

## **Library Use and Information - Seeking Behavior of Medical Students**

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### **INTRODUCTION**

The rapid proliferation of information in our era has important implications for the education of health professionals including medical students. Health Sciences students cannot afford to concentrate solely on learning subject-specific information and skill. Information is an important tool used in the realization of any objective or goal set by an individual. It is a valuable resource required in any society; thus acquiring and using information are critical and important activities. According to Igbeka (2002), human beings go out in search of this valuable production.

In his own study Marchionini (1995) reveals that information seeking is a fundamental human process closely related to learning and problem solving. Many factors initiate the search for information, among these are in the individuals' task or profession. Burkett (1993) contended that information seeking behavior is significantly influenced by the nature of the subject and rank academic training.

Recent studies in information sciences have been concerned with the manner in which information sought is used. Studies by Robinson et al. (1995) inquiring on the use of information, found out that differences in the use of information, sources and types exist among professionals and students.

Information at all levels remains the life-blood of any organisation, and the twenty-first century has witnessed remarkable evolution as evident in considerable large increase of technology ranging from bibliographic to full database. In the case of medical libraries, the medical practitioner, researcher, students and others in allied fields who are the patrons of the library need up-to-date information frequently in education programmes, diagnostic procedures, research in various fields of treatment of various ailments, said Rees Alan (1993).

In the work of Graves and Seliq (1986), they emphasized the importance of the medical library's role in developing life long learning skills in medical students. They pointed out that

“students need to develop skills in information management and the use information tools and databases”. Undergraduate students often do not comprehend the necessity of learning to use the library resources available to them, nor do they always realize that research skills will be a necessary part of their future practice of medical profession.

Medicine is among many other sciences, an area in which the expansion of information is enormous and which is critically dependent on up-to-date information. These factors have influenced the implementation of problem-based learning (PBL) approach in the medical education. Students can't learn during formal education all what is needed and therefore skills in problem-solving and dependent information seeking are emphasized in the curriculum.

Medical students' information behaviour has been explored in connection with library user or use studies. According to a study conducted by Rankin (1992a) medical students use most often textbooks and general or overview material to meet their information needs. Also results of Mick's study 1972 in Taylor (1991) revealed that medical students were dependent on their personal notes and colleagues. Due to changes in the medical education, interest in medical students' information behaviour has grown during the last decade.

In the studies of Saunders et al. (1985), Andrup (1995), Rankin (1992b) and Friden and Oker-Blom (1995), problem-based learning students chose sources, which support learning process, and they learn how to seek information on the early stage of education. Problem-based learning students use of libraries and different information sources has been explored in a few studies. Results of these studies indicate that the way, how the library and its services are used changes and the use of the library and library services increases.

The implementation of student-centered learning and teaching methods in the medical curriculum has also resulted in a growing body of literature which explores different aspects of

information literacy and user education of libraries. In his own study, Gorman (1995) revealed that changes are made in medical education in order to enhance problem-solving skills of students and to help them learn to think like experts when solving clinical problems. It may be possible that these changes also influence students' information behaviour.

### Objectives of the Study

The objectives of the study are:

- (1) to evaluate students' perception of the demand for their curriculum for locating clinical information.
- (2) to determine if they sought current information, and
- (3) sources most often used for their current information.

### METHODOLOGY

Since the focus of the study is information-seeking behaviour of medical students, it was essential to establish access to information and this is most visible in libraries. The researcher selected medical students who came to the library to use library and its facilities. Therefore, for the purpose of this study, only those who are in 200-600 levels were selected. The respondents were grouped into four: 200 level, 300 level and 400 level while 500 and 600 levels were classified as seniors (in clinical rotation).

A total of six hundred and eleven (611) medical student library users comprising of 313 males and 187 females were sampled. The questionnaire was distributed to those who came to make use of the library facilities. A systematic random sampling technique was used to distribute the questionnaire at the main entrance of the library. The respondents were selected at an alternating interval of five students coming to the library. Simple percentage were used to analysis the data collected.

### FINDINGS

Five hundred completed questionnaires were returned and analyzed. This represented 280 (56%) part ii, 78 (15.6%) part iii and 73 (14.6%) part iv while 69 (13.8%) seniors. Three hundred and thirteen (62.6%) were males and one hundred and eighty-seven (37.4%) females.

Eighty-two percent of the respondents held no previous undergraduate degree, 6.0% held B. S. degree, 2.0% held the M.S. or Ph.D. degrees. Nearly three fourths of the students 75% had completed Library Instruction Programme (LIB. 001), others had received some form of library orientation (25%).

### Library Related Activities

Students were asked to mark on a checklist the frequency with which they engaged in seven library activities (Table 1).

The most frequent use of the library (defined as every day and 2-4 times per week) was for studying course work and photocopier. Seeking information for course work ranked fifth. This category was intended to indicate independent initiation of an information search in the library, rather than reaction to course provided information sources such as photocopying specific articles, past question file, reserve materials and reading lists. Almost 70% of senior students on clinical rotation indicated little use of the library for independent initiation of searches.

**Table 1: Students' activities in the library**

Activity	Frequency of response (%)			
	Daily	2-4 times per week	Once per week less	None
Using photocopier	17	67	40	2
Studying course work	30	65	35	10
Using reserve books	8	45	61	4
Leisure use	7	37	29	29
Seeking information for course work	6	24	62	14
Past question file	3	12	67	21
Seeking information for research	4	7	32	53

Percentages may not equal 100% due to rounding.

### Locating Current Information

To find current information on a new topic, 22.6% of the respondents indicated that they used indexes and/or abstracts (Table 2). But when probed more closely about the sources they used most often, all four levels indicated assigned textbooks and course handouts more than any other sources (Fig. 1).

**Table 2: Sources used by students for current information**

Source	No of responses	Percentage
Textbooks	242	48
Handouts	237	47
Classmates or Lecture	191	38
Library Staff	117	23
Indexes/Abstract	113	23
Browse shelves	108	22
Card catalogue	85	17

Figure 1 also shows that part two students used textbook extensively and that seniors used indexes/abstracts least of all groups. This finding is similar to Rankin (1992b; Northup et al., 1983; Da Rosa et al., 1983). Studies of medical students, residents and physicians, where proportionately more of the students were found to rely on books to satisfy their information needs.

Other sources for locating current information include the library staff (23%), and browsing the shelves (21.6%) ranked well below textbooks and handouts. Because senior medical students who are faced with clinical rotation were no more likely to consult library-related sources for current information than others.

Medical students perceive the information that appears in textbooks and course handouts as

being current enough for their needs. In their view these sources are convenient for covering much information in a short-time.

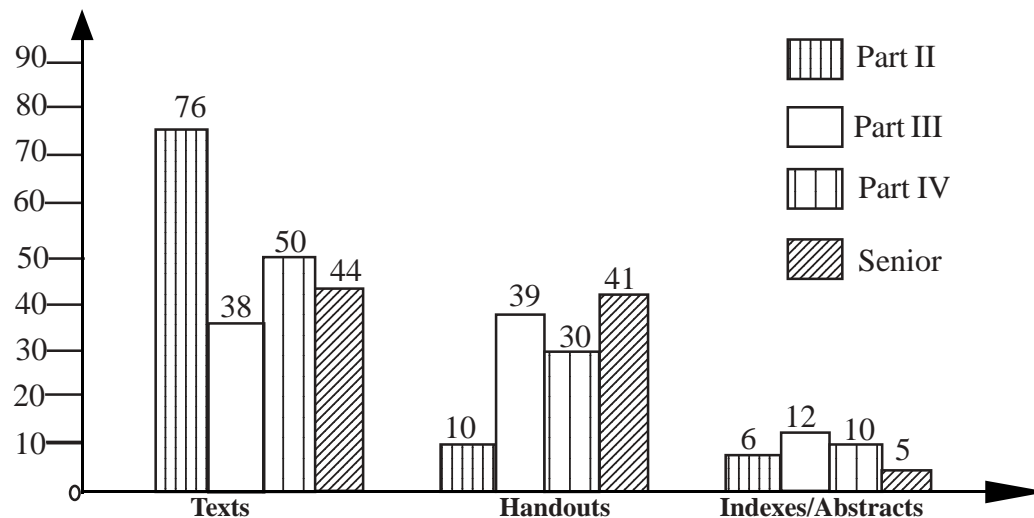
A large portion of students indicates that they never used Index Medicus (53%) and Biological Abstracts (69%). The overall use of other print and computerized and indexes is shown in Table 3.

The observation that many students are not using indexes or abstracts raises fundamental question as to whether they are gaining sufficient exposure to the literature. It appears that students are not taking time to explore journal literature as a source while in medical school. The wide range of information required for treating human multiple medical problems does not lend itself to a narrow information base.

**Table 3: Students' use of print and computerized Indexes/Abstracts**

Print	Frequency of response (%)			
	0 times	1-2 times	3-5 times	6+ times
Index Medicus	53	32	21	18
Biological Abstract	69	38	16	10
Biosis	96	8	7	2
Medline	96	14	4	2

Percentage may not equal 100%

**Fig. 1. Source most often used for current information**

### Use of Internet

A large proportion of students indicated that they have access to the internet (89%). It was asked further the frequency of use and for what purpose. A high percentage (65%) showed that they use it at least once in a week. Although 45.6% used Internet to check and send mails, a sizeable percentage used it for down loading books and journals 15.6% and 16.8% respectively.

Access to internet to down load books and journal articles will help students combat lack of required texts that is facing majority of them and it will ease the problem of too many students chasing few books in the library leading to mutilation, stealing, hiding and book loan delinquencies (Ajayi, 2003). According to Gosling (2002), many people are using internet resources for a variety of purposes, the service institution as library remains an important and expanding element of the information delivery chain.

Contrary to the view that all information are available online, this of course is inaccurate. Only a fraction of past and new knowledge is available online, and much of that is not peer-viewed in any other manner.

When the respondents were asked how they anticipated fulfilling continuing education needs as practitioners, over 90% felt that courses/workshops, conferences/meetings, computerized information and colleagues were the most important sources (Table 4). Personal library was considered to be an important to very important source. Nearly one-fourth of the students considered the library to be a possible source of continuing education.

**Table 4: Information sources for continuing education needs**

Source	Frequency of response (%)				
	Not impor- tant	Some what impor- tant	Impor- tant	Quite impor- tant	Very impor- tant
Courses/ Workshops	1	8	24	42	48
Conferences/ Meetings	2	17	24	40	37
Colleagues	1	10	27	39	35
Computerized- information	-	34	34	32	33
Personal Library	1	35	32	49	26
Medical Library	1	40	26	22	25

### CONCLUSION

Clearly, as shown in this study, medical students' most frequent use of the library was for studying course work and photocopier. These do not show any independent initiation of an information search in the library. Textbooks and handouts were most used by all the students. They believe that information supplied by these sources is adequate for their present information needs. A large percentage of the respondents never use Indexes and Biological Abstracts for their current information. It is interesting to note from the study that most students have access to internet and maximally utilized its availability.

For fulfilling anticipated continuing education needs as practitioners course, workshops, conferences/meetings, computerized information and colleagues were the most important sources indicated. Library has not been seen as the most useful source of information. No wonder their activities in the library were for the use of photocopier and studying course work. These raise concern that students are not developing adequate information-seeking and retrieval skills.

### RECOMMENDATIONS

From the observations and conclusion, one can conjecture that by the time a student enrolls in Senior (clinical) class, he may have forgotten library skills and resources introduced earlier. Therefore, the following recommendations are made:

1. Problem-based learning curriculum education should be introduced into the medical education curricular. This will make medical students to learn to develop information-seeking behaviour while still in the medical school and thereafter.
2. Advanced Library Instruction Programme (LIB. 001) should be made compulsory for all medical students when they are in their senior class and emphasis should be on the use and importance of Indexes and Biological Abstracts. They should be taught how to seek independent initiation for an information search in the library. The aim of library instruction programme for health profession students is to improve the quality of patient care and the clinical role of faculty in initiating library instruction and use of materials. Since

students can't learn during their formal education, all that is needed and therefore skills in problem-solving and independent information seeking must be emphasized.

**KEYWORDS** Information-seeking Behavior. Library Use. Medical Students.

**ABSTRACT** The medical students of Obafemi Awolowo University were assessed for general use of library and for their information seeking behavior. The objectives of the study were to evaluate students' perception of the demands for locating clinical information; to determine if they sought current information and sources most often used for their current information. Five hundred medical students comprising of 313 males and 187 females who were in parts ii – vi were used for the study. The result shows 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. Light use of library information resources raise the concern that students are not developing adequate retrieval skills for finding information. Advance library instruction programme should be introduced to the medical curriculum of the medical schools.

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