PROBLEMS FACING DENTAL STUDENTS AT THE UNIVERSITY OF NAIROBI AND THE PERCEIVED EFFECTS ON THEIR ACADEMIC PERFORMANCE.

Research proposal submitted in partial fulfillment of Bachelor of Dental Surgery Degree of University of Nairobi 2005

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List of Abbreviation

1). BDS- Bachelor of Dental Surgery.
2). UON-University of Nairobi.
3). FDS-Faculty of Dental Sciences.
Summary

Dental students all over the world face several problems. These could be classified as social, economic, financial and emotional. These problems normally manifest as stress and depression. If not addressed these problems are likely to impact negatively on the performance of the students.

A descriptive cross sectional study will be conducted among 151 University of Nairobi Dental Students. The aim of the study will be to audit the problems faced by dental students and to Assess whether they perceive them as a hindrance to their ultimate academic performance.

A self-administered questionnaire will be used to collect information. All students currently admitted at the University of Nairobi to pursue the BDS degree course will be included.

The findings from this study could be used by the University and other authorities to design programmes which will improve the overall students’ welfare.
Introduction

A student is motivated to learn and achieve high level by the messages he receives from his entire surrounding; family; community, his employer and his culture. Both students and the education providers have considered the dental course stressful. Generally students undergo problems of one form or the other. These problems can be academic, financial, social or emotional (1)

The problems may be compounded by the fact that some students did not choose dentistry as their first choice. Studies have shown that up to 80% of the students pursuing dentistry were not adequately prepared for the course (2)

Several studies done in different dental institution around the world have shown that many students view examinations, fear of failing work load and other course requirements as what many interfere with their learning. Perception of stress may be influenced by one’s personal beliefs and attitudes; social cultural background of student has a strong influence on tolerance and motivation by stress. Stress and associated problems may be expressed as sleeplessness, fatigue, dizziness and changes in cardiac rhythm gastrointestinal distress for example duodenal and gastric ulcers are a common manifestation. Some students result to drugs and alcohol abuse as a coping mechanism. (3)

The general well being of the students depends on effective management of the problems facing them. Therefore the aim of this study is to determine the problems facing the dental students and the perceived effect on their academic performance.
LITERATURE REVIEW

Stress is any situation that evokes negative thoughts and feelings in a person. The same situation is not evocative or stressful for all people, and all people do not experience the same negative thoughts and feelings when stressed.

One model that is useful in understanding stress among students is the person-environmental model. According to one variation of this model, stressful events can be appraised by an individual as "challenging" or "threatening" (4). When students appraise their education as a challenge, stress can bring them a sense of competence and an increased capacity to learn. When education is seen as a threat, however, stress can elicit feelings of helplessness and a foreboding sense of loss.

A critical issue concerning stress among students is its effect on learning. The Yerkes-Dodson law (5) postulates that individuals under low and high stress learn the least and that those under moderate stress learn the most. A field study and laboratory tests support the notion that excessive stress is harmful to students' performance.

Mechanisms that explain why students perform badly under stress include "hyper vigilance" (excessive alertness to a stressful situation resulting in panic--for example, over studying for an exam) and "premature closure" (quickly choosing a solution to end a stressful situation--for example, rushing through an exam). Students react to college in a variety of ways. For some students, college is stressful because it is an abrupt change from high school. For others, separation from home is a source of stress. Although some stress is necessary for personal growth to occur, the amount of stress can overwhelm a student and affect the ability to cope. One measure of excessive stress, or distress, in college students is the use of mental health services. Symptoms commonly reported by campus psychiatrists portray a general picture of school-related stress, for example, the inability to do school work and the fear of academic failure.

A second measure of distress in college students is the dropout rate. Although nationwide figures are difficult to obtain, an estimated 50 percent of entering freshmen do not finish
college four years later (6). Studies of college dropouts associate dropping out with the aversive side of the "fight or flight" formula; that is, students, feeling a mismatch between themselves and their college, wish to distance themselves from the source of stress, the college environment (7). Solutions suggested for reducing distress in college students include "stress inoculation" -- for example, informing students in advance of what difficulties they might face and encouraging them to develop their own strategies to achieve personal goals. Other suggestions include improving campus mental health services and organizing peer counseling and self-help groups.

The accelerated growth in undergraduate programs has also been felt in schools, resulting in an oversupply of degrees. Consequently, graduate students, facing poor employment opportunities when they finish their programs, feel stress associated with the uncertainty of their career choice and future prospects. Often, students perceive that faculty exert great power over their lives and feel that they live in a state of substantial powerlessness (8). Another source of stress is the difficulty of achieving social intimacy. It is difficult to find a mate or maintain a relationship with an existing one. Students tend to lack the time and/or the opportunity to develop interpersonal relationships (9).

Specific tasks that produce stress in undergraduate students are exams and schoolwork. Fear of academic failure related to these tasks is a definite stressor (10).

The dental profession has been considered among the most stressful of all professions. (11) It is widely acknowledged that students find dental education stressful with a number of groups reporting that compared to clinical norms dental students show higher levels of stress related to psychosomatic activity and increased mood disturbance. What is less clear is whether stress has an impact on academic performance (11-12).

Variation of students stress appear to result from internal factors related to their course or to their immediate surrounding (13) Tedesco noted in a discussion paper that the continuous scrutiny of clinical supervisors that typifies dental school learning is highly stressful for students and becomes increasingly so as students progress through their education (14). Studies done on dental students stress conducted in several different
countries for example United Kingdom, USA Singapore, Israel and Australia report generally consistent findings. Specific stressors reported in these studies include many factors relating to the practices of clinical dentistry and patient management; the need to meet academic requirements; interaction with students, colleagues, clinical teachers and support staff and relationships with partners, friends and family (15-16). Lloyd and Musser (17) attribute heightened interpersonal sensitivity in dental students to the excessive demands on performance made by the educators.

Two major stressors consistently identified by dental students themselves are examinations and student-faculty conflict (18). Overall the highest ranked stressors reported for dental for dental students were examinations, fear of failing, or falling behind and completing course requirements. (19) High levels of stress can result in declining student performance (20).

However, many students enrolling to dentistry have inadequate background knowledge of what the course entails. Studies done by Mureithi et al on UON-dental students revealed that 80% of student pursuing dental course felt that they were not adequately prepared for their career at the time of joining the university (2).

Humphris et al, in a survey of dental student from seven European dental schools has described prevalence estimates of 36% for psychological distress and 22% emotional fatigue, it was also reported that almost half of the students were in the clinical range indicating significant psychological disturbance.

Generally, the presence of psychological stressors when prolonged could lead to stress symptoms including anxiety and depression (14). These reports suggest the need for dental educators to appreciate factors related to stress and assist in the development of appropriate problem solving systems and stress-reduction programmes for dental students. It would be more valuable to dental educators to understand more fully those aspects of the academic performance affected by stress (20).
Solutions for alleviating distress include improved orientation for new undergraduate students, more flexibility in core requirements, and expanding the role of faculty advisors. Stress is necessary to challenge students to learn. Approaches are needed that reduce the negative aspects of stress (distress), which lessens students' learning and performance.

The key to reducing distress is providing students with a feeling of control over their education, information about what to expect, and feedback regarding what can be done to improve their performance. Students who do not feel helpless will adopt their own coping strategies. Reactive coping, that is, dealing with one's own thoughts and feelings, can be facilitated by accessible professional and peer counseling, student support groups, and adequate faculty advising. Active coping, that is, dealing with the actual stressful situations or events, can be strengthened by providing students with early success. Good teaching cannot be overestimated as a key to preventing and minimizing distress among students. Of course, faculty may not be good teachers if they are themselves stressed and if they feel unrewarded for good teaching. How to reduce stress among faculty and reward good teaching are questions for further study (9).
Research Problem

Problem Statement
The dental learning process is perceived to be hard and very challenging and this is made harder by other problems not related to academic work. Many students do not express these problems outwardly since they feel that these problems may not be solved or handled adequately. These problems may affect them both in their academic work, physical and mental health.

Study Justification
Many studies have been done around the world to determine problems facing dental students but there is scanty information on the problems facing dental student in developing countries including Kenya. The aim of this study therefore is to determine the problems facing dental students and the perceived effects on the academic performance. The data and information collected during this study will be used by educators to formulate programmes that will help in identification of these problems and ways to improve the learning environment of dental students.
Main Objectives
To determine the problems facing University of Nairobi Dental students and perceived effects on their academic performance

Specific Objectives
1. To determine the knowledge of dentistry as a career choice.
2. To determine the types of problems facing the dental students.
3. To determine the perceived effects of these problems on their academic performance.

Hypothesis
Many dental students face problems not related to their academic work but feel that these problems have an effect on their academic performance.

Variables Investigated
Independent Variables
- Age
- Gender
- Year of study
- Ethnicity

Dependent Variables
- Students’ perception of the problems facing them.
- Students’ attitude
- Problems faced by the students
Material and methods

Study area
This study will be conducted in Nairobi, the capital city of Kenya. Study centers will include Chiromo campus where the 1st year dental students hold their classes. It’s situated on Chiromo road off Waiyaki way about 2 km from the central business district, Kenyatta national Hospital where the 2nd year dental students hold their classes, situated on Ngong road about 3km from the central business district and at the University of Nairobi Dental Hospital located along Argwigs Kodhek road about 2km from the city center.

Study population
The study population includes all undergraduate students pursuing the BDS degree course at the UON.

Study design
This will be a descriptive cross-sectional study.

Sampling and sample size determination.
All undergraduate students presently pursuing the BDS degree course at the UON during the period of study will be included in the study.
Data collection Instruments and techniques
A self-administered questionnaire with open and closed ended questions will be used. Questionnaires will be issued in the morning of a selected day and collected at the end of the day.

Inclusion criteria
1. All undergraduate students pursuing the BDS degree course at UON who consent to the study.

Exclusion Criteria
1. All the dental students who will not consent to participate in the study.
2. All non-dental students.

Ethical Consideration
1.) Permission to carry out the study there will be sought from the University of Nairobi Ethical Committee.
2.) Permission to carry out the study will be sought from the university of Nairobi authority.
3.) Voluntary consent of the subject Involved in the study will be required before taking part in answering the questionnaire
4.) Information forwarded in the questionnaire will be private, confidential and strictly for research purposes.

Logistical considerations
Problems with access since the students are all based in different locations

Perceived benefits
1. Study will highlight problems facing students pursuing the BDS degree course at the UON.
2. Results will help the authorities to understand the students’ problems and therefore come up with modifications that will ensure comfortable learning of the dental course.
3. Report will be submitted in partial fulfillment of the requirements of bachelor of dental surgery

Data Analysis
Data will be analyzed using SPSS 12 and presented in form of tables, graphs and pie charts. Descriptive statistics mainly frequencies, will be computed.
**Budget**

**Proposal.**
- Pens – 50.00
- Paper ream- 250.00
- Diskettes- 100.00
- Printing and typing services- 1000.00
- Photocopy- 500.00
- Total 1900.00

**Data collection**
- Paper 2 reams - 500.00
- Printing and typing - 1000.00
- Photocopying - 2000.00
- Total 3500.00

**Project.**
- Paper 1 ream - 250.00
- Computer services - 500.00
- Binding- 200.00
- Total 950.00
List of References


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QUESTIONNAIRE

Gender
Year of Study
Age

STUDENTS ATTITUDE

1. Did you have any Career guidance in school?

2. What was your first career choice?

If not dentistry, did you choose dentistry as your
a). 2nd choice
b). 3rd choice
c). Others, specify

3). How do you view the dental course?

4). What greatly motivates you to study dentistry?
a). Prestige
b). To cure the sick
c). Money
d). Others, specify

5). Were you compelled into dentistry?
Yes □
No □
If yes, by whom?

PROBLEMS FACING THE STUDENTS

6). Do you experience any of the following problems?
a). Sleeplessness
b). Fatigue and burnout.
c). Dizziness
d). Suicidal Tendencies
e). Others, specify

7). Do you think the above-mentioned problems affect your academic performance?
Yes □
No □
If yes, how?

8). Do these problems have an effect on your general well being?
Yes □
No □
If yes, specify?

9). How do you cope with problems facing you as a student?
a). Counseling
b). Alcohol
c) Medication.
   i) Sleeping pills
   ii) Anti-depressants
   iii) Analgesics
   iv) Tranquilizers
c). Others, specify

10). Do you feel that the authorities try to make dentistry as comfortable as possible?
Yes □
No □
If yes, How?
If no, explain?

11). With regards to the following what other challenges do you face as a student?
   a) Social

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b) Financial

c) Academic

d) Psychological

12). Do you think anything can be done to improve the dental training course?
Yes ☐
No ☐
If yes, How?

If no, explain

13). Given a chance, what would you change about your academic life as a dental student?

14). Do you intend to practice dentistry?
Yes ☐
No ☐
If yes, full time ☐
   Part time ☐

15). Have you contemplated a change of career?
Yes ☐
No ☐
If yes, to what career?

16) In addition to dentistry have you considered another career?