
Reference books	23(56.09%)	45(65.22%)	68(61.82%)
Text books	10(24.39%)	24(34.78%)	34(30.9%)
Journal articles	1(2.4%)	0	1(0.9%)
Humans	2(4.8%)	0	2(1.81%)
Computer search	5(12.19%)	0	5(4.54%)
Total	41(100%)	69(100%)	110(100%)

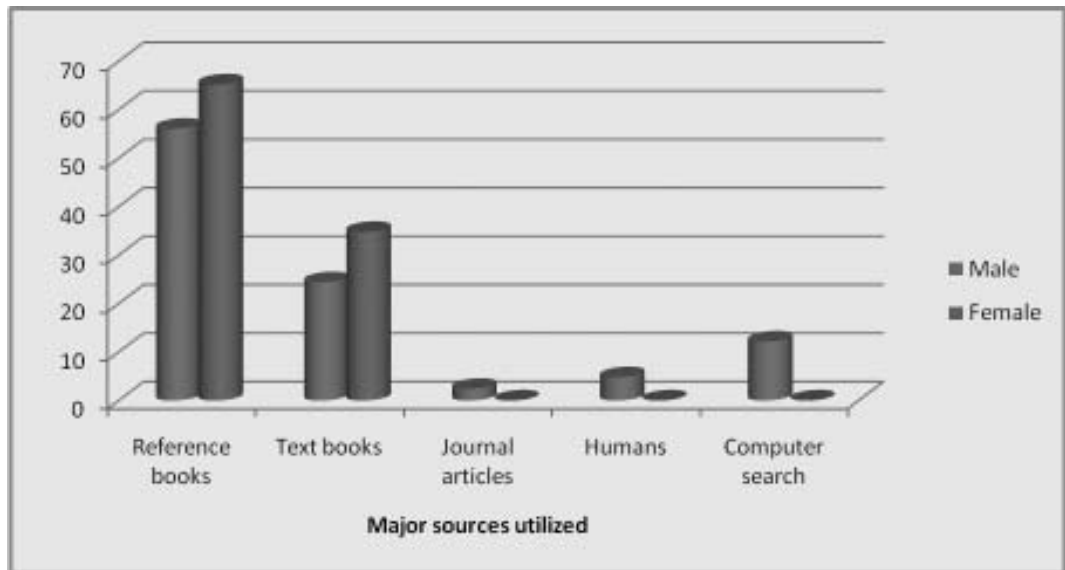


Figure 1. Major information sources utilized

Information sources used in emergency

During emergency, the majority of medical students' first choice of information resources is patients (43.6 percent) followed by physicians (39 percent), and patient chart (9 percent). A small number of students depend online (4.5 percent) and printed resources (1.8 percent). Table 2 & Figure2 portrays gender wise analysis of the use

of information resources at the time of emergency. There is difference between female and male students opinion regarding the use of sources at emergency. While male students (68.3 percent) prefer to consult patients as their first choice, female students prefer physicians. Compared to male students, female students utilize all possible resources.

Table 2. Information sources utilized in emergency

Information sources	Gender wise distribution		
	Male	Female	Total
Patients	28 (68.3%)	20 (28.9%)	48 (43.6%)
Physicians	10 (24.3%)	33 (47.8%)	43 (39%)
Online Sources	0(0%)	5 (7.2%)	5 (4.5%)
Patient charts	3(7.3%)	7 (10.1%)	10 (9%)
Printed sources	0(0%)	2 (2.8%)	2 (1.8%)
Nursing staffs	0(0%)	2 (2.8%)	2 (1.8%)
Total	41(100%)	69(100%)	110(100%)

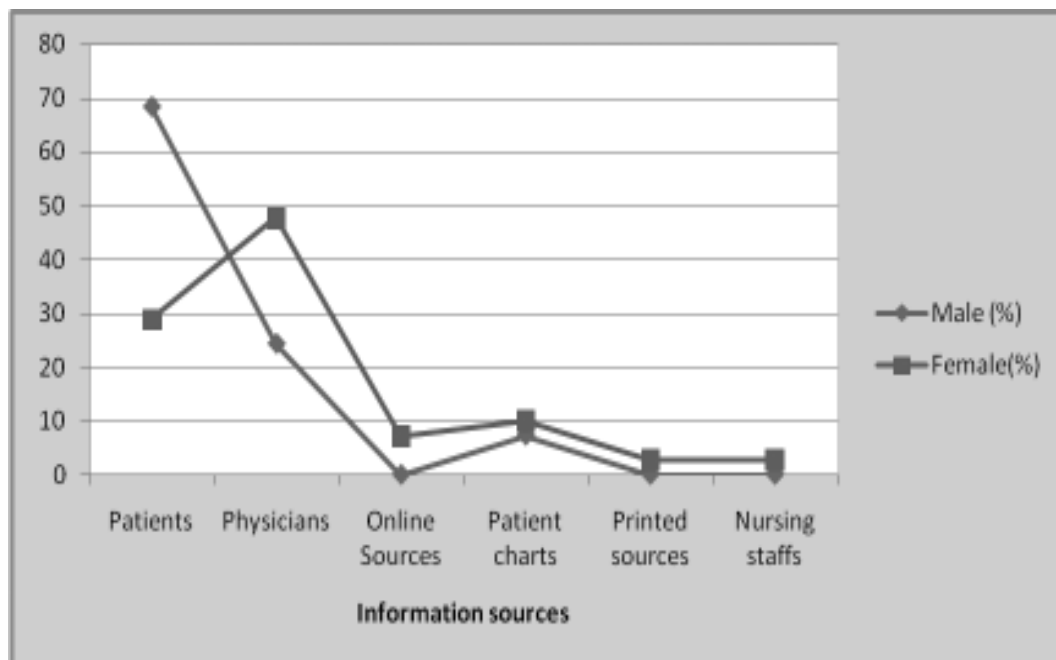


Figure 2. Information sources utilized in use of online information sources

Medical students are sporadic users of online resources. There is no difference between female and male students regarding the frequency

of use of online sources. In this digital era it is quite surprising that 4.3 per cent of female students never used online resources (Table 3 & Figure 3).

Table 3. Use of online resources

Frequency	Responses		Total
	Male	Female	
Regularly	14(34.1%)	21 (30.4%)	35(31.8%)
Occasionally	27(65.8%)	45(65.2%)	72(65.4%)
Never	0(0%)	3(4.3%)	3(2.7%)
Total	41(100%)	69(100%)	110(100%)

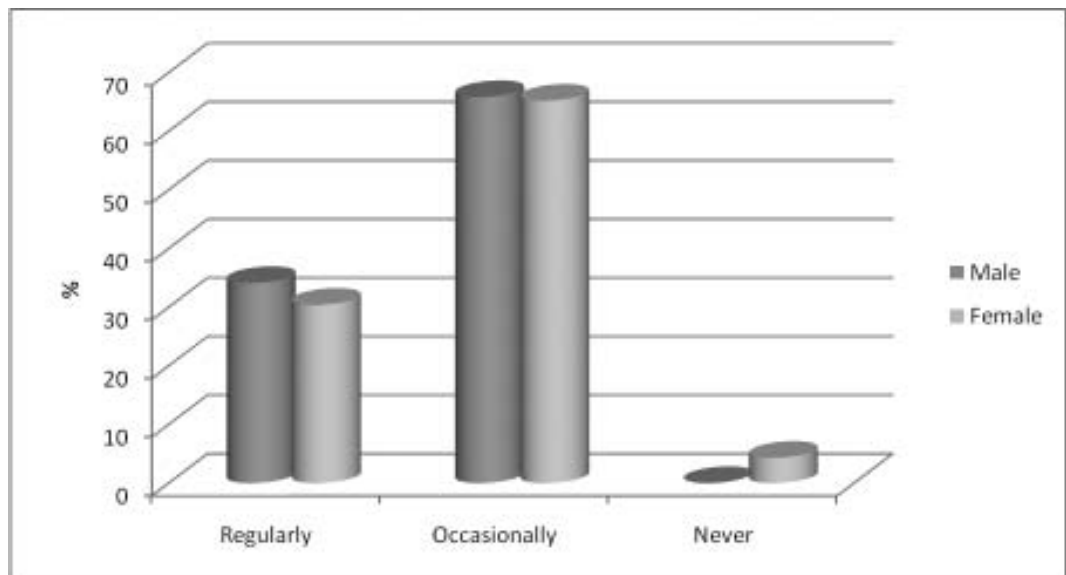


Figure 3. Use of online resources

Major purpose of information seeking

Nearly half (41.8 percent) of the medical students seek information for the purpose of solving immediate practical problems. The next purpose of seeking information is “to keep up-to-date” (27.2 percent) and career development (21.8 percent). 7.2 per cent students seek information for writing essays for course work. Gender wise analysis shows difference in

opinion between female and male students to seek information. While the majority (68.3 percent) of male students seeks information for solving immediate practical problems, female students do it for keeping themselves up to date. Female students seek information for multiple purposes whereas male students do it for two or three purposes (Table 4 & Figure 4).

Table 4. Purpose of seeking information

Purposes	Responses		Total
	Male	Female	
To keep up-to-date	3(7.3%)	27 (39.1%)	30(27.2%)
To solve immediate practical problems	28(68.3%)	18(26.0%)	46(41.8%)
To write articles	-	8(11.5%)	8(7.2%)
For career developments	10(24.3%)	14 (20.2%)	24(21.8%)
Other purposes	-	2 (2.8%)	2(1.8%)
Total	41(100%)	69(100%)	110(100%)

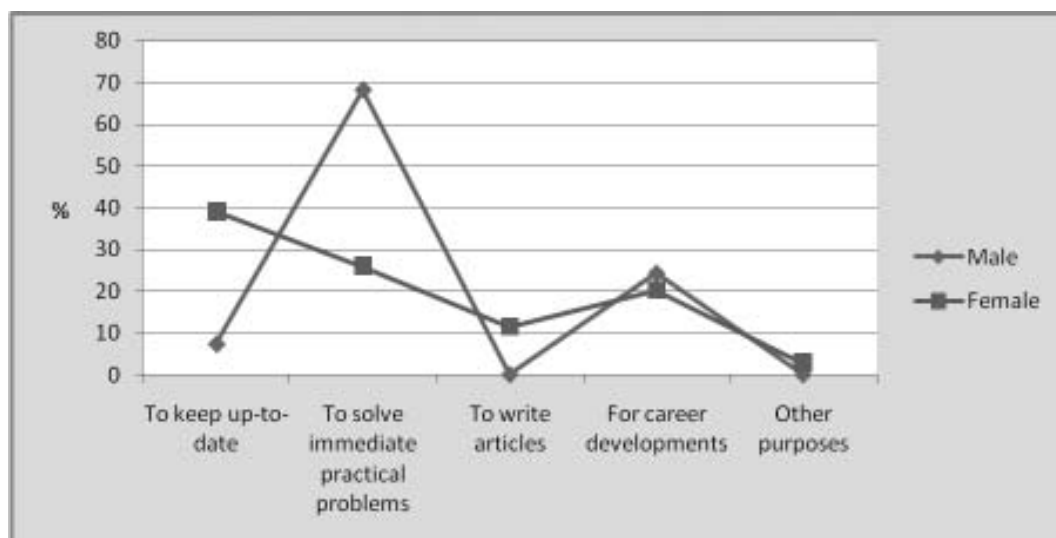


Figure 4. Purpose of seeking information

Awareness of library services

The majority (71 percent) of medical students is aware of library services provided by their institutional library and 29 percent students are not aware of the services. Gender wise difference is negligible on library awareness.

Problems in using information sources

Lack of time is the major barrier of information usage of medical students. More than

half of them indicated that they have insufficient time to spend in library. Another major barrier pointed out by respondents is diversity of information sources.

Library assistance and instructional course

Compared to male students, majority of female students (67.27 percent) seek help from library staff for using library. Meanwhile, students responded to the question whether they need any library instruction courses, 62.7 percent

responded 'No'. However, introduction of a structured library instruction programme may be beneficial for medical students.

Conclusion

The findings of the study show that, although similarities exist between female and male students of MBBS with regard to information-seeking behavior, there are significant differences as well. Female students and male students differ in spending time in the library, use of information sources, sources consulted at the time of emergency and purpose of information seeking. Both male and females are aware of library services and sporadic users of online resources. The result of the study matches with the findings of an earlier study conducted by Adedibu & Gboyega (1986) who showed that almost 70 per cent medical students spent more than three hours in the library to consult books that are relevant to their areas of specialization, and 68 per cent of this students seek library staff for various assistance in the course of searching for books. The study also established the findings of Mehdi *et al* (2010) which showed at the time of emergency period students preferred information sources such as patients and patient charts. One of the major finding of this study is medical students mainly visit the library for consulting reference books. They prefer reference books for study to text books. This result is quite different from earlier studies. The result of the study may be used as an evaluation tool of medical college libraries in India.

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