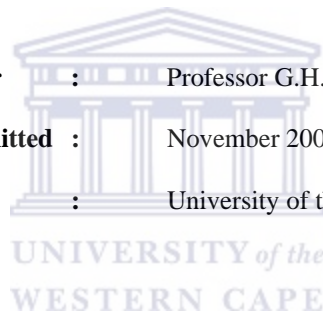


*A survey of the information seeking behaviour of the dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre Library, in Mitchell's Plain.*

**By: Tshipinare Renard Marumo**

**Submitted in partial fulfilment of the requirements for the degree of  
MAGISTER BIBLIOTHECOLOGIAE in the Department of Library and Information Science,  
University of the Western Cape.**

**Supervisor** : Professor G.H. Fredericks  
**Date submitted** : November 2000  
**Bellville** : University of the Western Cape



## DECLARATION

“ I declare that **A survey of the information seeking behaviour of the dental faculty lecturers and students at the University of the Western Cape’s Oral Health Centre Library, in Mitchell’s Plain** is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references”.

Signed: -----

Tshipinare Renard Marumo



UNIVERSITY *of the*  
WESTERN CAPE

Date: -----

## **DEDICATION**

This thesis is a dedication to the people who contributed positively to my life and inspired my educational goals and career during difficult times

My father, **TAWANA ROBERT MARUMO**  
(1949-1999) Who passed away on the 2<sup>nd</sup> October 1999. A teacher by profession, A Jack of all trades, master of them all and an authority on traditional leadership issues.

My maternal grandmother, **NTSHADI ELIZABETH QOBOLO**  
(1924-1991) Who was always vocal when it comes to education matters and a very strict disciplinarian. She was a teacher and a deeply religious woman.

Paternal Great Grandfather **TIMOTHY SELEKE MONARE**  
(1893-1990) Who was my father's paternal Grandfather who built and shaped the author in me. He was a teacher, author, soldier, community leader, traditional court interpreter, businessman, farmer, carpenter, musician and a priest.

My father's father **TSHIPINARE RENARD MARUMO**  
(1914 –1958) who was a priest, teacher, musician and definitely a librarian. His collection of books really nourished and nurtured me to keep on studying.

## **SUMMARY**

This mini-thesis offers up to date information on issues relating to the information seeking behaviour of the dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre library. The thesis argues that dental libraries with particular reference to the South African context need to undertake research to determine needs, preferences and user patterns of dental professionals, lecturers and students. The thesis gives a brief archaeological and anthropological history of medicine and dentistry collections from the ancient times and supplies South Africa's medical literature history. The thesis also looks at the current status and collection of the Oral Health Centre library at the University of the Western Cape in Mitchell's Plain. It studied users and staff of the Oral Health Centre library and the services provided by the library. The main aim of the survey was to determine the information seeking behaviour of users of the Oral Health Centre library at the University of the Western Cape's dental faculty in Mitchell's Plain.

Questionnaires and an interview with the librarian were used to collect data in order to achieve the objectives of the study. Lecturers, students and library staff were the respondents of the study. The survey gives a reflection on the status of the library and the provision of information to both lecturers and students. Data presented and interpreted is based on the responses of lecturers, students and library staff.

The findings reflect the need to improve the Oral Health Centre library services. The findings also reveal the need for journals for both lecturers and students. It reveals that most of the lecturers and students couldn't find the materials they need in the library. The findings also reveal that most of the respondents in the study prefer to use journals for research purposes. Both lecturers and students ranked the use of journals highest. Both lecturers and students frequently used the Oral Health Centre library.

The findings also reveal that both lecturers and students believed that the Oral Health Centre library was not meeting their information and research needs. Moreover, the lack of computer facilities for online searching and the Internet were also cited as obstacles in the effective use of the Oral Health Centre library. The findings also noted lack of space, lack of availability of journals, problems with Medline (Medical literature database) and queuing in the photocopy room in the library. Access to books and learning materials is vital to educational and social development. Lack of these resources is a major obstacle or handicap to most higher education institutions in third world and developing countries.

The task of building strong academic centers, postgraduate and research programs lies in strengthening library services and providing teaching materials and equipment. Without these, the task of building strong academic institutions cannot be accomplished. Recommendations were also based on the fact that the Oral Health Centre library as a part of the University should upgrade its stock and services to a level where it can meet the information and research needs of lecturers and students.

## ACKNOWLEDGEMENTS

My first and foremost thanks and praises goes to the Most High, the Almighty, Alpha and Omega, Lion of Judah, Jehovah for the strength, wisdom, guidance, help and for such a great blessing. And to my late father, Tawana Robert “Toney” Marumo, for support and giving me the opportunity to further my studies and moreover for believing in me. I did it finally and I wish you were here to witness this accomplishment. My mother, Patricia Mahali Marumo (nee Qobolo), my sister, Gomolemo and brother, Kagiso for believing in me and their support.

My sincere and deepest gratitude goes to Professor G.H. Fredericks, my supervisor for his invaluable help and ideas. I would also like to extend a word of thanks to the following people:

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- Dentistry Faculty Officer, Mrs Audrey Coetzee & Dentistry Secretary,

Ms Jane Ellis

Students and lecturers at the UWC’s Oral Health Centre who responded to the survey.

And those who assisted with this research, particularly Mark Sarpong of the Dental Students Association and Yvonne Msimang. My deepest and warmest appreciation and thanks also goes to my friend and source of encouragement, Chuene Ennet Moloto for being there during the period of this research study.

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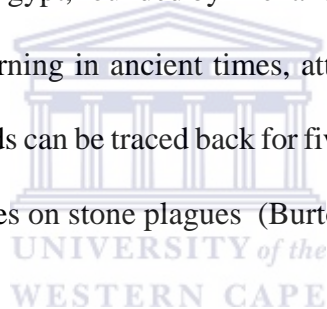
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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background**

Libraries devoted exclusively to medical literature have existed since the formation of schools, societies and institutions devoted to the study of medicine (Thornton, 1963:1). Specialist medical libraries were founded from the tenth century. During the 18<sup>th</sup> and 19<sup>th</sup> century the Royal colleges and medical societies also built up substantial collections, many of the medical society collections formed the basis of medical school and hospital libraries (Burton, 1994:227). The founding of medical collections can be traced back to one of the earliest medical schools, which was established at Alexandria, in Egypt, founded by Alexander the Great in 332BC. Alexandria was the centre of culture and learning in ancient times, attracting scholars from all over the world. The earliest medical records can be traced back for five thousand years when disease and treatment were recorded in pictures on stone plaques (Burton, 1994:226).



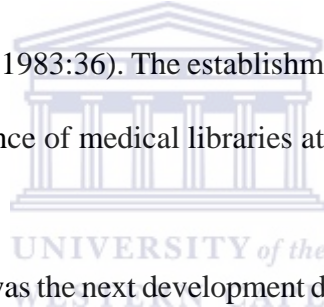
One of the most distinguished scholars was Galen (129-99 AD) whose study of anatomy was the cornerstone of medical science for 1500 years. He travelled extensively in Asia Minor to extend his knowledge of medicine but worked in Alexandria and left his manuscripts in the library (Burton, 1994:227). Manuscripts written by medical scholars and scientists from other disciplines were placed under the care of Demetrios of Phaleron, the first librarian at the University of Alexandria, who wrote to every king and governor to send the books that were within their realm. Even ships, which docked at the Port of Alexandria, were searched and scrolls were seized. This draconian acquisition programme led to the library containing more than half a million scrolls and vellum.

Unfortunately, all were destroyed in fires in the 3<sup>rd</sup> and 4<sup>th</sup> centuries A.D. (Burton, 1994:227). The earliest complete written accounts of medical experience are found in the Egyptian papyri. The *Kahun Papyrus (1900 BC)*, found by Sir Flinders Petri in 1889 at Fayum contained three columns listing gynaecological disorders-symptoms and treatment. The *Edwin H Smith papyrus (1600 BC)* is the most complete and important treatise on surgery dating back to this period, and its systematic arrangement covers objective examination, diagnosis, prognosis and treatment. Smith acquired this papyrus in 1862 at Luxor (Burton, 1994:226). The *Ebers Papyrus (1550BC)* discovered at Thebus in 1862, containing one hundred and eight columns is a *materia medica*, which lists diseases under sections headings, with treatments listed below.

In approximately 2 000 BC King Hammurabi of Babylonia prepared a series of rules and regulations to cover standard treatments for specific diseases and illnesses which were meant to protect both doctors and their patients. As information was gathered official texts dealing with subjects such as surgery, anatomy, pathology, ophthalmology were prepared. Doctors were expected to follow recommended treatment for at least three days before trying anything new, and the over imaginative doctor who disobeyed this ruling would pay with his life if his patient died (Burton, 1994:227). At that stage, not only had a doctor to care for his patient, he also had a moral and legal obligation to provide the best possible service to his patient given the state of knowledge at the time (Burton, 1994:227). The Hippocratic Oath (named after the father of modern medicine, Hippocrates who lived approximately from 460-377 BC) attests to this fact because even today the oath is still taken by medical students on graduation when they pledge to observe the code of ethics expected of all those who practice medicine (Burton, 1994:227). Previously, writings on medical literature were found in temples, monasteries, cathedrals, universities and similar establishments.

Dentistry as a discipline began in Egypt in about 3700BC. Modern dentistry emerged in the 19<sup>th</sup> century and today it includes the study, treatment and prevention of the diseases of the mouth, teeth, gums and jawbones (Compton's Encyclopaedia, 1996:101). Dentistry includes so many techniques that most dentists specialize. Oral surgery is concerned with tooth extraction, jaw fractures, correcting malformation of bones and plastic surgery of the mouth. Orthodontics treats maloccluded teeth using wires and appliances. Prosthodontics builds dentures and bridges. Periodontics is the treatment of gums and underlying bones. Endodontics is concerned with protection or removal of the tooth's pulp in root canal therapy. Pedodontics is dental practice limited to treating children (Compton's Encyclopaedia, 1996:102).

In South Africa early medical libraries date back to 1827 with the establishment of the South African Medical Society (Kruger, 1983:36). The establishment of the University of Cape Town and Stellenbosch saw the emergence of medical libraries attached to medical schools.



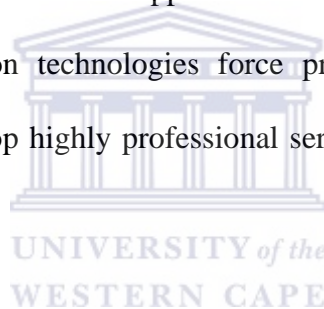
Post-graduate medical education was the next development during the establishment of the South African Medical Society in the then Cape Province. A further development was the establishment of a college of physicians and surgeons with its attendant library (Kruger, 1983:36). In 1847 the medical periodicals publications made a further contribution in medical literature with the establishment of the Cape Town Medical Gazette (Kruger, 1983:36).

Medical literature is very important to health professionals for them to perform their tasks most effectively and efficiently (Burton, 1994:226). Research on medical libraries and information seeking behaviour of dental lecturers and students have been very limited in South Africa and to a large extent it has been confined to those privileged to work in medical libraries. With the

growth of the volume of literature there has been a necessity for the creation of specialist information centres and libraries for clinicians, researchers, health care workers and students.

Currently developing educational software, electronic databases, doing market research and developing highly professional consultation services are among the new responsibilities of all dental professionals (Heaton, 1996:17).

Furthermore, in the words of Picken & Kahn (1986:x) “ With the development of new technologies and techniques, learning from others should not mean confining one’s activity to the library world. It is important for one to be alert of the things encountered in everyday life since they have potential influences and applications in libraries”. These factors in the development of new information technologies force professionals in all academic and professional disciplines to develop highly professional services for the performance of their diversified tasks.



In the medical and dental field, the information needs or perhaps more accurately, the information seeking behaviour of various personnel has been explored from many viewpoints at an international level. Subject interest, for example, has been one of the several factors explored in studies of users, purpose of need, urgency of need and use of information sources (Carmel, 1981:317).

Based on the above-mentioned factors it would be important and appropriate to study the information seeking behaviour of the dental lecturers and students served by the University of the Western Cape’s Oral Health Centre library in Mitchell’s Plain.

## **1.2 Statement of the problem**

The need to provide up-to-date information and professional library services to support dental students and lecturers in their work has become apparent in today's rapidly changing modern society.

Today's health and medical care environment imposes severe cost constraints and because of this there should be continuous quality improvement programs which can improve or lead to improved medical and oral health information systems which can help both students and lecturers in their tasks.

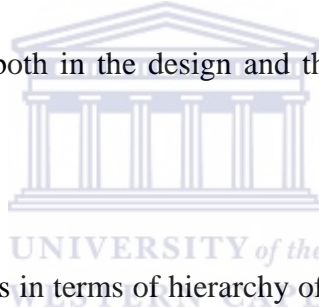
Medical libraries and dental libraries need to undertake research to determine needs preferences and user patterns of dental professionals, lecturers and students. Above all, the dental and medical libraries are being tasked to explore alternative means of meeting their clientele needs. Even though a lot of historical inquiries have touched on other areas of knowledge within medical librarianship, there is still a need for the new interpretation of old and new data.

Coupled with this interpretation is the need for new approaches to past studies about medical librarianship. Most research on the information needs of health professionals has largely focused on the information and research needs of medical doctors and at times neglecting the role of other medical or health professions.

Several researchers in librarianship have dealt with the difficulty of defining a need. For example, studies by Rees (1963:17-23), Line (1969:1-19) and Brittain (1970:1-5) show that

researchers who investigate the information needs of users may face the difficulty in that “ need” may be difficult to define for operational purposes. As a result many studies now investigate use and demand which are relatively easy to define and therefore to measure (Carmel, 1981:315). According to Carmel (1981:315) in some circumstances use, demand and need may coincide, but equally they may not.

The term “ Information needs” has been defined in a variety of ways by authors hardly ever reaching a consensus. In some cases needs are synonymous with demands: for example where the user knows of all the information that is relevant to his/her work and makes a demand to an information source. At the extreme is the user who makes very few demands but has many needs (Brittain, 1970:1). Brittain notes that an information scientist dealing with information needs and requirements faces the problem both in the design and the data gathering stages of his/her investigation (Brittain, 1970:4).



Maslow (1970:35-58) views needs in terms of hierarchy of needs. Motivational needs are not information needs according to Maslow. Childers (1975:36) views needs in terms of types of need. Beal (1979:130-151) views needs in terms of accessibility of information. Roberts (1975:308-313) views needs in terms of wants, desires, demands and requirements. In this study the term “ information needs” will include not only the subject areas or topics on which information is required, but also the behaviour patterns of information users and various levels of information transfer. There is none specifically directed prior research on this topic of study.



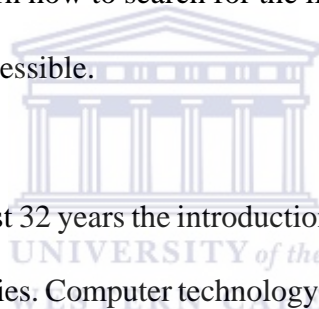
In this study, the operational definition of the term “ Information needs” will mean the user’s demand for information that is relevant to their academic work be it journals, documents, records, primary and secondary material that is relevant to dental lecturers and students’ academic work.

Motivation to seek information is often seen as being rooted primarily in the basic human needs for survival, security and safety, love, esteem and self-actualisation as identified by Maslow. Needs for intellectual stimulation, health, emotional securities are life needs (Kruger & Fourie, 1995:227). The impulse to seek information could be within the individual himself / herself, that is, he or she could be intrinsically motivated. On the other hand it could be extrinsic, that is, the reward or satisfaction could be independent of the activity itself (Kruger & Fourie, 1995:228).

Some writers reduce these basic needs to physiological, affective and cognitive needs. These needs are interrelated. For instance an affective need such as the need for esteem could give rise to a cognitive need (Wilson, 1981:7). From these basic needs, motives arise which lead to some form of behaviour. As part of their search for the satisfaction of these needs students and lecturers may engage in information seeking behaviour (Kruger & Fourie, 1995:227).

Little research on dental students and lecturer’s information seeking behaviour has been done. In fact, most research has focused on other medical professions. It must be said clearly that information does not only facilitate students and lecturers ability to make important decisions about oral or dental hygiene, but it enables them to provide effective and quality care to their patients and clientele.

Knowledge of information needs can help in efficiently disseminating oral hygiene or dental information. The quality of medical and health research depends largely upon the efficient availability and accessibility of information. It is essential therefore, that medical literature should be easily and rapidly accessible to dental lecturers and students so that they in turn should be able to use it to their full advantage. Although the output of medical and dental literature today is enormous, dental lecturers and students may at times not always make full use of it. However, in better academic libraries, information centres and medical libraries where sufficient information is available, users are given unrestricted access to the literature and are encouraged to help themselves and should learn how to search for the literature, implying that search tools should be available and easily accessible.



It is crucial to note that over the last 32 years the introduction of computer technology has led to dramatic changes in medical libraries. Computer technology has made possible the generation of databases i.e machine-readable data banks of bibliographical information, which can be searched in a matter of minutes, in contrast to the hours spent in searching by hand.

The modern specialized library is now equipped with a computer terminal that can be linked on-line by telephone to various databases located all over the world and these devices can carry out sophisticated and complex literature searches. It is appropriate and essential that the information and research needs of medical library users be met in order to assist them in rendering a satisfactory service to their clients in South Africa (Carmel, 1981:315). Therefore, the aim of this survey is to determine the information seeking behaviour of the users of the Oral Health Centre

Library at the University of the Western Cape, Mitchell's Plain.

### **1.3 Research questions**

There has been little, if anything, known about the information seeking behaviour of the dental faculty lecturers and students in South Africa. The research by Andrew Summers Kerkham (1986) has laid a foundation of formalized knowledge about the information needs of lecturers at a specific technikon. So, it is appropriate that Kerkham's research be used as a starting point to further the research on information seeking behaviour and that this research on the information seeking behaviour of lecturers should even extend beyond what Kerkham has discovered in his research. The research questions for this study are:

- ❖ What are the information seeking behaviour of the dental faculty lecturers and students?
- ❖ What kind of information sources do they use for current awareness, research and lecture preparation?
- ❖ How do lecturers and students rate the library in its ability to meet their information needs?
- ❖ What are the barriers to information provision at the University of the Western Cape Oral health centre library and how can these be overcome?

### **1.4 Objectives**

In pursuance of the stated aim of this study the following objectives will be pursued to:

- ◆ Determine the usage of the Oral Health Centre sources by dental lecturers and students.
- ◆ Determine the information needs of dental lecturers and students.
- ◆ Determine whether the library serving the Oral Health Centre is able to meet those information needs of dental lecturers and students.

- ◆ Determine the barriers to information provision at this Centre and how to overcome these barriers.

### **1.5 Significance of the study**

Although medical libraries are in existence in South Africa their impact on the medical field in the country have been less felt because of political, social and economic factors. As a result of the past apartheid state which encouraged separate development and racial discrimination amongst South Africa's population most lecturers and students in South Africa do not have an efficient and effective library service to meet their information and research needs in performing their tasks. Users in the field of dentistry have not previously been studied in South Africa. This study will fill the gap and make a valuable national contribution to the field of librarianship in addition to its practical application at the University of the Western Cape's Oral Health Centre.

According to Carmel (1981:73) even when medical professionals and students have no service of their own which is effective, it is often accepted that they can use medical libraries attached to a hospital or academic institution which often does not have the collection which can encourage them to become regular users of medical libraries.

Even though the Medical Libraries Interest Group (MEDLIG), a division of the South African Institute for Librarianship and Information Science (SAILIS) was formed in 1981 with the objectives of encouraging the exchange of ideas and to promote co-operation and the free interchange of bibliographical information, its modus operandi has not extended to cater for the integrated library services for all dental professionals (Musiker, 1986:131). LIASA (Library and Information Association of South Africa), which was officially launched on the 10 July

1997, does not have such an interest group, however, it does have an interest group for all special libraries.

It should be noted that the library and information profession in South Africa has been without a unified and inclusive professional association for a number of years. This was as a result of past apartheid racial law. Transforming Library and Information Services (Translis) project initiated the forming of LIASA (Library and Information Association) in 1993 and this was followed in January 1995 by the conference of Libraries and Information Services in Developing South Africa (LISDESA). After this conference followed two years of hard work by the Committee of Unification of Library and Information Stakeholders (ULIS 1 and ULIS 2) conferences. The purpose of the ULIS 2 conference held in Pretoria in July 1997 was to adopt a constitution and to launch the new association, LIASA on the 10 July 1997. Currently, the Institute for Biomedical Communication of the South African Medical Research Council (MRC) at Tygerberg in Cape Town has been offering computerized information services in the biomedical field. The service known as MIDS (Medical Information Dissemination System) has been used by people active in the medical field i.e staff, students, lecturers and researchers at medical schools and universities, research organizations, hospitals and by private practitioners.

Information provided by the Institute for Biomedical Communications relates to the medical field in the widest sense, for example disciplines such as nursing, veterinary science and pharmacology are covered by a variety of databases which provide both bibliographic and factual information (Shillinglaw & Thomas, 1988:135). In the context of dental libraries in South Africa the diversity and geographical spread of medical services due to past laws such as the Group Areas Act, have created difficulties of looking at the national medical service as a cohesive system. Thus in the medical service professions there has been a tendency to categorize

information needs in terms of professional client groups rather than by functional activities (Carmel, 1981:73).

This research project aims to investigate the information seeking behaviour of dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre Library in Mitchell's Plain.

## **1.6 Definition of terms**

It is essential that the terms used in this study be understood in the context in which they are used. The following definitions of terms were constructed for the purposes of the study.

### **1.6.1 Dental lecturers**



Dental lecturers refer to people involved in the teaching of dentistry. These include dental professionals such as oral hygienists.

### **1.6.2 Dental professionals**

Dental professionals refer to those people who are qualified oral hygienists, dentists and other qualified professionals within the field of dentistry.

### **1.6.3 Dental students**

Dental students refer to students who are studying dentistry and oral hygiene at a tertiary

institution.

#### **1.6.4 Oral Health Centre library**

Oral Health Centre library refers to an information service centre attached to a medical or academic institution. Such a centre is a specialized library, which provides an information service to dental lecturers, students and professionals. However, not all libraries attached to a medical or academic institution could be called “Oral Health Centres”. In some institutions they are known as medical libraries, in others as dental libraries or as health libraries depending on coinage of the term as used by that particular institution. Oral Health Centre libraries are mostly situated or attached to a medical or academic institution.



#### **1.6.5 Medical library users**

Medical library users refer to students, staff, lecturers and professionals who use the medical library or any library related to any branch of medicine. These people use the medical library for acquiring information relevant to their work. The term can also be extended to include the medical or dental administrative personnel.

### **1.7 Scope of the study**

This study aims mainly to determine the information seeking behaviour of the dental lecturers and students at the University of the Western Cape's Oral Health Centre in Mitchell's Plain and how the library meets those information needs. The research will be based on the literature pertinent to the research which relates to meeting the information seeking behaviour of dental lecturers and students at the University of the Western Cape's Oral Health Centre at Mitchell's Plain.

The study will look into the current status of information provision, determine the usage of medical literature and assess the resources in identifying information and research needs of dental lecturers and students.



### **1.8 Research design**

The main objective of this study was to determine the information and research needs of the dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre library, in Mitchell's Plain and the library's ability to meet those information and research needs. Therefore this was an example of the application of survey research. In Library and Information Science survey research methods are used to obtain three broad classes of data:

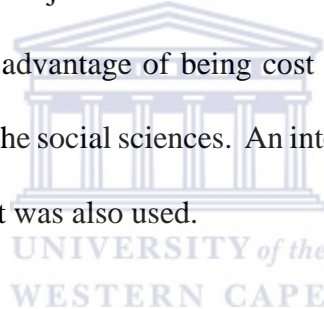
- (a) Information about incidents and development i.e. data about events in a given period.
- (b) Information about distributions and frequencies (data concerning the possessions or



characteristics of each member of a subject group).

(c) Information about generally known rules and statuses (data about institutional norms and conditions) (Busha & Harter, 1980:54).

Survey research is characterized by the selection of random samples from large and small populations to obtain empirical knowledge of a contemporary nature. This knowledge allows generalizations to be made about characteristics, opinions, beliefs, attitudes etc. of the population being studied (Busha & Harter, 1980:54). The method of survey research allows investigators to gather information about target populations without undertaking a complete enumeration. Field methods used to obtain survey research data generally consist of a combination of techniques such as mail questionnaires, interviews with respondents and participant-observation (Busha & Harter, 1980:54). In this study the major data collection instrument was the questionnaire. A questionnaire has a considerable advantage of being cost effective and it is also being used widely as a method of research in the social sciences. An interview with the librarian of the Oral Health Centre, Mr. Clive Sargeant was also used.



According to Ronald Powell (1991:53-54) survey research is used to gather contemporary data and it has characteristics common to most other research methods. The strength of survey research is in answering questions of fact and in assessing the distributions of the characteristics of populations (Kidder, 1981:80). Survey research is typically weak on internal control or validity, but if based on random sampling, it is strong in external validity.

**Some of the advantages of the questionnaire are:**

1. It is relatively easy and cheap to administer.
2. It can be constructed so that quantitative data are relatively easy to collect and analyze.

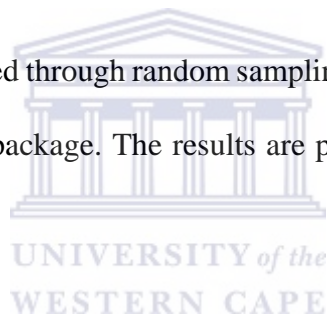
- 3 It facilitates the collection of large amounts of data in a short period of time.
4. It allows a wider range and distribution of the sample than the survey interview method.
5. It provides an opportunity for respondents to give frank, anonymous answers.
6. It allows respondents to complete the questionnaire at their own pace and during their leisure time.
7. It can be used to gather background information about respondents, as well as original, hard to obtain data.
8. In regard to ego-involving questions, it can enhance the collection of objective data.
9. Unlike interviews, it hardly requires trained staff to administer a questionnaire.
10. Because of its fixed format, it helps to eliminate variation in the questioning process.
11. It allows greater economy of effort; one instrument produced and distributed to many potential respondents, can produce a large amount of data (Busha & Harter, 1980: 62)

Questionnaires are often a convenient way to obtain data from a large range population or sample particularly if the population is geographically dispersed and travel is not feasible for one reason or another. If properly constructed, a questionnaire can elicit a great deal of information on the survey topic, particularly if quantitative data only are sought, and the relative costs of the survey are reduced. Two questionnaires were used for data collection. One intended particularly for lecturers and students and the other for library staff. Interview with the librarians were also done.

The population to be studied was a convenient sample of lecturers and students at the University of the Western Cape's Oral Health Centre in Mitchell's Plain. It was intended that the questionnaires would determine the objectives or usage of the Oral Health Centre library sources by lecturers and students.

The questionnaire as a tool for data collection was elected because it allows researchers to have a professional responsibility to analyze carefully and understand research questions. Moreover, it allows researchers to state their questions clearly and it also gives the researcher the task of promoting understanding and accuracy when using written instruments rather than verbal communications (Busha & Harter, 1980:64). Apart from this, the *raison d'être* behind using the questionnaire was that it can facilitate the collection of large amounts of data in a relatively short period of time and moreover that they are usually inexpensive to administer (Powell, 1991:85).

Potential respondents were selected through random sampling. Data was codified and analyzed with the assistance of the SPSS package. The results are presented in frequency distribution tables.



### **1.9 Demarcation of chapters**

This mini-thesis will consist of five chapters. Chapter one is the introductory chapter, which discusses background to dental and medical libraries. It also traces the earliest medical collections and gives South Africa's medical literature history. This chapter also deals with the problem statement of the study, the research design, definition of terms used in the study and lastly on the scope of the study itself. Chapter two reviews literature of previous studies that have been conducted and those that are related to the present study. Chapter three provides a background of the University of the Western Cape's Oral Health Centre, the Dentistry faculty,

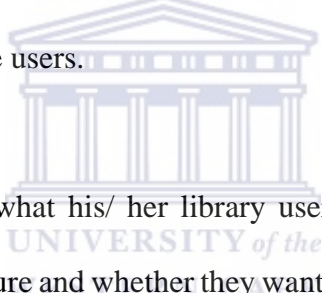
the library, its users, the services provided by the Oral Health Centre library. In Chapter four the analysis and interpretation of data are presented. The conclusion and the presentation of recommendations are done in Chapter five.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Dental librarianship demands more from librarians than merely building up a good collection or stock and waiting for people to come and use it. It demands hard thinking about libraries (whether dental, medical, public or academic) and their purposes, about the users and their needs, about values and costs. It also demands an appreciation of the fact that a library's contents must be exploited for the benefits of the users.



The librarian must get to know what his/ her library users do, who they are, their special interests, why they need the literature and whether they want to keep up to date by hearing about new publications coming into the library. Information helps the professional clientele improve the quality of their lives, either directly by solving an immediate problem or in the longer term by helping them to influence decisions, which will affect their lives. Information and its prompt provision affect the task performance of the practitioners of various occupations and professions.

While in developing countries the main areas in which information is required include health care, employment, transport, education, water supply, religion, recreation etc. In developed countries, the situation is different, information priorities and needs include housing, income maintenance, family and personal matters, careers, employment, education, consumer matters. In

a library setting special services forms part of the marketing process. These services can and do take various forms designed to suit the needs of library users.

In essence libraries exist to serve people. Dental libraries exist to serve people with dental information needs. No library or information service can ever hope to be self-sufficient, so to know where to turn for help is of vital importance. The researcher found it valuable to review literature

- ◆ not necessarily identical in order to acquaint the researcher with the most recent developments in the area of research,
- ◆ to determine what has already been done and to identify gaps in knowledge and moreover
- ◆ to detect connections and relations between different research results.

The study areas revealed include bio-medical users, dental practitioners, Cape Technikon lecturers, physicians, health care practitioners, cancer-patients, medical students, dental hygienists, health professionals and acute-care clinical nurses. The researcher will review these research projects by referring to their purpose, methodology and the findings of these studies.

**The following are related selected research that has been completed on this subject:**

### **2.1.1 The G.H. Haffajee study 1981**

The title of the study was: **Information gathering habits among bio-medical users of the medical library, University of Natal.** The use of the medical library, Faculty of medicine, University of Natal, by non-student members was studied by questionnaire. An effort was made to ascertain the part the library played, among channels of communication in information searches. The generalizations of former use studies were tested on a new population. The study attempted to describe the population of users and the kind of sources they used in an information search. Since the largest percentage of the respondents were clinicians, the results of the study referred mainly to the information searching habits of clinicians affiliated to a teaching hospital.

The most frequently sought information was about a specific disease. The major source that provided the information was journal articles. More than half of these articles were used in photocopy form. Most of the respondents went to the library personally.

The use to which information was put was evenly divided between clinical applications and research. The study showed that there appears to be a relationship between the type of source and ease of use. The main users of the library were persons in the clinical departments of Internal medicine, surgery, pediatrics and gynaecology. They used journal articles to find information on

diseases for use in the treatment of patients.

Of those who used a library, the main methods that were used to find information were by asking the library staff for help, using *Index Medicus* themselves and by browsing as a means of obtaining information. The card catalogue was little used by the patrons. Recommendations of the study are that journals should be shelved accessibly with *Index Medicus* nearby.

The use of the catalogue should be considered in relation to the cost of maintaining it. The provision of photocopying facilities is of major importance and should be constantly examined (Kruger, 1983:80).

### **2.1.2 Janette Gretchen Smith study 1981**

The title of the study was: **The information requirements of natural scientists and Engineers at academic institutions with special reference to the University of Cape Town.** The study looked into whether or not the information requirements of natural scientists and engineers in a University were being satisfied adequately. The study also looked into whether or not the information needs of natural scientists and engineers in an academic community differed in essence from those of their colleagues in other organisations and as to whether or not there are inherent dissimilarities between engineers and natural scientists. Another area in which the study focused was the extent to which natural scientists and engineers were sufficiently conscious of their information needs and concomitantly the degree to which they were capable of articulating such perceived needs effectively. A provisional assumption on the part of the researcher was that users' perceived needs are usually conditioned by the nature and quality of the library facility serving them.

The study hypothesized that:

- ◆ the information needs of natural scientists and engineers in an academic environment were not being adequately met.
- ◆ natural scientists and engineers operating in a university community display, as distinct groups, different information requirements.
- ◆ rank, age and extra-university experience at a professional level also markedly influence the information requirements of natural scientists and engineers at universities.
- ◆ the nature of the information requirements of natural scientists and engineers in an academic environment are situation-specific
- ◆ library facilities serving user communities of natural scientists and engineers directly influence their perceived needs.
- ◆ The relative geographical and political isolation experienced by South African natural scientists and engineers as a result of their remoteness from the main research centres of the world adversely affect their information communication behaviour.

The study used structured interviews and questionnaire to study the information requirements of natural scientists and engineers.

The study provided positive proof on the following hypothesis:

- ◆ That there is an underlying difference between the information requirements of natural and applied scientists.
- ◆ That the nature of the information requirements of natural scientists and engineers in an academic environment are situation-specific.



- ◆ That the library facilities serving user communities of natural scientists and engineers directly influence perceived needs.

A certain amount of evidence has been obtained to suggest that aspects of the following hypothesis have been proved, viz.:

- ◆ That the relative geographical and political isolation of South Africa adversely affected the information requirements of the scientists and engineers. The geographical isolation resulted in the user community not always receiving information timeously, while the political isolation led to certain material not always being accessible. The following hypothesis were, however, not fully substantiated by the study, viz.:
- ◆ That the information needs of natural scientists and engineers in an academic environment are not being met- the findings obtained from the study suggest that except for the few needs, i.e. a need for access to more extensive literature collections, greater support from the university to assist them in keeping up to date and closer liaison with the library, their information requirements are generally satisfactorily met.
- ◆ That rank, age and extra-university experience at a professional level also markedly influenced information requirements of natural scientists and engineers at universities- inconclusive results were obtained regarding the effects of these variables in the empirical study.

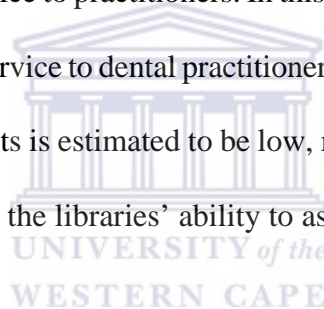
The study proposed two major areas of research:

- ◆ That research be conducted with a view to investigating, in particular, the nature, extent and intensity of the underlying differences in information requirements created by the diversity in organisational structures and the concomitant variations in work activity and library facilities serving the users.

- ◆ That research should be undertaken within the university community at large, in order to establish whether or not university structures differ in essence from each other, and if so, what attendant influences are reflected in the information requirements of their natural and applied scientists-users, and what implications the results of such an examination would have on the planning and continuous improvement of their information service.

### 2.1.3 Elizabeth Ashin 1983

The title of the study was: “**Library service to dental practitioners**”. A survey was conducted among the sixty United States dental school libraries. The purpose of the study was to examine policies and attitudes towards service to practitioners. In this study a questionnaire was designed to examine dental school library service to dental practitioners. The results of the survey revealed that although library use by dentists is estimated to be low, most libraries were willing to serve them as long as it does not reduce the libraries’ ability to assist students and faculty.



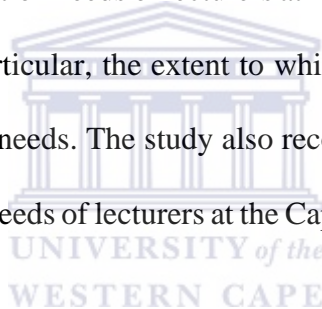
The need for information in any form is inherent currently and this made the library such an important contemporary institution for the dissemination of information. It is a worthwhile fact that the library can play an active role in diagnosing the reading and information needs of its users and therefore actively participate in the development process (Kotze, 1980:25). To this end libraries should always be sensitive to the real as well as the potential needs of users. It remains also the library’s responsibility to create channels for communicating potential library deficiencies.

#### **2.1.4 Andrew Kerkham study 1986**

The thesis by Andrew Summers Kerkham studied the **information needs of lecturers at Cape Technikon and the ability of the technikon library to meet those needs.**

The purpose of the study was to investigate the information needs of lecturers at Cape Technikon and the ability of the technikon library to meet those information needs. The research focused mainly on lecturers since they appeared to ignore the library. The study involved the use of a formalized questionnaire as a research method.

The study recommended that further research be done to determine whether there are similarities or differences between the information needs of lecturers at Technikon and the information needs of lecturers at Universities, in particular, the extent to which the applied nature of technikon education influences information needs. The study also recommended that further research be done on whether the information needs of lecturers at the Cape Technikon are similar to those of lecturers at other institutions.



#### **2.1.5 Virginia Bowden et.al 1994**

A study on the assessment of physicians information needs in five Texas Counties was conducted in the United States. The study was entitled “ **Assessment of physicians information needs in five Texas counties**”. The purpose of the research was to determine the differences between physicians who have access to established medical libraries and physicians who practice in remote areas without local access to medical information. The study involved the use of a questionnaire as a research method (Bowden et.al, 1994:184-196). The results indicated

that differences in the health care profile did not affect the information usage of the physicians but that differences exist between the two groups in the use of MEDLINE (i.e Medical database) and libraries.

#### **2.1.6 Gerald Lundeen et.al 1994**

The survey studied the information needs of rural health care practitioners in Hawaii and their methods of accessing information. The title of the study was “ **Information needs of rural health care practitioners in Hawaii**”. The study used interviews and mailed questionnaires as research methods. The study focused on the information needs, current information use and problems in locating and retrieving information by rural health practitioners.

The study identified the following problems or barriers to information access: Lack of funds, inadequate hardware, infrastructure problems and insufficient knowledge about information sources and how to use them (Lundeen et.al 1994:197-204).

The findings of the study revealed that although 85% reported having computers, only a minority 30% had modems and even fewer use online resources or the free electronic databases at Public and University libraries. Most reported that journal articles were the information source that best met their needs and that personal files or a colleague’s collection were the most common places for accessing needed materials. Recommendations for solving some of the information problems included development of a state of Hawaii rural information clearing house, better identification, training and use of available services and most importantly, the establishment of rural health care information agents modeled on agriculture extension agents on each major island.

### **2.1.7 Heather Mcloughlin study 1994**

In South Africa, the research on information needs of cancer patients in the Republic of South Africa was studied. The study was entitled “ **The Information needs of cancer patients in the Republic of South Africa**”. Mcloughlin chose the interview and questionnaire as methods of study. The aim of this study was to determine the needs of a specific group of users namely cancer patients who are in need of relevant information within a limited time (Mcloughlin, 1994:3). The study had limitations in that mainly white patients completed the questionnaire. The results of the study indicated that patients still express the need for more information about most aspects of their disease.

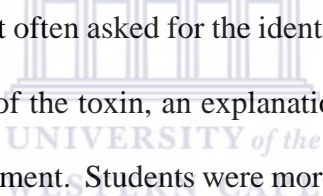
Most of the questions in the study revealed that the percentage of respondents who wanted information about various aspects was above 70% with many above the 80% mark. The study also revealed that 43% respondents, who were the lowest percentage, indicated that they definitely wanted information about fad treatments. The study highlighted that the fact there is a definite need for structured information provision to the cancer patients in South Africa. The study also recommended co-operation between various role players in the cancer field as of paramount importance (Mcloughlin, 1994:91-2).

### **2.1.8 Barbara Wildemuth et. al 1994**

The study by Barbara Wildemuth et.al entitled “ **The information seeking behaviours of medical students: a classification of questions asked of librarians and physicians** “ examined types of questions students asked when they were presented with a clinical scenario, it compared

questions students would ask of physicians with those they would ask of librarians. Given the opportunity to ask questions to help solve the problem, what types of questions would they (students) ask? (Wildemuth et.al, 1994:295-304).

In this study 63 first year medical students responded to clinical scenarios, each describing a patient affected by a toxin and asking questions concerning the identity of the toxin and its characteristics. After answering those questions, students were asked to imagine that they had access to a medical reference librarian and an internist specializing in toxicology. The students then generated two questions for each expert about each clinical scenario. Each question was categorized according to the type of information requested, and the frequency of each type of question was calculated.



The study found that students most often asked for the identification of the toxin(s), references about the scenario, or the effects of the toxin, an explanation of the patient's symptoms, or a description of the appropriate treatment. Students were more likely to address questions on the identity of the toxin and references to the hypothetical librarian.

They were more likely to ask the internist for explanations of the symptoms and descriptions of the treatment. The study was limited or confined to one domain, toxicology and an educational setting. The findings of the study support the traditional library role of providing bibliographic references relevant to clinical cases, particularly references concerning symptoms and environmental factors that can affect a case. The result also suggests that libraries should acquire or build information systems that will help students identify the pathogens relevant to a particular case.

For instance, students in the study expected that the librarian could answer questions concerning the identity of a toxin in a particular setting, it is likely that they will expect librarians to play a similar role for the identification of other such agents. The study also suggested that online systems that address these types of the questions would augment students' educational experiences.

### **2.1.9 Gravois et. al 1995**

A study by Sharon Gravois, William Fisher, Silvia Patrick and Denise Bowen was conducted in 1995. The research explored the information seeking practices of dental hygienists. The study was entitled "**The information seeking practices of dental hygienists**". A thirty-six-item questionnaire was developed to assess the information seeking, critical analysis and computer application practices of dental hygienists. The questionnaire was mailed to seventy-one dental hygiene practitioners (Gravois et al, 1995:446-451). The result of the study suggested that there might be differences in information seeking practices and computer applications based on the type of employment setting of dental hygienists.

The findings of the study also revealed that it is difficult to compare information seeking practices and computer applications used in the dental and medical fields due to variations in clinical practice resources. According to the study most dental personnel work in hospitals and clinics. Larger facilities, according to the study often have more space and money to provide an assortment of information resources and computerized equipment that would not be feasible within a solo practice.

The result indicated that discussions with colleagues, continuing education courses, journals and newsletters were the sources used most frequently for professional development and information retrieval. To evaluate professional development and information, these hygienists tended to rely on personal experience, credibility of the journal and discussion with colleagues. Word processing was the most frequently used computer application.

Online database was rare and computer use within the employment setting was primarily for business rather than clinical applications. Finally, the study revealed that many hygienists were interested in attending continuing education courses on use of computers to acquire professional information.

#### **2.1.10 Grace Yin Ting Cheng and Louisa Mei Chun Lam 1996**

A study by these researchers was on the information seeking behaviour of health professionals in Hong Kong. The survey was entitled “**Information seeking behaviour of health professionals in Hong Kong: A survey of thirty-seven hospitals**”. The survey was undertaken to investigate the information seeking behaviour of health professionals working in thirty seven public hospitals, to examine their information needs, to assess user satisfaction with and the impact of library services (including HALIS i.e Hospital Authority Library and Information System) and to examine why hospital libraries sometimes fail to meet user needs. The survey used a questionnaire as a method of gathering data.

The findings revealed disparate use patterns among different groups of health professionals and confirmed that medical staffs were the most satisfied with the library collections and services.



The nurses and hospital executives were found to be underserved. They needed information not only for work related reasons but also to support self-study and development. The new HALIS service was neither well known nor widely used, especially among nurses. Survey results also highlighted areas in which improvements are needed, such as collection enhancement, promotion and user training, and assessment of the impact of library service on patient care.

Survey results also suggested a number of development priorities: expansion of printed, audio-visual and electronic information sources to support all user groups, use of electronic resources on international networks to increase accessibility and promotion of user training in computer searching. The survey confirmed that medical doctors used libraries more intensively than other medical professions. It also reported that the collection served doctors better and that respondents often used other libraries as well as alternative sources of information (Cheng and Lam, 1996:32-39).



#### **2.1.11 Spath and Buttlar 1996**

A study by Spath and Buttlar entitled “**Information and research needs of acute-care clinical nurses**” focused on the information and research needs of acute-care clinical nurses. The primary method used to survey published information was systematic journal scanning, with a questionnaire that was developed that requested data about nurses’ areas of work, reasons for library use, reading habits and use of specific information sources.

The purpose of the study was to determine usage of libraries and information sources by acute-care clinical nurses. The objective of the study were to identify the ways nurses typically solve

their needs for information, examine the role of the library in meeting nurses' information needs, determine how much time they spend reading materials related to the profession and how much they use specific materials to access information, and to discover how nurses keep abreast of the field (Spath and Buttlar, 1996:112-115).

The findings of the study were that the majority of nurse's surveyed use the library on a regular but limited basis to obtain information needed in caring for or making decisions about their patients. A minority of the nurses indicated that the libraries in their own institutions totally met their information needs. The study also revealed that only 4% depended on the library to stay abreast of new information and developments in the field. Many nurses had their own journal subscriptions, which could account in part for the limited use of libraries and the popularity of the professional journal as the key information source.

This finding correlates with the research of Binger and Huntsman (1979:19-22) who found that 95% of staff development educators relied on professional journal literature to keep up with current information in the field and only 45% regularly monitored indexing and abstracting services. The study also revealed that nurses seek information from colleagues more than from any other source, supporting the findings of Corcoran-Perry and Graves (1990:119-127).

## 2.2 Conclusion

This literature review is based upon the research that has already been done in certain areas or disciplines that relates to the current study. It must be borne in mind that the term “ University Library” refers to a very wide range of institutions, which differ from one another not only in age, but in size and in scope also. There is a general agreement or rather we all agree that a university library exists primarily to serve the needs of the members of its own institution.

However, if the library is to fulfil that prime function it must provide facilities for study and research, which are geared as closely as possible to the academic mission and pattern of the university.

A review of the mentioned literature reveals that research into information needs of dental lecturers and students with specific reference to the South African situation has not been done. However, one need to concur with Van Zijl (1987:142) that the library must be aware of the needs of all its users and that libraries as social institutions are shaped by their societies because they are needs-oriented.

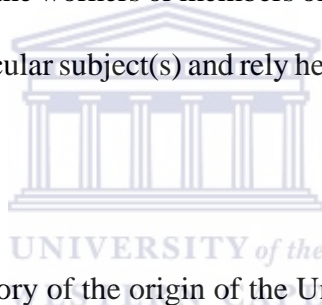
In conclusion it should be noted that most of the literature that has been consulted was not strictly based on the University of the Western Cape’s Oral Health Centre library. Therefore sources that have been consulted reflected quite a broad coverage of the medical and health sciences literature and medical libraries. Hence the literature of the medical libraries and other health sciences collections were examined as the main themes of this dissertation. Most of this literature is foreign based and very little has been reported on dental librarianship in the broader health sciences particularly also within the South African context.

## CHAPTER 3

### THE ORAL HEALTH CENTRE OF THE UNIVERSITY OF THE WESTERN CAPE

#### 3.1. Introduction

A library is basically a gathering of ideas, of information that is put in order and shared. The University of the Western Cape Oral Health Centre Library is a place where students and lecturers and staff use materials for research and teaching in the dental and oral field. As a special type of library, a special library as part of an institution, organization etc it has the role of providing practical information to the workers or members of such an institution. Usually special libraries must concentrate on particular subject(s) and rely heavily on materials such as reference books, journals and reports.



This chapter will give a short history of the origin of the University of the Western Cape Oral Health Centre. The chapter will also focus on the current status and collection of the University of the Western Cape Oral Health Centre Library, the services that the library offers, the users and staff of the University of the Western Cape Oral Health Centre Library. It will also touch upon the role of the Oral Health Centre Library in university teaching, the role of the library in relation to students and lecturers and in relation to research.

The University of the Western Cape's dentistry school started between 1973 and 1974. When the faculty started during those early years it was located at the Tygerberg hospital as a small dental services clinic. The clinic was housed in the same building used by the University of Stellenbosch. In 1992 the faculty made an unprecedented move to Mitchell's Plain where there were virtually no dental services for such a large populated area. (See Appendix 5 for the current location of the Faculty). The University of the Western Cape dental services clinic or Oral Health Centre is run with the assistance of the Western Cape Provincial Health Department which fully funds the services the Oral Health Centre offers while the university attends to academic matters. The services that the faculty provides extends beyond national boundaries and important links have been set up with other African countries. Currently, the Dental faculty is being recognised as a WHO (World Health Organisation) Collaborating Centre. There are only two of such centres in Africa. Collaborating centres deal with the training of personnel for Africa. The faculty also trains Zimbabwean postgraduate students to become specialists in areas such as facial surgery. Every year the faculty accepts four foreign students and these students come mainly from SADEC (Southern Africa Development Economic Community) countries. Although the faculty was originally built for a maximum of 30 dental students and 8 oral hygienists, presently the premises have become so inadequate that the Oral Health Clinic has been forced to cordon off the foyer to be used as an examination room (UWC Perspectives Winter 2000:7-14).

## **3.2 CURRENT STATUS AND COLLECTION OF THE UWC ORAL HEALTH CENTRE**

### **LIBRARY**

#### **3.2.1 Stock**

##### **3.2.1.1 Books**

The UWC Oral Health Center library has about 4 000 books, 150 journals and subscribes to about 50 journal titles. Dentistry books represent the highest percentage of books in the stock. The library has a collection of computer related books as well as books on management. In the reference section books can be borrowed overnight while the open shelf books have a 2-week loan period. A number of books are loaned to the academic staff on a permanent basis. The Library's current stock consists mostly of older editions because there haven't been any major purchases for the past 3 years. There are multiple copies of some "core" books but many of these have gone "missing" with the result that, in most cases, only one copy remains on the shelf. This copy is then placed in high demand and invariably is always on loan. The Library hasn't made any major book purchases in the last 3 years and will unlikely be able to do so in the unforeseeable future due to budgetary constraints. This has resulted in the library having the present stock, which consists of older books and journals. Up till 1998, all costs for the purchase of books and journals were borne by the Department of Health's budget to the Faculty. Since 1999, all material was ordered from the main library, the costs of which were borne by the UWC main library's budget.

### **3.2.1.2 Journals**

The Oral Health Centre Library has an ongoing collection of dentistry journals covering the major disciplines. Issues of the current year are put on display and all previous issues are bound and shelved. As a rule, journals are not permitted to leave the library. Due to lack of funds the Oral Health Centre Library was forced to cut down on the number of journals subscribed to by the library. The library has access to a number of journals through the CALICO (Cape Library Co-operative) system. The University of the Western Cape Oral Health Centre Library stocks a wide variety of journals, which is about 300 journals, although some, if not most are outdated. It consists of specific and general medical and dental journals in fields such as orthodontistry, clinical research, periodontology, oral surgery, oral diseases and quite a number of journals relating to the field of dentistry.



### **3.2.2 Users and staff of the UWC Oral Health Centre library**

The majority of the University of the Western Cape Oral Health Centre library's users are undergraduate dental faculty students. Academics and postgraduate students also make use of the University of the Western Cape Oral Health Centre library. Occasionally, non-faculty members use the library's facilities but they are not permitted to borrow books. The library staff consists of two permanent staff members, one librarian and an assistant. The library has also been fortunate in the past to have a student assistant working under the university work-study programme. The assistant would usually work from 14h00 to 17h00 and assist in keeping the library open after hours. The library is closed on Saturdays and during vacations.

The normal closing time of the library is at 16h30, but the part-time employment of Library Science students enables the library to be open until 17h00 from Mondays to Thursdays. The library is sometimes closed when the student assistants are unavailable because of vacations and examinations.

The permanent staff is employed by the Western Cape Provincial Library Services. Attempts have been made to transfer the staff to the payroll of the university and this has proved fruitless due to the financial implications.

The implication of library staff being employed by the Western Cape Provincial Library Services is as a result of the announcement in 1991 by former President F.W. de Klerk's Minister of Health and Population development who structured health services in the provinces.

Tertiary or academic health care was made to become the joint responsibility of the universities and the provincial hospital services (Myers, 1995:71-77). Primary health services came under the control of local authorities and the provinces no longer controlled it. Funding for primary, secondary and tertiary health services were determined on a national basis and guaranteed by legislation made by the apartheid government (Myers, 1995:74). This new policy was welcomed by the Universities as for the first time they had greater freedom in running academic medical services at the teaching hospitals. Each academic centre would enjoy considerable autonomy and thus would be able to address some of the crises facing academic care more efficiently.



### **3.2.3 Services**

#### **3.2.3.1 Introduction**

The following services are rendered by the University of the Western Cape Oral Health Centre Library e.g. Inter-library loans, computerization, photocopy service and online services.

#### **3.2.3.2 Inter-library loans**

The University of the Western Cape Oral Health Centre library is affiliated or is a member of the Southern African Interlending Scheme. The library also has dealings or links with the University of Stellenbosch Medical Library since the University of Stellenbosch Medical library tend to have most journals required. The Cape Library Co-operative (CALICO) was established in October 1992 under the auspices of the Western Cape Tertiary Institutions Trust. The Cape Library Co-operative is a consortium between five tertiary institutions in the Western Cape province of South Africa. These include: The University of Cape Town, University of Stellenbosch, University of the Western Cape, Cape Technikon and the Peninsula Technikon. The vision of the Western Cape library co-operative is to promote information literacy and economic development for the area by providing information to users in a form they want, when and where they need it ([www.adamastor.ac.za](http://www.adamastor.ac.za)).

### **3.2.4 Computerization**

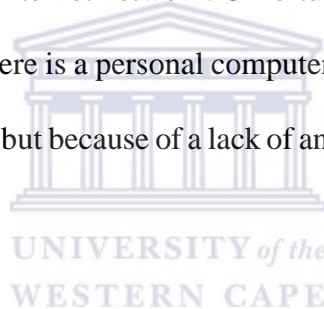
#### **3.2.4.1 Software**

The University of the Western Cape Oral Health Centre library is computerized and is a member of the CALICO (Cape Library Co-operative) system. The library has been using the ALEPH system since about the middle of 1999; prior to this the Oral Health Centre library was using the PALS system.

The library also has a Sabinet (South African Bibliographic Network) connection, which is used to locate holdings for inter-library loans. Applications for inter-library loans are done by post, fax and e-mail. The library is connected to the Internet and uses it to search for information. Most of the searches are done using the free Pubmed database service. The library has during the period of this research created links with two dental and medical databases. It has also created website links with dental associations such as the South African Dental Association and academic links with websites which provides information for the dental profession.

#### **3.2.4.2 Hardware**

There are a few personal computers in the computer room adjacent to the library, which are connected to the internal and the Internet network. Unfortunately these machines are outdated and cannot be used efficiently. There is a personal computer at the issue desk, which should be used solely for issuing and returns but because of a lack of an alternative, the library is also using it for doing Internet searches.



#### **3.3 Users and their information needs**

The term “ *User* ” in this context has been employed to describe an actual user of information, potential user, a non-user or even an expected user (Kerkham, 1986:2.13). Students and lecturers are probably the users (although this will be tested) in terms of groups as to which type of students or lecturers do require information and use information and for what purpose(s) do these users use the information. Do they use information for attainment of professional goals, or for undertaking research or is it to solve work or academic related problems?

For this study the term “ information needs” will include library usage patterns, user preferences and user’s needs. Kerkham (1986: 2.15) warns that a book issue does not necessarily mean that the book has met the user’s need. One of the most frequent difficulties which students (undergraduate and postgraduate) face is closing the gap between university education and high school education. This leads to situations where many students at times are unable to use or even recognize resources available in libraries. Some students generally do not even have a slight idea of the facilities that the library offers and this is also evident in the lecturing staff at times.

The researcher wishes to concur with Theron and Fielding (1981: viii) that in order to research a subject thoroughly, students should read widely, take notes, construct their argument within a coherent plan and then communicate the results of their research as lucidly as possible. This is also equally relevant to the teaching staff. Human beings are all users of information and our need for information differs with every one of the many roles we daily assume – worker, parent, decision maker, patient, teacher, consumer. Moreover, information itself is a strange commodity, for although it has definable costs of production and distribution and is of undeniable value to a user, it has peculiar properties, which make it very difficult to generalize about it (Burt Nanus in Boaz, 1981:56).

The problem of assessing information seeking behaviour is at times exacerbated by the fact that the environment of user needs is rapidly changing. Virtually everything in the social environment affects user needs and in turn is affected by information usage. For example, the role of information in an organization is so central to its management and functioning that it must be viewed as a fundamental factor of production like money and manpower (Burt Nanus in Boaz, 1981:56).

Information provides a way of determining the alternative available and of assessing the associated risks (Paul Gray in Boaz, 1981:65). So, in providing information for decision-making, the database of the library is the backbone of a management information system.

This implies that providing information to lecturers and students is not enough, the information must be tailored to the problem and must be coupled to the specific decision and decision maker, that is, it must take the human factor into account (Paul Gray in Boaz, 1981:68).

Libraries do have a major responsibility for information transfer and providing all types of materials, particularly research materials, to persons who desire them when they need them. The primary purpose and function of libraries and information centres is the preservation and dissemination of information and ideas. The quest for information is not a new phenomenon. Information has been needed and used by persons throughout the ages, for there has never been a time when people did not need information to solve their personal or professional problems. In this 21<sup>st</sup> century information, its lack and availability, its use and misuses, its treatment and transfer and its possession is a crucial factor for technological advancement (Goggin in Stueart, 1982:5).

Those people who have accurate, reliable, up-to-date information to solve day-to-day problems, critical problems of their professions and businesses will survive and succeed. Knowledge is power may well be the truest saying for the 2000's and access to information is currently one of the most critical requirement of all people.

### **3.4 The role of the Oral Health Centre Library in University teaching**

#### **3.4.1 Library service to lecturers**

In order to support the lecturer at university teaching the Oral Health Centre Library must familiarize itself with the general aspects of the university's teaching programme as well as the presentation of the various courses and subjects. This enables the library timeously to:

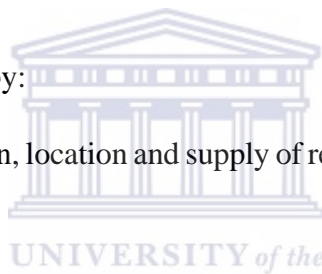
- Be aware of existing, potential needs and stock
- Plan and offer services and facilities to satisfy identified requirements and to
- Ensure that library staff is able to communicate meaningfully with the lecturer about his/her information requirements (de Bruin 1985: 6).

The library supports the lecturer by:

- Assisting with the identification, location and supply of relevant information and information sources
- Helping the lecturer to keep abreast of recent relevant literature by optimal availability of its services and facilities and
- By retrospective and current awareness services.

The Oral Health Centre's responsibility as a university library of a special type is to ensure that each lecturer:

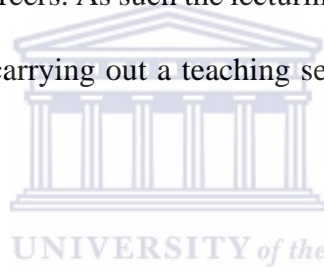
- Is familiar with all services and facilities that the library offers.
- Is aware of the importance of information in the lecturer's work and the library's place and role and has a positive attitude to library services.
- Knows how to use or make optimum use of these services and facilities.



The Oral Health Centre library is involved with the lecturer in the teaching process in the following ways:

- By consulting with the lecturer when necessary about the best strategy by which the library can contribute to the lecturer's attainment of goals.
- By helping the students as arranged beforehand with the lecturer and
- Constantly discussing with the lecturer the library's contribution to the teaching process.

The library, together with the lecturer is responsible for the planned development and maintenance of a balanced collection of information resources required for university teaching (de Bruin, 1985: 6). Lecturers within a university setting perform the teaching function and they prepare students for productive careers. As such the lecturing staff is the pivot of the university and is primarily responsible for carrying out a teaching service and research (Shillinglaw & Thomas, 1988:237)



### **3.4.2 The Oral Health Centre library and the students**

The student body in a university setting represents the direct recipients of the teaching and instructional activities. The students fulfil the studying and learning function and perform problem-solving activities as determined by lecturers (Shillinglaw & Thomas, 1988:238).

Students can be divided into two distinct groups:

- Post-graduates who conduct research on the honours, masters and doctoral levels
- Undergraduates who follow a structured course of study set out by the department. They usually constitute the largest group on a campus.

The library supports students in their studies by:

- Optimal availability of general services and facilities

- Active assistance with locating, identifying and supplying information and information sources as previously agreed with the lecturer and
  - In general supplying advice about bibliographic presentation of publications, online searching and in conformity with the lecturer's instructions
  - Advising students about the bibliographic presentation of assignments, theses etc
- (de Bruin 1985: 7).

The library is responsible for:

- Making all students in the University or Faculty aware of its services.
- The orientation of students towards the role of information in study, research and practice and the place of the library in disseminating information
- The development of skills in the students for optimum utilization of the library for his/her studies.



### **3.4.3 The role of the Oral Health Centre Library Service in relation to research**

The library is responsible for ensuring that each researcher in the faculty is:

- familiar with all services and facilities provided by the library
- has a positive attitude towards the library and
- knows how to make optimum use of these services and facilities.

In collaboration with the researchers the library is responsible for the planned development of a balanced collection of information sources required for research (de Bruin 1985:8).

The library supports the researcher/ student/ lecturer in the research process by:

- Providing information and information sources about recent publications concerning developments in research methods and techniques.

- Keeping the researcher/ student/lecturer constantly supplied during his/her research with relevant information in his/her research field.
- On request, and when necessary, advising on bibliographic referencing of research reports.
- Offering professional advice about the manipulation and use of information retrieval systems required for successful research.

The Library supports the researcher/ student/ lecturer in his/ her task by being familiar with the university's research policy, goals and philosophy in general as well as with specific research projects and the scope of specialisation in broad terms. In this way the library can:

- Become aware timeously of existing and potential information requirements
- Ensure that library staff are able to communicate meaningfully or well with the researcher about his/ her information
- Plan, offer its services and facilities in advance for researchers

Academic and research library users demand a sophisticated level of service to obtain the latest information. These services range from print formats to online reference databases to electronic journal access. The web has currently evolved into a powerful tool for the information community.

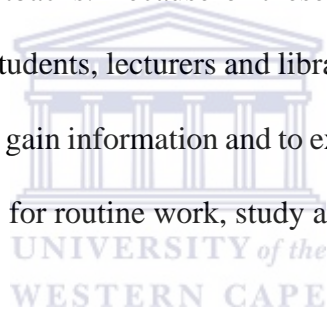
Today finding information that is meaningful and relevant to you can be challenging. There are currently a variety of search tools you can use to help you find information you want. Students and lecturers need more than the skill to go beyond simple web searches to become effective, efficient researchers. Lecturers and students moreover, must learn to apply Internet search techniques, how to browse the World Wide Web (WWW) for useful information, how to return to useful web sites and moreover how to use a variety of Internet search tools effectively.



### 3.5 Conclusion

In conclusion, the researcher wishes to concur with Harrop (1983:23) that most librarians are aware that there seems to be a mismatch between faculty expectations of the books or other material students will need and what students actually seem to use. Reading lists alone are not sufficiently good indicators of students' real information needs. The Oral Health Centre Library as a library is firmly embedded in the academic life of UWC as a parent institution.

Currently many libraries are going through a period of economic constraint and they are also feeling the effects of financial cutbacks. Because of these factors and new technologies the faculty of dentistry, researchers, students, lecturers and library staff are faced with a myriad of new ways, primarily electronic, to gain information and to expand the environment from which one obtains information resources for routine work, study and research.



The researcher concurs with Pastine & Wilson (1992:100) that the librarian's role is to ensure that the faculty understand that they and their clients i.e. students and lecturers are no longer limited to resources held locally, that they may use technologies within the classroom to build educational connections and links to worldwide experts and authorities and to databanks far beyond the limitations of the home library. The librarian has a role to accomplish the following:

- ◆ To familiarize faculty with relevant resources and services beyond their areas of specialization.
- ◆ Helping faculty to understand the research capabilities and needs of students, lecturers

- ◆ Working with faculty in structuring experiences that will effectively promote the mastery of information management skills.
- ◆ Keeping faculty apprised of new information sources and services in their own field of research (Pastine & Wilson, 1992:98).



## **CHAPTER 4**

### **A SURVEY OF THE INFORMATION SEEKING BEHAVIOUR OF THE DENTAL**

## **FACULTY LECTURERS AND STUDENTS**

### **4.1 Introduction**

There are few studies, if any, on the information and research needs of dental faculty lecturers and students with particular reference to the South African situation. Most studies on dental or medical literature were completed in foreign countries. It was necessary to examine the information seeking behaviour of dental faculty lecturers at the University of the Western Cape's Oral Health Centre in Mitchell's Plain.

### **4.2 Objectives of the study**

The objectives of the study were to look into:



- ◆ The information and research needs of dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre Library in Mitchell's Plain
- ◆ Usage of the Oral Health Centre Library sources by lecturers and students.
- ◆ Whether the Oral Health Centre library is able to meet the information and research needs of dental lecturers and students.
- ◆ Barriers to information provision at the Oral Health Centre Library and how to overcome these barriers.

At the core of this information and research needs is whether lecturers and students do make optimum use of library resources.

### **4.3 Research design and methodology**

The study utilised quantitative research methods. A questionnaire survey was conducted of a representative sample of students, lecturers and library staff at the University of the Western Cape's Oral Health Centre. The questionnaire survey assessed students and lecturer's information and seeking behaviour.

The research instruments used were two questionnaires which were completed by lecturers, students and staff and a one interview with the librarian. The questionnaires consisted of open-ended and close-ended questions, which related to information, suggestions, frequency of library use, information seeking behaviour patterns of students.

The first questionnaire entitled "Questionnaire on the information and research needs of dental faculty lecturers and students" was completed by lecturers and students (See Appendix 3). The questionnaire consisted of open-ended questions and closed questions. It consisted of two sections dealing with information such as status of respondents, how respondents keep up to date with their course, where do they (respondents) find extensive information relating to their course, students and lecturing rating of their library, library usage patterns, which information sources would they (respondents) like to use for research purposes, what their preferred sources of Oral Health Information sources are?

The second questionnaire also entitled "A questionnaire on the information and research needs of dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre" was completed by the library staff (See Appendix 4).

It concentrated on the library staff and their status, how long they had worked in the library, obstacles that hinders users working in their library that they had observed, the loan period for library material i.e. for undergraduate, postgraduate and for lecturers, the busiest periods in the library, why students and lecturers use the library according to the library staff's opinion, services mostly used by both students and lecturers.

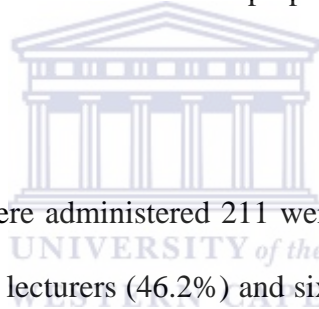
#### **4.4 Data collection**

After the Faculty Joint Committee had granted the permission, questionnaires were then distributed to students, lecturers and the library staff during mid-August 2000. Lecturer's questionnaires were delivered at their offices through the Dean's Secretary. It was agreed with the Secretary and the Faculty Officer that the completed questionnaires would be collected from the Secretary and the Faculty Officer's Offices within two weeks. This was to allow those lecturers who were not available at the time to also fill in the questionnaires and return them through the Secretary or Faculty Officer's office. In order to accomplish and get a good response, the researcher went to the dentistry faculty for two weeks to distribute student questionnaires and ensure that questionnaires were completed and returned.

For the students a sample was drawn by using a sampling interval of 3 from the population of students. In this sampling 10 questionnaires at a time were administered to the students within an hour, at different periods within a week in the library and the clinical rooms. To avoid the same

students being given the questionnaire twice, all students were asked whether they had already had the questionnaires. Questionnaires for library staff were also distributed during this time. An interview with the librarian was conducted during February 2000 prior to the distribution of the questionnaires.

The purpose of the interview was to do an environmental scan of the library and its setting. Moreover, to have an overall picture of the conditions and collections of the Oral Health Centre library. A box was placed in the library with the request that library users, who could not immediately return their completed questionnaires while in the library, should put them in this box. The questionnaires were collected weekly over a period of two weeks. As there were 3 (three) members of staff, three questionnaires were prepared and personally distributed and collected from the library.



Of the 237 questionnaires that were administered 211 were undergraduate and postgraduate students and 26 lecturers. Twelve lecturers (46.2%) and sixty students (28.4%) inclusive of 6 (six) postgraduate students responded i.e. a response rate of 74.6%. This means that 72 responded. This is a breakdown of the total number of respondents.

**Table 1: Breakdown of the total number of respondents**

<b>Undergraduates</b>	<b>Postgraduates</b>	<b>Lecturers</b>	<b>Library staff</b>
54	6	12	3

**4.5 Data analysis and interpretation**

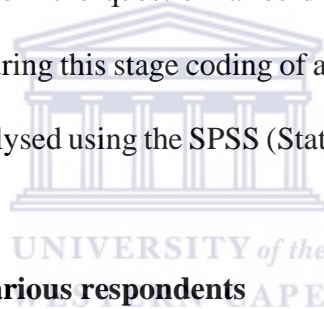
The permission to do this study was sought and given to the researcher by the Faculty of

Dentistry Joint Committee (See Appendix 1 & 2). The distribution of questionnaires was subsequently done. From the library staff side, all 3 staff members (100%) returned their completed questionnaires. Twelve lecturers (46.2%) completed the questionnaire while sixty students (28.4%) completed the questionnaire. Both undergraduate and postgraduate students were grouped as students. It must be noted that in some instances the universum was not 12 and 60 because respondents had the option to make more than one choice.

## 4.6 Data analysis presentation

### 4.6.1 Introduction

The presentation, analysis and interpretation that follow are based upon the results of the findings, which were obtained from the questionnaires distributed (See Appendices for the structure of the questionnaire). During this stage coding of all open-ended and closed questions was undertaken. The data was analysed using the SPSS (Statistical package for Social Sciences) programme.



### Questionnaires completed by various respondents

**Table 2: Questionnaires completed by various respondents**

STATUS	TOTAL	%
Students	60	83.3
Lecturers	12	16.7
Library Staff	3	100

According to Table 2, if the total number of user respondents are considered i.e.  $60+12=72$ , then 83.3% of the respondents were students, while 16.7% were lecturers in the faculty of dentistry, while all the library staff (100%) responded to the survey.

**Table 3: Place or location of information**

LOCATION/ PLACE OF INFORMATION	LECTURERS		STUDENTS	
	NUMBER	%	NUMBER	%
Public Libraries			4	6.7
Professional Institutes	5	41.7	11	18.3
Local University Libraries	4	33.3	39	65
Research Organizations	2	16.7	3	5
Oral Health Centre Library	8	66.7	46	76.7
Colleagues or Co-students	6	50	33	55
Co-Students			17	28.3

The majority of lecturers, 66.7%(8) reported that the UWC Oral Health Centre Library was their place or location of finding information whilst 50%(6) said colleagues were their sources of information, while 41.7% (5) of the lecturers said that they used professional institutes to find or locate information, 33.3%(4) said they used local university libraries.

The majority of students 76.7 %(46) said that the Oral Health Centre library was the place where



they found information relating to their courses. Sixty five percent, 65%(39) of these students cited that the local university library was the place where they could find extensive information relating to their course while 55%(33) said colleagues and co-students served as the place where they could find information, 28.3% (17) of the students said that co-students only was the place where they found extensive information relating to their course and 18.3%(11) of the students named professional institutes as the places where they found information. A rather low percentage 6.7%(4) of the students stated that public libraries were the place where they found information, whereas 5%(3) cited research organisations as the place where they found information relating to their course.

In comparison, the majority of respondents 75%(54) indicated that they acquire their information at the University of the Western Cape’s Oral Health Centre library whereas 59.7%(43) of the respondents indicated that they found information relating to their courses at local university libraries, 54.2% (39) reported that colleagues and co-students were their sources of information in finding extensive information, while 23.6%(17) said that only co-students served as a place where they find extensive information relating to their courses while 22.2%(16) indicated that professional institutes were the location where they found extensive information relating to their course.

**Table 4: Methods of acquiring information**

METHODS	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
Browse library	4	33.3	45	75

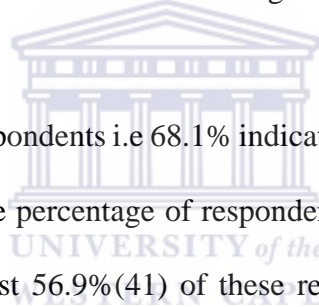
Consult librarian	6	50	35	58.3
Surf Internet	10	83.3	24	40
Consult colleagues in the university	5	41.7	44	73.3
Consult colleagues outside university	4	33.3	13	21.7
Visit Local libraries	2	16.7	9	15.0

According to table 4 the majority of lecturers, 83.3%(10) acquired needed information by surfing the Internet whereas 50%(6) of the lecturers said they consulted the librarian. Those lecturers who said they consulted colleagues in the university if they need information on a specific topic constituted 41.7%(5) while 33.3%(4) said if they need information on a certain topic they browsed in the library. Those lecturers who consulted colleagues outside the university were 33.3%(4) while those who said they visited local libraries were 16.7%(2).

The majority of students, 75%(45) said they browsed in the library, of these students 73.3%(44) said they consulted colleagues in the university, 58.3%(35) said they consulted the librarian whilst 40%(24) of the students said they surfed the Internet if they needed information on a certain or specific topic. There were 21.7%(13) students who said they consulted colleagues

outside the university while 15%(9) said they visited local libraries if they need information on a certain or specific topic.

The findings reveals that lectures and students use different methods in terms of acquiring information. The assumption of the researcher in relation to the difference in the methods of acquiring information is that most users in libraries use browsing as a method of selecting materials. The difference might also lie in the fact that students have cited lack of computer facilities for Internet searching as an obstacle preventing them from acquiring information electronically. And whereas lecturers have access to computers, students on the other hand might not have easy access to such facilities. Apart from this information literacy remains a very important tool for all library users in this information age.



In comparison, the majority of respondents i.e 68.1% indicated that they acquire information by browsing in the library. The same percentage of respondents, 68.1%(49) said they consulted colleagues in the university whilst 56.9%(41) of these respondents said they consulted the librarian. Of these respondents 47.2% (34) said they surfed the Internet while 23.6%(17) cited that they consulted colleagues outside the university. Amongst these respondents 15.3%(11) said that if they need information on a certain or specific topic they visited local libraries.

**Table 5: Information sources for research (Question 4)**

SOURCES	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%

Reference work	1	8.3	14	23.3
Conference proceedings	8	66.7	13	21.7
Journal articles	11	91.7	53	88.3
Newspapers & Periodicals	4	33.3	18	30
Handbooks & Manuals	3	25%	32	53.3
Audio-visual materials	4	33.3	36	60

The majority of lecturers, 91.7% indicated that they used journal articles as information sources for research. This was followed by 66.7% (8) who indicated that they use conference proceedings reports for research purposes, 33.3% (4) of the lecturers said they use newspapers and periodicals for research purposes while the same percentage 33.3% (4) said they use audio-visual materials. Those who cited that they use handbooks and manuals were 25% (3) while 8.3% (1) of the lecturers indicated that they use reference works such as encyclopaedias for research. The majority of students, 88.3% (53) said they use journal articles for research purposes. Of these, 60% (36) said they use audio-visual materials for research purposes while 53.3% (32) said they use handbooks and manuals.

There were 30% (18) of the students who said they use newspapers and periodicals. Of these students 23% (14) said they use reference works such as encyclopaedias while 21.7% (13) said they use conference proceedings. There is a correlation in this finding in the sense that both students and lecturers cited that they would prefer journal articles for research.

In comparison, the majority of the respondents 88.9%(64) said that they use journal articles for research purposes. Of these respondents 55.6% (40) said that they use audio-visual materials for research purposes while 48.6%(35) of these respondents said that they use handbooks and manuals. Those who said that they use newspapers and periodicals were 30.6% (22) while 29.2% (21) said that they use conference proceedings reports for research purposes. There were 20.8%(15) of the respondents who said that they use reference works like encyclopaedias for research purposes.

**Table 6: Preferred sources of information (Question 5)**

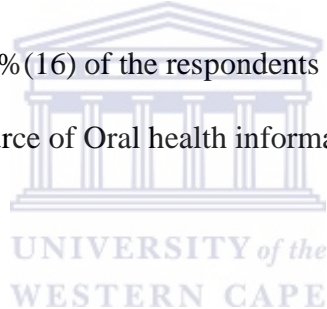
PREFERED INFO. SOURCES	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
Journals	10	83.3	51	85
Colleagues	5	41.7	26	43.3
Conference proceedings	8	66.7	11	18.3
Librarian	2	16.7	14	23.3
Internet	8	66.7	40	66.7

Table 6 shows that the majority of lecturers, 83.3%(10) cited journals as their preferred sources of information. Of these lecturers 66.7%(8) said that they preferred conference proceedings while equally the same percentage 66.7%(8) indicated that they preferred the Internet as their source of information. There were 41.7%(5) of the lecturers who said that colleagues were their preferred source of information. Amongst these lecturers 16.7%(2) said that they preferred the

librarian as their source of Oral health information.

The majority of students, 85%(51) said they preferred journals as their sources of information. Of these students 66.7%(40) said they preferred the Internet as their source of information while 43.3%(26) said they preferred colleagues as their information source. There were 18.3%(11) students who said they preferred conferences whilst there were also 23.3%(14) of these students said that they preferred the librarian.

In overall, the majority of the respondents, 84.7%(61) cited journals as their preferred sources of Oral health information while 66.7%(48) said that the Internet was their preferred source of Oral health information. Those who said that colleagues where their preferred sources of information were 43.1(31) while those who said that conferences were their Oral health information sources were 26.4%(19). There were 22.2%(16) of the respondents who said that they preferred to use the librarian as their preferred source of Oral health information.



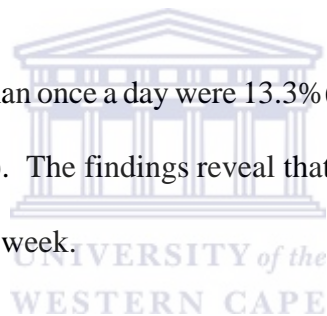
**Table 7: Frequency of library use (Question 6)**

FREQUENCY	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
Everyday	2	16.7	14	23.3

More than once a day	4	33.3	8	13.3
More than once a week	5	41.7	28	46.7
Other	0	0	5	8.3

Table 7 shows that the majority of lecturers, 41.7%(5) said they used the library more than once a week while 33.3%(4) other lecturers said they used it more than once a day. Those who said that they used the library everyday were 16.7%(2). The majority of students, 46.7%(28) said they used the library more than once a week while 23.3%(14) reported that they used library everyday.

Those that used the library more than once a day were 13.3%(8) whilst those that said their usage of the library varies were 8.3%(5). The findings reveal that most of the lecturers and students used the library more than once a week.



The majority of the respondents, 44.4%(32) reported that they used the Oral Health Centre library more than once a week while 22.2%(16) of the respondents said they used the library everyday. There were 13.9% (10) of the respondents who said that the frequency of them using the library varied whilst 11.1%(8) said that they used the library more than once a day. The findings in table 7 is an indication that most lecturers and students used the library more than once a week, an indication that they are frequent users of the library.

**Table 8: Purpose & reasons for using Oral Health Centre library (Question 7)**

PURPOSE	LECTURERS	STUDENTS
---------	-----------	----------

	<b>TOTAL</b>	<b>%</b>	<b>TOTAL</b>	<b>%</b>
Consult books	7	58.3	46	76.7
To return borrow items	3	25	25	41.7
To read recent books	1	8.3	14	23.3
To consult reference material	9	75	44	73.3
To meet Colleagues	0	0	16	26.7
Request inter-library loans	4	33.3	8	13.3
Work with own documents	1	8.3	21	35
To consult Journals	11	91.7	49	81.7
To borrow library items	8	66.7	39	65
To photocopy	5	41.7	52	86.7
To read newspapers	1	8.3	22	36.7

Table 8 illustrates that the most lecturers, 91.7%(11) used the library to consult journals, 75%(9) of the lecturers said they used the library to consult reference materials, while 66.7%(8) of the lecturers said they used the library to borrow library items. Those that said they used the library to consult books were 58.3%(7), 41.7%(5) said they used the library to photocopy material



whilst 33.3%(4) said they used the library to request inter-library loans. Those that used the library to return borrowed library items were 25%(3) while those that used it to read recent books were 8.3%(1).

In contrast with the lecturers, the majority of students, 86.7%(52) said they used the library to photocopy materials. The reason for this contrast may be the fact that there are 3 photocopy machines; two photocopy machines are for use by students while the third photocopy machine is reserved for library staff. Another reason might be the fact that students consult journals more often hence the need for photocopying notes in journals.

There were 81.7%(49) of the students who indicated that they used the library to consult journals, 76.7%(46) of the students on the other hand, said they used the library to consult books, 73.3%(44) says they use the library to consult reference materials, 65%(39) says they use the library to borrow library items, 41.7%(25) indicated that they used the library to return borrowed library items while 36.7%(22) indicated that they used the library to read newspapers. Of these respondents 35%(21) said they used the library to work with own documents.

In comparison, the majority of respondents 83.3%(60) said they use the library to consult journals. Of these respondents 79.2%(57) use the library to photocopy materials while 73.6%(53) use the library to consult books. The same percentage 73.6%(53) use the library to consult reference materials while 65.3%(47) use the library for borrowing library items. Of these respondents 38.9%(28) said they used the Oral Health Centre library to return borrowed library items. A further 31.9%(23) said they used the library to read newspapers while 30.6%(22) said they used the library to work with their own documents.

The findings shows that journals consultation ranked highest, 83.3%(60), followed by the photocopying of library materials, 79.2%(57) and 73.6%(53) of those who used the library to consult books and to consult reference materials. The finding also reflects the fact that both lecturers and students use the library for different purposes.

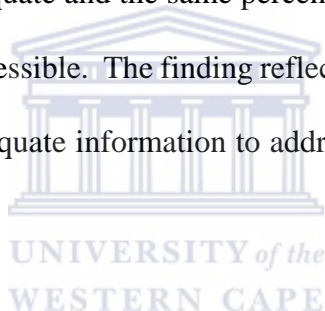
**Table 9: Reasons for not using the Oral Health Centre library (Question 8)**

REASONS FOR NOT USING LIBRARY	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
Personal collection adequate	2	16.7	4	6.7
Library is inaccessible	1	8.3	5	8.3
Library does not have adequate information	8	66.7	31	51.7
Other libraries are more convenient	1	8.3	10	16.7

The majority of lecturers, 66.7%(8) indicated that the Oral Health Centre library does not have adequate information while 16.7%(2) of the lecturers said that their personal collection was adequate. A lesser percentage, 8.3%(1) of the lecturers indicated that the library was not inaccessible while equally the same percentage 8.3%(1) indicated that other libraries were more convenient.

The majority of students, 51.7%(31) indicated that the Oral Health Centre library does not have adequate information while 16.7%(10) said that other libraries were more convenient. There were 8.3%(5) of the students who reported that the library was inaccessible while 6.7%(4) of them said that their own collection was adequate. In general, the majority of respondents, 54.2%(39) indicated that the reasons they didn't use the Oral Health Centre library were that the library does not have adequate information.

Other respondents, 15.3%(11) believed that other libraries were more convenient while 8.3%(6) of the respondents said that the reasons they didn't use the Oral Health centre library was that their personal collection was adequate and the same percentage 8.3%(6) said that their reason was because the library was inaccessible. The finding reflects the fact that the respondents felt that the library does not have adequate information to address the needs of both students and lecturers.



However, the researcher is of the view that most respondents are not information literate because library users have a tendency of saying that libraries do not have adequate information. This is particularly true when it comes to students because most of them do not have the ability to gather, analyze and package information for their use.

**Table 10: Times for library use (Question 9)**

TIME FOR LIBRARY USE	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%

08h30-10h30	1	8.3	15	25
10h30-12h30	2	16.7	19	31.7
12h30-14h30	4	33.3	16	26.7
14h30-16h30	2	16.7	6	10
Other	3	25		

Table 10 shows that the majority of lecturers, 33.3%(4) indicated that they used the library between 12h30-14h30 while 25%(3) of the lecturers said that the times of library usage varied, 16.7%(2) said they used it between 10h30-12h30 whilst equally the same percentage, 16.7%(2) said they used the library between 14h30-16h30.

Of these lecturers 8.3%(1) indicated that they used the library between 08h30-10h30.

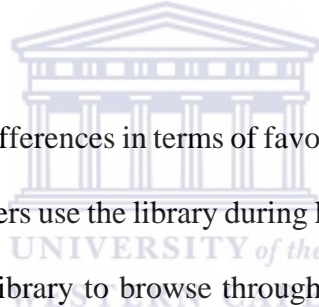
The majority of students, 31.7%(19) reported using the library between 10h30-12h30. The next highest number 26.7%(16) reported using it between 12h30-14h30. 25%(15) reported using the library between 08h30-10h30 whilst 10% (6) reported using the library between 14h30-16h30.

The finding reveals that the library was used mostly between 10h30-12h30 and during lunch hours, that is, between 12h30-14h30. The above percentage bears testimony to this fact.

In general the majority of respondents, 31.9% (23) cited using the library between 12h30-14h30 whilst 25%(18) of the respondents said they used the library between 14h30-16h30. 23.6%(17) of the respondents said that they used the library between 10h30-12h30, while 12.5%(9) said that the times they used the library varied. Only 1.4% (1) of the respondents said that they used the library between 08h30-10h30.

In contrast 1 library staff respondent said that the library was used mostly between 15h30-16h30 while the second library staff member said the library was busy between 17h00-17h30. The third library staff respondent said the times of library usage in the library depended on the pressure of examinations, assignment deadlines for students and students' free times.

Table 10 indicates that there are differences in terms of favoured time of library use. The reason for this contrast may be that lecturers use the library during lunch times when they are free from academic activity. They use the library to browse through the latest journals and oral health information whilst students on the other hand use the library more often for assignments, reference materials and photocopying.



**Table 11: Use of indexing journals (Question 10)**

USE OF INDEXING JOURNALS	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
Once a day	5	41.7	7	11.7
Once per fortnight	1	8.3	15	25
Once per month	3	25	19	31.7
Once bi-monthly	3	25	6	10
Once per semester	0	0	3	5
Once per year/ annum	0	0	3	5
Never	0	0	0	0

Table 11 depicts the fact that the majority of lecturers, 41.7%(5) used indexing journals once a day while 25%(3) used indexing journals once per month. Equally the same percentage and number 25%(3) said they used the indexing journals once bi-monthly. Of these lecturers 8.3%(1) said they used indexing journals once per fortnight.

The majority of students, 31.7% (19) were of the opinion that they used indexing journals once per month while 25%(15) said they used indexing journals once per fortnight. Of these students 11.7%(7) said they use indexing journals once a day while 10%(6) of these students said they used indexing journals once bi-monthly. The majority of respondents 27.8% (20) said that they used indexing journals once per fortnight while equally the same percentage 27.8% (20) said they use indexing journals once per month.

Of these respondents 9.7%(7) reported that they used indexing journals once a day while 8.3%(6)

said they used indexing journals once bi-monthly. Equally the same percentage, 8.3%(6) said they used indexing journals once per semester. Of these respondents 4.2%(3) that they used indexing journals once per year and an equally same percentage, 4.2%(3) said they had never used the indexing journals. The finding shows that indexing journals were mostly used once per fortnight and once per month.

**Table 12: Information sources for lecture preparation (Question 11)**

INFO. FOR LECTURER PREPARING LECTURE S	TOTAL	%
Journal articles	12	100%
Newspapers	3	16.7%
Conference proceedings	5	41.7%

The majority of lecturers, 100% (12) said they used journal articles for studying and lecture preparation, 41.7%(5) said they used published conference proceedings for their lecture preparation whilst 16.7%(2) said they used newspapers for studying and lecture preparation.

This finding correlate with Binger and Huntsman’s (1979:19-22) research which found that 95%

of staff development educators relied on professional journal literature to keep up to date with current information in the field. This finding reveals that journals are the most used information sources for lecture preparation and this is followed by published conference proceedings.

**Table 13: Reasons for seeking oral health information**

REASONS FOR SEEKING INFO	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
To keep up to date with course	9	75	31	51.7
To study for a qualification	4	33.3	42	70
To train others	9	75	6	10
To do research	8	66.7	33	55
For Oral Health Care purposes	4	33.3	29	48.3

Table 13 illustrates that the majority of lecturers, 75%(9) are seeking oral health information to keep up to date with the latest developments equally the same percentage 75% (9) of lecturers seek oral health information to train others while 66.7% (8) of the lecturers said that their reasons for seeking oral health information was to do research.

Of these lecturers 33.3% (4) said their reason for keeping seeking oral health information was to



study for a qualification whilst equally the same percentage, 33.3%(4) of lecturers said their reasons for seeking information was for oral health care purposes.

In contrast to lecturers, the majority of students 70%(42) seek oral health information to study for a qualification. The reason for this contrast may be that most lecturers have an academic role of teaching and research to follow as compared with students who are the learners in the academic process. Of these students 55%(33) indicated that they do research whilst 51.7%(31) said their reasons for seeking oral health information were to keep up to date with the latest developments. The next percentage 48.3% (29) said it was for oral health care purposes while 10%(6) of the students said their reason to seek oral health information was to train others. In overall, students ranked to study for a qualification highest with 70% (42) followed by doing research at 56.9%(41) and keeping up to date with the latest developments at 51.7%(31).

In comparison the majority of students and lecturers, 63.9%(46) said that their reasons for seeking oral health information was to study for a qualification while 56.9%(41) said their reason to seek oral health information was to do research. Of these respondents 55.6%(40) said that their reasons for seeking oral health information was to keep up to date with the latest developments while 45.8% (33) said their reasons for seeking oral health information was based on oral health care purposes. A lesser percentage 20.8%(15) said their reason was to train others. This low percentage seems logical in the sense that lecturers and few postgraduate students were involved in the academic teaching process.

**Table 14: Availability of library materials (Question 15)**

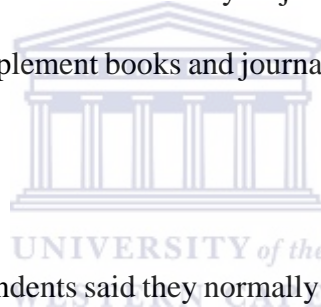
AVAILABILITY OF MATERIALS	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
YES	3	25	14	23.3
NO	9	75	39	65

Table 14 shows that the majority of lecturers, 75%(9) indicated that they normally did not find the materials they needed in the library while 25%(3) said they normally found the materials they needed. The high percentage in lecturers, 75%(9) not being able to find the materials is an indication that the library's journal stock is not addressing the information needs of users and that perhaps the library's collection development policy is not effective or perhaps that there are no stock control measures which are in place. Some of the lecturers, 58.3%(7) said the reasons they didn't find the materials were that there were limited numbers of journals. Some of the journals were either lost or had limited information. Other reasons included the fact that books and journals were vandalised and that information was unavailable to supplement the limited journals.

With regard to the same question about availability of library materials, 16.7%(2) of the lecturers said that the reasons they didn't find materials was that at times subscription of journals have been terminated and that they encountered problems in relation to the current information that the library possessed. They also reported that journals were either outdated or disorganized. Basically, the findings reveals that there are also problems of recency of information the library possesses.

Most students, 65%(39) indicated that they normally did not find the materials they need in the library. The high percentage of students, 65%(39) attributed the fact that there are outdated journals and old books as the reason why they didn't find library materials they needed in the library. Of these students, 23.3%(14) said they normally found the materials they needed in the library.

The finding revealed that both students and lecturers didn't find the materials they need in the library, which means that the library did not meet the information and research needs of both groups adequately. The finding revealed that the Oral Health Centre library has a limited journal collection and that there are problems of availability of journals. The findings also reflect that there is limited information to supplement books and journals that have been vandalised, lost or stolen.



In overall, 66.7%(48) of the respondents said they normally did not find the materials they need in the library while 23.6%(17) said they did find the materials they need in the library.

#### 4.7 Library obstacles

**Table 15: Nature of library obstacles**

NATURE OF OBSTACLES	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
Availability of Medline & Internet			14	23.3
Library closed during vacations			5	8.3
Photocopy machines			13	21.7
Noise			4	6.7
Old journals/limited materials	5	41.7	14	23.3
Subscription terminated/ Journals lost	2	16.7		

The majority of lecturers, 58.3% (7) indicated that they encountered problems if they want to use the library while 25%(3) of the lecturers said they didn't encounter any obstacles if they want to use the library. The majority of students, 61.7%(37) said they did normally encounter obstacles if they want to use the library while 25%(15) said they did not encounter obstacles if they want to use the library. This finding shows that a high percentage, 61.7% of students encounters

problems if they want to use the library. The finding also revealed that 41.7% (5) lecturers had problems with the library having limited and old journals.

The reasons cited by both lecturers and students for encountering problems included:

- ◆ The fact that the library was closed during lunch and after-hours as well as vacations
- ◆ The fact that the library closes early
- ◆ The availability of computers including the Internet and Medline, which was at times offline.
- ◆ That photocopy machines were difficult to use and that there was unnecessary queuing in the photocopy room in the library. The library has three (3) photocopy machines, two of them are for the use by students while the third one is reserved for staff members.
- ◆ That there is only one computer with the Internet in the library and that the computer laboratory is only opened during library hours.
- ◆ The other reasons included the fact that the computers were old and that recent software programmes should be installed in the computer room. **NB:** When this research was done the Oral Health Centre library was in the process of setting up about 10 computers in the library.
- ◆ That the library was noisy, books and journals out of stock and that library items were not returned on time.

#### **4.8 Times when users encountered obstacles**

**Table 16: Times when users encountered obstacles**

TIMES	LECTURERS		STUDENTS	
	TOTAL	%	TOTAL	%
08H30-10H30	1	8.3	1	1.7
10H30-12H30	1	8.3	4	6.7
12H30-14H30	3	25	11	18.3
14H30-16H30			9	15.0
08h30-16h30 (All the times)			13	21.7

Of the lecturers, 25%(3) said they encountered obstacles between 12h30-14h30, 8.3%(1) of the lecturers said they encountered obstacles between 08h30-10h30, the same percentage of lecturers 8.3%(1) said they encountered obstacles between 10h30-12h30. The finding reveals that most lecturers encountered obstacles between 12h30-14h30.

In relation to students, the majority of them, 21.7%(13) said they encountered obstacles every time and that the time frames during which they encountered obstacles at times differed. There were 18.3%(11) of the students who reported that they faced problems between 12h30-14h30 while those who said they found obstacles between 14h30-16h30 amounted to 15%(9). There were 6.7%(4) of students who said they encountered obstacles between 10h30-12h30 while 1.7%(1) said they found problems between 08h30-10h30

This finding reveals that the times when users encounter problems were particularly during 12h30-14h30 and every time. The above percentage confirms this fact.

In overall, there were 61.1 (44) respondents who encountered obstacles all the time. Of these

respondents 19.4% (14) said they encountered problems between 12h30-14h30. Equally the same percentage 19.4% (14) said the time they encountered obstacles varied. There were 12.5% (9) of the respondents who reported that they encountered problems between 14h30-16h30 while 6.9% (5) said they faced problems between 10h30-12h30. The percentages, 19.4% (14) is an indication that obstacles were normally encountered by lecturers and students all the time and especially during lunches i.e. between 12h30-14h30. The percentage, 9.4% (14) is an indication that lecturers and students did encounter obstacles especially during lunch times i.e. between 12h30-14h30. The reason for lecturers finding obstacles might be that during this time most of the students are also using the library. The majority of students, 18.3% (11) on the other hand said that the times they encountered obstacles were during the periods 12h30-14h30.

#### **4.9 Data analysis: library staff questionnaire**

Of the 3 questionnaires that were distributed to the library staff, all 3 were received back i.e. a response rate of 100%. Two of the library staff members had a Library and Information Science qualification and one i.e. student assistant did not have the Library and Information Science qualification. The librarian has 12 years experience, assistant librarian 4 months while the student assistant had 3 months experience.

On the question of whether they as library staff had observed any obstacles that hinders users working in the library, 2 of the library staff members said “ Yes”. While there was a missing value on the third respondent, meaning that the question was not answered. There was an open-

ended space where library staff could list the nature of problems encountered.

More staff members (2) mentioned noise in the passage as one of the obstacles they encountered. This was followed by lack of computer equipment. The last respondent's questionnaire had a missing value, which meant that the question was not answered. When asked about the busiest periods in the library, 2 of the respondents said exam time was the busiest period. Between these two library staff members, 1 library staff member said the busy periods in the library was between 15h30-16h30 whilst the other said between 17h00-17h30. The other library staff member said the library was usually busy during exam time, when students were writing assignments and tests.

In contrast, the majority of lecturers, 33.3%(4) cited that they used the library between 12h30-14h30 whilst 31.7%(19) of students indicated that they used the library between 10h30-12h30. This showed a level of inconsistency in the library staff response as compared to both the lecturers and students. It is assumed that perhaps the inconsistency is as a result of the level of experience of both the assistant librarian and the library assistant. The times when the library was used by students and lecturers revealed that the most busiest periods in the library according to the responses of the majority of lecturers, 33.3% (4) was between 12h30-14h30. The majority of students, however, cited using the library between 10h30-12h30 and this was followed by 26.7%(16) students who indicated that they used the library between 12h30-14h30.

The reason for this discrepancy as to when are the busiest periods in the library maybe that the library staff do not engage themselves in doing the quantitative analysis of library visits nor take



note of the importance of recording library visits for them to do an analysis of the busiest time periods in the library.

On the question regarding the perceived reasons of the library staff as to why do they think that students and lecturers use the library? All of the respondents gave different answers. All three staff members said that students used the library to trace references; two said they used the library to search the Internet, to return and renew books, to consult journals, to study and to read newspapers. This partly relates to the response of students.

The majority of students, 86.7%(52) said that their purpose for using the library was to photocopy, 81.7%(49) consulted journals 76.7%(46) consulted books while 73.3%(44) consulted reference material. One of the respondents said students used the library to socialise with friends and send e-mail. The other question relates to the reasons why lecturers use the library. Two of the respondents said lecturers used the library to photocopy, to obtain oral health information, research, information for clinical practice, biomedical information, for drug related information and for treatment information. One respondent said lecturers used the library to get more information.

There is no correlation between what the library staff thinks the lecturers use the library for and the actual reasons as indicated by the lecturers. In contrast, 91.7%(11) said they used the library to consult journals. Of these 75%(9) said they use the library to consult reference materials whilst 66.7%(8) said they use the library to borrow library items. Two (2) of the library staff members said lecturers used the library to photocopy, for seeking oral health information, for seeking biomedical information and for research purposes.

In relation to the services used by students, one of the respondents said students only borrowed books; two said students used online services whilst one of the respondents said students used reference and consultation services. This question was only posed to the library staff. With regard to the services used by lecturers, three of the respondents said reference services were services used by lecturers while one of them also noted interlibrary loans as a service that was used by lecturers.

Asked whether the library does provide an excellent service to its users, all three respondents said they provided an excellent service. The reasons why they said they provided an excellent service was that according to them:

- ◆ No complaints were received
- ◆ Users receive “everything” they want “anytime” in the library
- ◆ Users are normally assisted to locate books in the shelves.

Lecturers and students cited that they encountered obstacles every time they want to use the library, which is an indication that the library does not provide an excellent service. The fact that 50%(6) of lecturers ranked the service provided by the library as average and 56.7%(34) of students ranked the library as average showed that the library is not providing an excellent service to its users.

When asked whether the library has a service desk other than the reference desk designated for users to obtain “directional” information. The purpose of the two desks will be for providing online help to users in the library, for assisting users in retrieving and locating materials using

Medline and the Internet. These service desks will have the role of assessing, evaluating and drawing training programs for library users on how users can carry out their research without relying heavily on the assistance of library staff members. In short, the desk will also be involved in information literacy for library users.

Two of the respondents said there was no designated service desk where users could obtain directional information. The third respondent did not answer the question. Asked about the barriers of the library not having a service desk for users, two of respondents noted that space, cost and need were the reasons why the library didn't have such a service desk for users of the Oral Health Centre Library. The researcher has also noted the fact that the library is too small and that space was needed to build a good collection to support the curricula of the faculty of dentistry in training dentists and oral hygienists.

In relation to the equipment that the library possesses, all the respondents said that the library had photocopying machines, computer for staff use only, slide projector and viewer and computer printer for staff. The library staff was also asked whether they have users who cannot locate information in the library. Two of the respondents said "Yes" they do have users who can't locate information in the library.

In contrast, 66.7%(8) lecturers said the library does not have adequate information while 51.7%(31) students also said the library does not have adequate information. It remains the sole responsibility of the library to educate the users about its collection and if they can't locate or

gather information the library must be able to provide such information. The third respondent said “No” the library doesn’t have users who cannot locate information in the library.

Asked to provide reasons why they say “Yes” to the question, two of the respondents said that the lecturing staff can place greater demands on students to refer to library material rather than supply them with notes and this “forces: students to find the material”. Others said librarians must not direct users to information, but must refer them to information. They said that users should locate information themselves, failure for them to locate information will result in them not developing intellectually and acquiring enough knowledge. There seems to be no closer working relationship between the lecturing staff and the library.



## **CHAPTER 5**

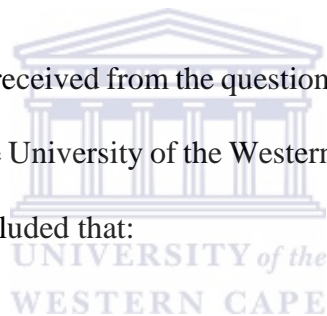
### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Conclusion**

The objectives of this study were to determine the information seeking behaviour of the dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre in Mitchell's Plain. In pursuance of this purpose the following objectives were identified:

- ◆ The usage of the Oral Health Centre library sources by lecturers and students
- ◆ The information seeking behaviour of dental lecturers and students
- ◆ Whether the library is able to meet the information and research needs of dental lecturers and students
- ◆ The barriers to information provision at the Oral Health Centre library and how to overcome these barriers.

Based on the responses that were received from the questionnaires that were distributed to both dental lecturers and students at the University of the Western Cape's Oral Health Centre library in Mitchells' Plain, it can be concluded that:



- ❖ The majority of respondents, 83.3%(60) used the Oral Health Centre library to consult journals, 79.2% used the library to photocopy and about 73.6% of these respondents used the Oral Health Centre Library to consult books and reference materials while 65.3%(47) used the library for borrowing items.
- ❖ The library was busy between 12h30-14h30 (31.9%) users attest to this fact, followed by 25% who said they used the library between 14h30-16h30 and 23.6% who said they used the library between 10h30-12h30. In contrast to this library staff said that the library was busy

during exams and during 15h30-16h30 and 17h00-17h30 respectively. This shows a level of inconsistency on the responses by both the library staff, students and lecturers. The explanation or assumption might be that non-library users and some students might be using the library as a place to study.

- ❖ The Oral Health Centre was used more than once a week by respondents (44.4%). The usage of the library is a positive indication; this means that the library should upgrade its stock.
- ❖ Indexing journals were used once per month and fortnight by all respondents (27.8%) of the overall percentage attest to this fact. The frequency of use of indexing journals shows their importance in the library, particularly with regards to lecturers who said they used them every day.
- ❖ The majority of respondents, 84.7% cited the use of journals and the Internet (66.7%) as the preferred sources of information. Journals and the Internet have been cited as the most preferred sources of information.
- ❖ The majority of respondents, 88.9% cited that they would like to use journal articles for research purposes, 55.6% said they would like to use audio-visual materials while 48.6% said they would like to use handbooks and manuals. This means that both lecturers and students placed great emphasis on the use of journals for use in research.
- ❖ The majority of the respondents, 75% said the place or location of their information was the University of the Western Cape's Oral Health Centre Library and 59.7% of the respondents cited the local university libraries as the place where they found extensive information

relating to their courses. This means that lecturers and students placed value on their library although they were of the opinion that the library didn't have adequate information. The assumption is that the library is perhaps at times more closer to them and accessibility to other libraries might be the problem since it might cost a lot of inconvenience to both lecturers and students to travel to other institutions in the province to gather and access information.

- ❖ The majority of respondents, 66.7% said they didn't find the materials they need in the library, which means that the library was not meeting their information and research needs.
- ❖ The majority of the respondents, 54.2% said the library does not have adequate information, which means that the library is not able to meet their information and research needs.

The analysis of the results of the survey suggests that although 75% of the respondents said the location of their information was the Oral Health Centre library, 83.3% said they used the library to consult journals. The findings obtained from the study suggest that except for the few needs i.e. outdated and limited books and journals, photocopy machines being difficult to operate, subscription been terminated a need for access to more extensive literature collections and relevant information being made available the information seeking behaviour and needs of the dental faculty lecturers and students were being met.

## **5.2 Recommendations**

As mentioned in Chapter One the University of the Western Cape's Dentistry Joint Faculty and

Hospital Management Committee together with the Provincial Health Services has an obligation to ensure that the library is the best source of information for lecturers and students, particularly when the Centre has also been recognised as a WHO (World Health Organisation) Collaborating Centre. While the majority of users are of the opinion that the Oral Health Centre library is inadequate in providing the latest journals, one must also be careful and mindful of the fact that the library's resources are not tapped enough at times to find relevant and recent information.

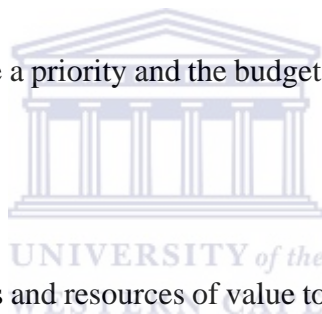
This might be the fact that library users don't know how to retrieve, analyse, package and evaluate information that is critical to their task performance as dentists and oral health practitioners. Hence, there is a need for the library to run information literacy classes to educate users on how to organise, retrieve and use information for decision-making in their task performances.



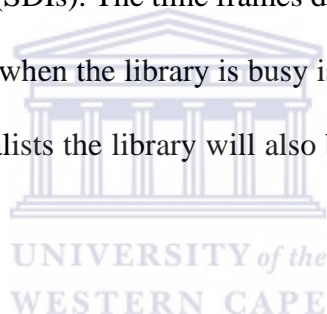
**The following recommendations are made in terms of the University of the Western Cape's Oral Health Centre Library in achieving the stated objectives:**



- ❖ The library should respond to the challenge which technology brings with new electronic formats of accessing information, Print materials should not be the only collection that the library can rely on. The library must take advantage of using new electronic formats of accessing information as this could be of assistance in terms of storage space.
- ❖ Accessibility of high-resolution multi-media computers with Internet should be given a priority in this information era.
- ❖ The library must upgrade its stock and services to a level where it can meet the information and research needs of lecturers and students.
- ❖ Purchase of journals should be a priority and the budget allocation for the library should be increased.
- ❖ The library must offer services and resources of value to lecturers and students. The library must market its resources and activities, since this will benefit both the library and the faculty. Both the library staff and library users can benefit from this exercise, e.g. brochures, pamphlets could inform users about the new books that the library has acquired. User education and information literacy sessions in the library should be provided to educate users in the effective use of the library and resources.
- ❖ The library must provide comprehensive literature searches and current awareness service to lecturers and students since the library's information services according to the findings are average.



- ❖ The librarian must also work with the faculty to develop informational and educational programs related to health issues e.g. Oral health.
- ❖ The librarian must network with other agencies, organisations and individuals to facilitate resource sharing of oral and health information.
- ❖ The Library must be adequately staffed and financed. The library should seek to services of 2 qualified reference librarians to ensure the availability and efficient use of informational resources, to provide literature services these include reference service, selective dissemination of information (SDIs). The time frames during which the library is used and the inconsistency on the time when the library is busy is cause for concern. In seeking the services of information specialists the library will also be able to focus its attention on its users.



By doing this the library will support the faculty's tasks of teaching, research, studying and management. This in turn will enable the library to fulfil the information needs of the teaching and research programmes of the dental faculty.

*It is envisaged and considered that a collection development policy and stock control policy be developed to:*

- ❖ Act as a tool and guide for library staff to be responsive, innovative and efficient in providing

information that is relevant to the current and changing patterns of information needs in this information era

- ❖ Act as a practical guide to assist the Faculty Library Joint Selection Committee, Academics and library staff in the selection, acquisition and weeding of the material the library receives.

The University of the Western Cape's Oral Health Centre Joint Faculty management and Provincial Health Services should also consider space in order to consider the future of their library.

In concluding, it is not being claimed that this study has given definitive answers to the obstacles in the Oral Health Centre library. However, the researcher would like to suggest that the study is a foundation in medical and dental librarianship, where particularly in South Africa we have about 6 dentistry schools in the country. And particularly, because a lot of research in medical librarianship hasn't been done in South Africa.

### **5.3 Suggestions for further research**

*The most important areas for further research are:*

- ❖ Whether the information seeking behaviour of dental faculty lecturers and students at UWC are similar or differ to that of other dental lecturers and students in South Africa.
- ❖ The differences between the information seeking behaviour of lecturers and students at universities and technikons, the extent to which technikon and university education influences information seeking behaviour of lecturers and students.
- ❖ To evaluate whether both lecturers and students are information literate and to assess, evaluate their use of computer systems and information technology for information retrieval purposes.

In conclusion, information is a most important asset in today's modern society. Knowing how to use a computer especially a personal computer is currently considered a basic and necessary skill for one to succeed in business or to function effectively in society. However, knowing how to use a computer is indeed not enough. Computer literacy must be coupled with information literacy.

In this 21<sup>st</sup> century most occupations now requires the ability to use a computer and since new computer applications are being drawn everyday, it remains the role of the librarian to ensure that the library's clientele is both computer and information literate.

## **Bibliography**

Ashin, E. 1983. Library service to dental practitioners. **Bulletin of the medical library**

**association**, 71(4): 400-402.

Beal, C.1979.Studying the public's information needs. **Journal of librarianship**, 11(2):130-151.

Binger, J.L and Huntsman, A.J.1979. Keeping Up: the staff development educator and the professional literature. **Nurse educator**, 4:19-22.

Boaz, Martha (ed),1981. **Strategies for meeting the information needs of society in the year 2000**. Littleton, Colorado: Libraries Unlimited.

Bowden, V.M. et.al 1994. Assessment of physicians' information needs in five counties. **Bulletin of the medical library association**, 82(2): 189-196.

Brittain, J. M.1970. **Information and its users. A review with special reference to the social sciences**. Bath University:Oriel Press.

Burton, J.1994. " The history of medical libraries: medical library history" **New Zealand Libraries**, December, 47(12): 226:229

Busha, C.H.and Harter, S.P.1980. **Research methods in librarianship: techniques and interpretation**. New York: Academic Press.

Carmel, M.1981. **Medical librarianship**. London: The Library Association.

Cheng, G.Y and Lam, L.M.1996. Information-seeking behaviour of health professionals in Hong Kong: A survey of thirty-seven hospitals. **Bulletin of the medical library association**, 84(1): 32-39.

Childers, T.1975. **The information-poor in America**. Metuchen, N.J: Scarecrow Press.

**Compton's Encyclopedia & Fact-Index** .1996. Chicago: Compton's Learning Company.

Corcoran-Perry, S and Graves, J.1990. Supplemental-information seeking behaviour of cardiovascular nurses. **Residence Nurse Health**, 13:119-127.

De Bruin, H. 1985. The role of the library service in the university. **Mousaion**, 3(2) 2-9.

Goodyear, M. Qualitative research: is this the industrial revolution or are we re-inventing the wheel? **Market Research Society Newsletter**, 254, May 1987, 26-27.

Gravois, S et. al 1995. Information seeking practices of Hygienists. **Bulletin of the medical library association**, 83(1): 446-451.

Gravois, S.L.1993. **Dental hygienists information seeking and computer application practices**. MA thesis: San Jose State University.

Haffajee, G.H.1981. **Information gathering habits among bio-medical users of the medical library, University of Natal.** M.Bibl Thesis: University of Natal

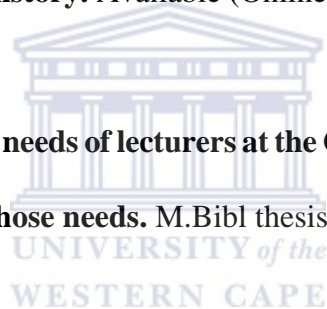
Harrop, Cherry. 1983. The information needs of undergraduates project .In **Third International conference on library user education proceedings, University of Edinburgh 19-22 July 1983**

Loughborough: INFUSE publications.

Heaton,G.T.1996. Rethinking the provision of reference services in academic medical school libraries. **Bulletin of the medical library association**, 84(1): 17-25.

Hooper,V.1997. **Calico-A brief history.** Available (Online) [www.adamastor.ac.za](http://www.adamastor.ac.za)

Kerkham, A.S.1986. **Information needs of lecturers at the Cape Technikon and the ability of the Technikon library to meet those needs.** M.Bibl thesis: University of Cape Town.



Kidder, L. H. 1981. **Research methods in social relations.** 4<sup>th</sup> ed. New York: Holt, Rinehart and Winston.

Kloppers, M.1991. The academic law library in South Africa with reference to Unisa's law library. **Mousaion**, 9 (1):113-117.

Kotze, D.A. 1980. **Library services for developing communities.** Pretoria: Unisa.

Kruger, J.A. 1983. Abstracts of master's theses and doctoral dissertations in Library and Information Science completed at South African Universities. **Mousaion**, 1 (2):15-102.

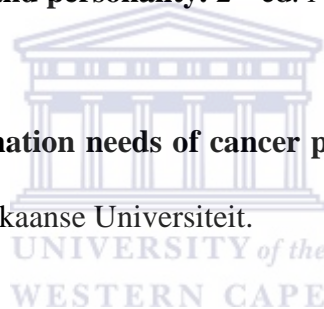
Kruger, J.A and Fourie, J.A.1995. Basic and developmental information needs of secondary school pupils. **Mousaion**, 13 (1/ 2): 225-227

Line, M.B.1969. Information requirements in the social sciences: some preliminary consideration. **Journal of Librarianship**, 1(1): 1-19.

Lundeen, G. et. al 1994. Information needs of rural health care practitioners in Hawaii. **Bulletin of the medical library association**, 82(2): 197-204.

Maslow, A.H.1970. **Motivation and personality**. 2<sup>nd</sup> ed. New York: Harper and Row.

Mcloughlin, H.1994. **The information needs of cancer patients in the Republic of South Africa**. M.Bibl Thesis: Rand Afrikaanse Universiteit.



Musiker, Reuben. 1986. **Companion to South African libraries**. Johannesburg: AD.Donker.

Myers, Glenda.1995. From apartheid to integration: the role of the Witwatersrand Medical Library in health care services in Johannesburg, South Africa. **Bulletin of the medical library association** 83(1) 71-77.

Pastine, M. & Wilson, L.1992. Curriculum reform: The role of academic libraries. In **The Evolving educational mission of the library**. Chicago: Association of College and Research Libraries pp 90-108.



Picken, F.M & Kahn, A.M.1986. **Medical Librarianship in the eighties and beyond: A world Perspective.** London: Mansell Publishing.

Powell, Ronald.1991. **Basic research methods for librarians.** 2<sup>nd</sup> ed. Norwood, New Jersey: Ablex Publishing Corporation.

Rees, A.M.1963. Information needs and pattern of usage. In **Information Retrieval in Action,** Cleveland, Ohio: Western Reserve University Press, 17-23.

Roberts, N.1975. Draft definitions: Information and library needs, wants, demands and uses: a comment. **Aslib Proceedings,** 27 (7): 308-313.

Shillinglaw, N. & Thomas, W.1988. **The Information society.** Johannesburg: AD.Donker.

Smith, J.G.1981. **The information requirements of natural scientists and engineers at academic institutions with special reference to the University of the Cape Town.** M.A (librarianship) Thesis: University of Cape Town.

Spath, M and Buttlar, L. 1996. Information and research needs of acute-care clinical nurses. **Bulletin of the medical library association,** 84(1): 112-116.

Stueart, Robert. 1982. **Information needs of the 80's.** Foundation in Library and Information Science, Volume 15, London: Jai Press.

Theron, Francois and Fielding, Michael.1981. **Resources and methods.** Cape Town: Oxford

University Press.

Thornton, J. L.1963. **Medical librarianship: principles and practice.** London: Crosby Lockwood and Son Limited.

Van Zijl, P. 1987. The South African society in transition: the needs of the black sector. **South African Journal of Library and Information Science**, 55(2): 142-145.

University of the Western Cape **Perspectives**, winter 2000. “ Faculty of dentistry rooted in community”. Public affairs department: University of the Western Cape.

Wildemuth B.M. et. al 1994. Information seeking behaviour of medical students: a classification of questions asked of librarians and physicians. **Bulletin of the medical library association**, 82 (2): 295-304.



Wilson, T.D.1981. On user studies and information needs. **Journal of Documentation**, 37 (1): 3-15.

## APPENDIX 1

University of the Western Cape  
C/o Department of Library &  
Information Science  
Private Bag x 17  
Bellville  
7535  
21 February 2000

The Faculty Officer  
Faculty of Dentistry  
University of the Western Cape  
Private Bag x 08  
Mitchell's Plain  
7785

**Re: Postgraduate Research survey**

Dear Sir/Madam

I am currently a registered M.Bibl student at the University of the Western Cape. I am presently conducting a survey research study under the direction and supervision of Professor G.H Fredericks. The survey research is entitled: - *A survey of the information seeking behaviour of the dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre Library*".

The main objective of this study is to determine the information and research needs of the dental faculty lecturers and students and the Oral Health Centre's ability in meeting those needs. Basically, this survey research is aimed at finding solutions for the lecturers and students and how best the Oral Health Centre can improve its information services for both lecturers and students.

Questionnaires will be used for data collection and it is intended that these questionnaires would determine the objectives or usage of the Oral Health Centre library sources.

I hereby request permission from your faculty to pursue such a study in fulfilment of my Master's degree in library and information science for the academic year 1999-2000.

Thanking you in anticipation

Yours sincerely

.....  
Tshipinare Renard Marumo (Mr)



**APPENDIX 2**



### **APPENDIX 3**

**Questionnaire on the information seeking behaviour of dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre, in Mitchell's Plain**

The purpose of this questionnaire is to determine the information and research needs and usage of users of the Oral Health Centre of the University of the Western Cape, Mitchell's Plain. It will be appreciated if you can find the time to complete the questionnaire.

The information will be regarded as confidential and you'll remain anonymous. The data obtained will contribute to the completion of the M.Bibl mini-thesis under the supervision of Professor G.H. Fredericks, Department of Library and Information Science, University of the Western Cape.

Please note that you are under no obligation to answer the enclosed questions.

Thanking you for responding and for your valuable time.

Yours Sincerely

-----  
Tshipinare Renard Marumo



**Questionnaire on the information seeking behaviour of dental faculty lecturers and students at the University of the Western Cape's Oral Health Centre**

**Section A: Personal Profile**

Please tick with an X in the appropriate box. You may place the tick in more than one box.

Undergraduate student

Postgraduate student

Academic staff

Other (please specify) .....

**Section B : Information and Research needs of dental students and lecturers**

1. How do you keep up to date with your course ?

(i) By reviewing journals

(ii) Discussing with colleagues

(iii) Attending conferences

(iv) By surfing the Internet

(v) Scanning indexes and abstract journals

(vi) Other ( Please specify) .....



2. Where do you find extensive information relating to your course ?

(i) Public libraries

(ii) Professional institutes

(iii) Local University libraries

(iv) Research organisations eg.( Medical Research Council)

(v) UWC's Oral Health Centre

(vi) Colleagues or co-students

(vii) Co-students

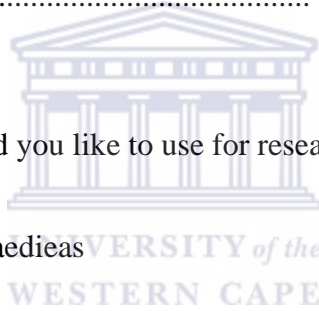
(viii) Other (please specify) .....



UNIVERSITY *of the*  
WESTERN CAPE

3. If you need information on a certain or specific topic do you:

- (i) Browse in the library
- (ii) Consult the librarian
- (iii) Surf the Internet
- (iv) Consult colleagues in the university
- (v) Consult colleagues outside the university
- (vi) Visit local libraries
- (vii) Other(please specify) .....



4. Which information sources would you like to use for research purpose ?

- (i) Reference works like encyclopaedias
- (ii) Conference proceedings reports
- (iii) Journal articles
- (iv) Newspapers and periodicals
- (v) Handbooks and manuals
- (vi) Audio-visual materials
- (vii) Other (please specify) .....



5. What are your preferred sources of Oral health information ?

(i) Journals

(ii) Colleagues

(iii) Conferences

(iv) Librarian

(v) The Internet

(vi) Other( please specify) .....

6. How frequently do you use the Oral Health Centre library ?

(i) Everyday

(ii) More than once a day

(iii) More than once a week

(iv) Other (please specify).....



7. What are the reasons for using the Oral Health Centre library ?

- (i) To consult books
- (ii) To return borrowed library items
- (iii) To read recent books
- (iv) To consult reference materials
- (v) To meet colleagues
- (vi) To request interlibrary loans
- (vii) To work with your own documents
- (viii) To consult journals
- (ix) To borrow library items
- (x) To photocopy material
- (xi) To read newspapers
- (xii) Other ( please specify) .....

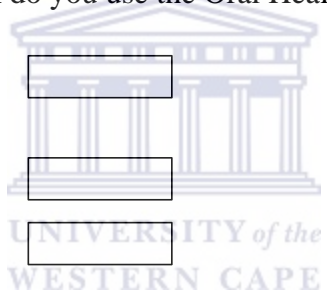


8. If you don't use the Oral Health Centre library, what are the reasons for not using it ?

- (i) My personal collection is adequate
- (ii) Library is inaccessible
- (iii) Oral Health Centre library does not have adequate information
- (iv) Other libraries are more convenient
- (v) Other reasons? (please specify) .....

9. During which hours of the week do you use the Oral Health Centre library ?

- (i) 08h30-10h30
- (ii) 10h30-12h30
- (iii) 12h30-14h30
- (iv) 14h30-16h30



10. Approximately how often do you use indexing journals ?

- (i) Once a day
- (ii) Once per fortnight
- (iii) Once per month
- (iv) Once bi-monthly
- (v) Once per semester
- (v) Once per year/ annum
- (vi) Never
- (vii) Other ( please specify) .....



11. What information sources do you use for lecture preparation ? (To be completed by lecturers only)

- (i) Journal articles
- (ii) Newspapers
- (iii) Published Conference proceedings
- (iv) Others (please specify).....

12. As a library user how would you rank the service provided by the Oral Health Centre ?

Excellent	Good	Average	Poor

13. Indicate how you would rank the Oral Health Centre in supplying the following information service ? (Please tick with an X in the appropriate box).

(i) Provision of books, journals

Excellent	Good	Average	Poor

(ii) Provision of current awareness service

Excellent	Good	Average	Poor

(iii) Provision of information sources on interlibrary loans

Excellent	Good	Average	Poor

(iv) Provision of answers to specific queries

Excellent	Good	Average	Poor

14. What are your reasons for seeking Oral Health Information ?

- (i) To keep up to date with latest developments
- (ii) To study for a qualification
- (iii) To train others
- (iv) To do research
- (v) For Oral Health Care purposes
- (vi) Other ( please specify) .....

15. When using the Oral Health Centre library, do you normally find the materials you need ?

<b>YES</b>
<b>NO</b>



If yes why do you say so ?

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If no why do you say so ?

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16. Do you normally encounter obstacles if you want to use the library ?

<b>YES</b>
<b>NO</b>

If yes, please specify

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If no, why not ?

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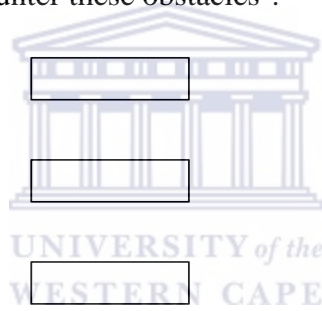
17. During what hours do you encounter these obstacles ?

(a) 08h30-10h30

(ii) 10h30-12h30

(iii) 12h30-14h30

(v) 14h30-16h30



## APPENDIX 4

### **Questionnaire on the information seeking behaviour of dental lecturers and students at the University of the Western Cape's Oral Health Centre, in Mitchell's Plain.**

Dear Library Staff

I am doing a survey of the information and research needs of dental faculty lecturers and students. The purpose of the survey is to determine the information and research needs and usage of the Oral Health Centre library by students and lecturers. It will be appreciated if you can be kind enough to help with this survey by completing the attached questionnaire.

The information will be regarded as confidential. The data obtained will contribute to the completion of the M.Bibl mini-thesis under the supervision of Professor G.H. Fredericks, Department of Library and Information Science, University of the Western Cape.

Please note that you are under no obligation to answer the enclosed questions.

Thanking you for responding and for your valuable time.

Yours Sincerely

-----

Tshipinare Renard Marumo



## Questionnaire for the library staff

Please place a tick (x) next to the appropriate responses.

1. What is your status in the library?

Librarian (with LIS qualification)

Librarian (without LIS qualification)

Assistant Librarian (with LIS qualification)

Assistant Librarian (without LIS qualification)

Library Assistant



2. For how long have you worked in the Oral Health Centre Library?

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3. Are there obstacles that you have observed that hinder users working in the library?

<b>Yes</b>
<b>No</b>

If your answer is YES in question 3, what are these obstacles?

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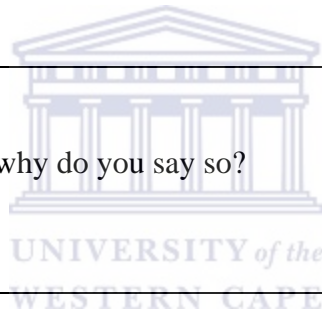
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If your answer is NO in question 3 why do you say so?



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4. What is the loan period for library material in your library?

For undergraduate students -----

For postgraduate students -----

For lecturers -----

5. What are the busiest periods in your library?

Between 08h30- 09h30

Between 10h30- 11h30

Between 12h30-13h30

Between 14h30-15h30

Between 15h30-16h30

Other (please specify) .....



6. Why do students use the library?

To return books

To renew books

To consult journals

To trace references

To study

To read newspapers

Other purpose (please specify) .....



7. Why do lecturers use the library?

To obtain Oral Health research

For clinical practice

For treatment information

For bio-medical information

For drug information

Other (please specify) .....

8. Which services do students mostly use?

Reference services

Interlibrary loans

Consultation services

Online services

Others (please specify) .....

9. Which services do lecturers mostly use?

Reference services

Interlibrary loans

Consultation services



Online services

Others (please specify) .....

10. Are you able to provide an excellent service to your users?

<b>Yes</b>
<b>No</b>

If YES why do you say so?



If NO what are the reasons?

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11. Do you have a service desk (other than the reference desk) designated for users to obtain “directional” information?

<b>Yes</b>
<b>No</b>

If YES, please specify



If NO what are the barriers to your library not having a service desk?

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12. What equipment is available in your library ( Tick all that apply)

Photocopy machine

Public Access computer

Computer for librarians & staff only

Slide projector/viewer

VCR player/TV monitor

Others (please specify) .....



13. Do you have users that cannot locate Oral Health information in the library?

<b>Yes</b>
<b>No</b>



If your answer is YES in question 13 how do you think this can be solved?

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If your answer is No in question 13. Say why do you say so?

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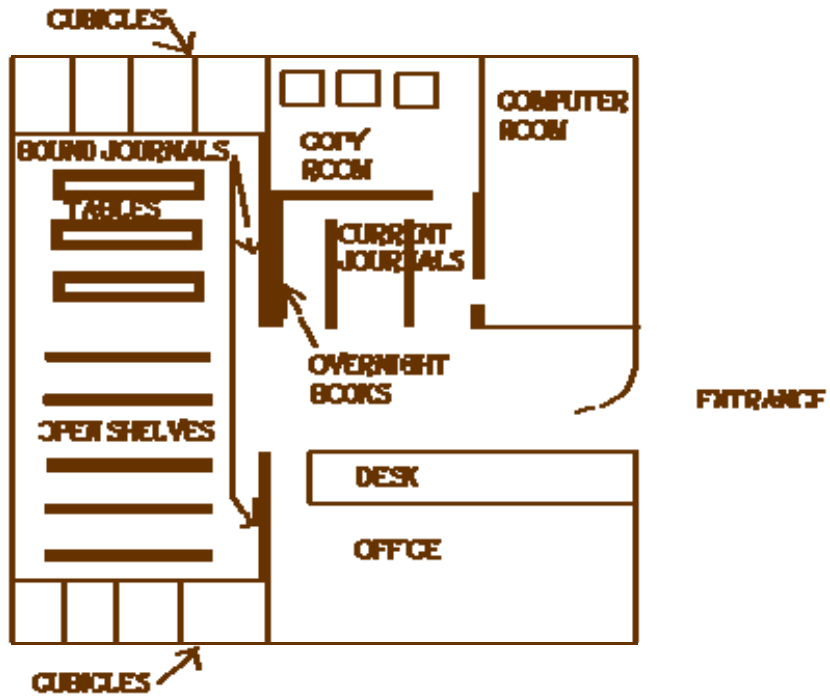
The logo of the University of the Western Cape, featuring a classical building with a pediment and columns, with the text "UNIVERSITY of the WESTERN CAPE" below it.

## APPENDIX 5



**APPENDIX 6**

**FLOOR PLAN**





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