ORAL HYGIENE PRACTICES AMONG DENTAL AND MEDICAL STUDENTS AT THE UNIVERSITY OF NAIROBI

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A RESEARCH PROPOSAL SUBMITTED IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF BACHELOR OF DENTAL SURGERY DEGREE OF THE UNIVERSITY OF NAIROBI.

DURATION FOUR MONTHS (AUGUST-NOVEMBER 2007)

COST OF STUDY 6360

SOURCES OF FUND SELF
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SUMMARY

Dental caries and periodontal diseases are influenced by the person's way of life. Oral health knowledge and practice may affect their prevalence or slow down the rate at which they progress. In recent years, a wide variety of projects have been undertaken to improve public awareness and knowledge of oral health in general, and periodontal health in particular. This study is to be carried out among the dental and medical students at the University of Nairobi. A cross-section of the students would be taken from the student population to participate in this study. Stratified random sampling would be used to identify the participants in this study and the strata would be based on the course of study. Questionnaires would be administered to the participants by the researcher at the halls of residence. The results of this study would act as a baseline study for future studies on the same subject.

An educated group of the population should have better oral health knowledge and behaviour. Dental and medical students should therefore have a very low prevalence of dental pathology, which should further be lowest among dental students and those in the same line of profession.
INTRODUCTION

Oral hygiene practices involves the thorough daily removal of dental plaque and other debris by tooth brushing, flossing, mouth rinsing and use of other auxiliary aids.\(^1\)

Good oral hygiene practices are preventive measure to oral diseases. Preventive approach to oral diseases is cheaper in terms of cost than curative approach thus good hygiene is more economical in the management of oral diseases. Benefits of good oral hygiene include reduced risks of infective endocarditis in patients with heart disorders, reduced gum infections like abscesses and cysts, reduced incidences of halitosis, reduced prevalence of dental caries and enhanced esthetics.\(^2\)

Methods of achieving good oral hygiene practices include brushing of teeth at least twice a day using a soft toothbrush, daily flossing to clean the interproximal teeth surfaces, going for frequent dental check-ups for early diagnosis of dental diseases, avoiding smoking and sugary foods especially in between meals and eating a well balanced diet.\(^3\)

Medical and dental students should are expected to have good oral hygiene practices because they are better informed of the merits and demerits of good oral hygiene practices. They are thus at a better position to make the best decision on their oral health.
LITERATURE REVIEW

Oral diseases are clearly related to behavior, and the prevalence of dental caries and periodontal disease has decreased with improvements in oral hygiene and a decrease in the consumption of sugar products. This general favorable trend in reducing dental caries, however, has not been seen in several developing countries.4

A study was done by Tenenbaum on 'Impact of a periodontal course on oral hygiene and gingival health among senior dental students' among 50 senior dental students. The course included patient motivation, instruction in oral hygiene procedures and plaque control, scaling and curettage, temporary splinting and occlusal adjustment. No improvement of either oral hygiene or gingival health was noted at the end of the periodontal course. It seems that even some dental students, who should know the direct relationship between bacterial plaque and periodontal diseases and should be better motivated than the average patient, failed to demonstrate effective oral hygiene. It is difficult to expect an improvement of patient oral hygiene, when the patients have been motivated by students who are unable to perform satisfactory personal oral hygiene themselves. It is suggested that a greater emphasis be placed on patient motivation and instruction in oral hygiene throughout the dental curriculum.5

A study done by Jassem Al-Ansari on 'Oral health Knowledge and Behaviour among male Health Sciences College Students' showed that although oral health knowledge does not necessarily relate to better health behavior, people who have assimilated this knowledge and feel a sense of personal control over their oral health are more likely to adopt self-care practices.6 Oral health knowledge was expected to be good among the Health Sciences College students in this study, because it is important content in their professional education, and they need this knowledge to educate patients and the community when they start working in health care system. These students seemed to be well aware about the most important aspects of oral health care, i.e. effects of sugar consumption, effects of fluorides as well as visiting the dentist. However, there seemed to be areas i.e. the role of plaque, periodontal diseases, transmission of oral bacteria, where their knowledge was poor. Other studies have also shown that there is in general much work to do in improving dental health knowledge even among dental hygiene students7, dental students.8
A study done by Anwar Merchant on Oral Hygiene Practices and Periodontitis in Healthcare professionals showed that people who reported better oral hygiene practices did not report less periodontitis, after controlling for potential confounders. Oral hygiene practices were not associated with periodontitis in this population.9
PROBLEM STATEMENT

Continued reported cases of dental pathology at an advanced stage among medical and dental students contradict the expectation of meticulous oral health among them. It may thus be true that whatever is taught in class is only put to practice while in the clinic and not at personal level. Some students still wait until diseases like dental carries have advanced and encroached the pulp before seeking help in the clinic. They are thus compelled by pain just like those who are ignorant about oral health to seek medical intervention. The students seem therefore not to use whatever they are taught in class for their own benefit.

JUSTIFICATION OF THE STUDY

Research is therefore needed to determine the effectiveness of the lectures on the dental students' personal health. The study aims at determining the impact of these lectures and tutorials on the students' personal oral health. The results should be used by the institution to assess the effectiveness of the education given to the students in class on their personal oral health care. This would also help the students integrate more of what they are taught in class and use it for their own benefits as well. Academic standards would also be boosted in such a situation.
OBJECTIVES

Main Objective
To determine whether there is any differences in oral hygiene practices among dental and medical students at The University of Nairobi.

Specific Objective

➢ To determine the oral hygiene practices among dental students
➢ To determine the oral hygiene practices among medical students
➢ To determine the frequency of brushing among dental and medical students.
➢ To determine the challenges faced by dental and medical students in achieving good oral hygiene practices.

HYPOTHESIS

There is a difference in oral hygiene practices between dental and medical students
VARIABLES

Socio-demographic variables

- Age of patient
- Gender of patient
- Year of study in the university

Independent variables

- Career of study

Dependent variables

- Tooth brushing methods
- Tooth brushing frequency
- Interdental cleaning methods
MATERIALS AND METHODS

STUDY AREA

The study will be conducted at the University of Nairobi, School of Dental Sciences for dental students in their second to fourth year of study and at Chiromo campus for the dental students in their first year. Medical students in their second to fifth year of study will be found at the School of Medicine and at Chiromo campus for those in their first year of study.

STUDY POPULATION

The study will be conducted among dental and medical students at the University Of Nairobi.

SAMPLING METHOD

Stratified random sampling will be used to select medical and dental students from the hostels and classes. The stratification will be based on the course undertaken.

SAMPLE SIZE

A confidence level of 95% will be used and a prevalence of 20%. The formula for calculating sample size will be as follows:

\[ N = \frac{Z^2 \times P(1-P)}{C^2} \]

Using the above formula:

\[ N = \frac{1.96^2 \times 0.2(1-0.2)}{0.05^2} \]

=246

Where, \( Z \) = corresponding value of confidence, \( P \) = prevalence, \( C = 1 \)-confidence level (1-0.95)

STUDY DESIGN

The study will be a descriptive cross-sectional study using population based study groups.
INCLUSION CRITERIA

Any medical or dental students who consent to the study.

EXCLUSION CRITERIA

All students who do not consent to participate in the study.
Non-dental and non-medical students

DATA COLLECTION METHOD

Data will be collected by the researcher using a self administered questionnaire. The questionnaires will contain both close-ended and open-ended questions. Some of the variables to be considered include age of the student, frequency of usage of dental services, among others.

DATA ANALYSIS AND PRESENTATION

Data will be collected and analyzed by the use of computer statistical program like SPSS. The measures to be computed include percentage, mean, standard deviation, ranges and proportions. The information will be presented in form of graphs, tables and pie charts.
ETHICAL CONSIDERATION

This research proposal will be presented to the KNH, UON Ethics, Research and Standards committee based at Kenyatta National Hospital. Participation after informed consent by the respondents will be voluntary and their confidentiality will be guaranteed. It's the desire of the researcher to make sure that all respondents are treated with utmost respect they deserve and avoid any bias or favor to a particular individual or individuals. The findings of this project will be utilized for the betterment of the study population it targets.

BENEFITS OF THE STUDY

The study results will be used to acquire baseline information on oral hygiene practices among dental and medical students.
To assist in enacting strategies to educate the students on proper oral hygiene practices.
Assist in partial fulfillment of requirements for the award of Bachelor Of Dental Surgery at The University Of Nairobi.
## BUDGET

### PROPOSAL

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**SUB TOTAL**

1140

**GRAND TOTAL**

6360
REFERENCES

1) Essentials of Preventive and Community Dentistry by Soben Peter

2) Good oral hygiene practices are preventive measure to oral diseases by J D Theis

3) Target Woman Directory 'Methods of achieving good oral hygiene practices'


5) Patient motivation and instruction in oral hygiene throughout the dental curriculum; European Journal Of Dental Education.


APPENDIX I

QUESTIONNAIRE

AGE ......
SEX MALE.... FEMALE......
COURSE BDS..... MEDICINE....
YEAR OF STUDY 1.. 2.. 3.. 4.. 5..

1) Do you clean your teeth?
   No.......... (go to Q 8) Yes ............

2) How often do you clean your teeth?
   Don't know....... Sometime...... Once a day....... Twice a day....... More than two times a day....... 

3) With what do you clean your teeth?
   With a toothbrush..... With a chewing stick....... (go to 7)
   Others(specify)..........................(go to 7)

4) How long have you used your current brush?
   1-2 weeks...... 3-4 weeks ..... 1-3 month.....
   Over 3 months ...... Can't remember.....

5) After how long should you change your tooth brush?
   1 month ....... 2 months....... 3 months ......
   4 months ...... Don't know....... 

6) What type of brush is recommended for cleaning our teeth?
   Hard....... Soft .... Don't know.....

7) What do you put on your cleaning device?
   Nothing..... Toothpaste..... Others (specify)......................

8) Did you clean your teeth yesterday afternoon?
   No....... Don't know/remember... Yes ......

9) Did you clean your teeth yesterday evening?
   No.... Yes.... Don't know/remember.....

10) I find having to brush my teeth everyday
    Necessary..... Unnecessary..... Don't know......
11) How would you describe the state of your teeth and gums?

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</tr>
<tr>
<td>Very good</td>
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<tr>
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<tr>
<td>Poor</td>
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<td></td>
</tr>
<tr>
<td>Don't know</td>
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12) Have you ever visited a dental clinic to seek dental care?
   Yes......... No........ (go to Q 13)

13) How long is it since you last saw a dentist?
   Less than 6 months....... 6-12 months....... 1 to 2 years....... 2 to 5 years....... More than 5 years....... 

14) What was the reason for your last visit to the dentist?
   Consultation/advise......... Pain/trouble with teeth....... Routine check-up....... 
   It was a follow-up treatment..... Don't remember/know....... 

15) Have you ever heard of interdental cleaning?
   Yes ..... No.....

16) Do you understand the importance of interdental cleaning?
   Yes......... No ......

17) Where did you learn about interdental cleaning?
   From a friend ..... From a dentist....... From my parents..... From my school....... 

18) What do you use for interdental cleaning?
   Dental floss....... Toothpicks...... Mouthwashes ...... Other (specify).........................

19) How frequently do you perform interdental cleaning?
   Daily....... After 2-3 days....... Twice weekly....... Once weekly....... 
   Other (specify)..............................

END! THANK YOU
APPENDIX II

ORAL HEALTH PRACTICES AMONG DENTAL AND MEDICAL STUDENTS AT THE UNIVERSITY OF NAIROBI

CONSENT FORM.

Purpose of the study.

I, Midega Augustine Awarah, am level III undergraduate student in the school of dental sciences at the University of Nairobi. I am conducting a study whose aim is to determine oral health practices among dental and medical students at the University of Nairobi. Your participation in this study will help generate data which will be used as a baseline study for other studies on the same. Data collected will also be submitted for partial fulfillment of the Bachelor of Dental Surgery degree course in the University of Nairobi.

Voluntary participation.

I understand that I have entered this study voluntarily and that I can terminate that participation at will without consequences. I also understand that my participation does not entail any financial benefit.

Anticipated risk.

There is no risk anticipated in this study.

Confidentiality.

The information given to the researcher will be kept in strict confidence. No information by which your identity can be revealed will be released or published.

I the undersigned........................................had time to ask questions and received answers concerning issues I did not understand do willfully give consent to participate in this study.

Signature/thumb print (Respondent)........................................Date.............

Signature (investigator)...............................................Date.............