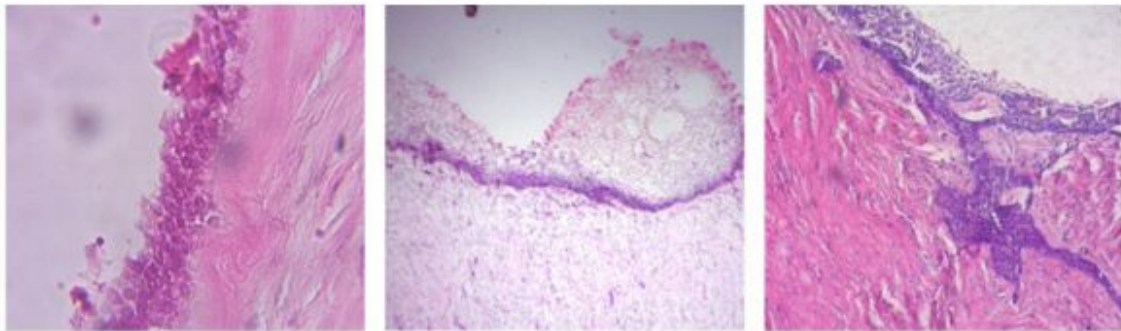


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## Awareness and Choice of Dentistry as a Career among Students in University Preparatory Classes

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### ABSTRACT

**Objective:** To identify the level of awareness of Dentistry and the reasons for choosing the course for study among students attending examination preparatory classes into tertiary institutions in Nigeria.

**Methods:** This was a cross-sectional study of 342 students attending examination preparatory classes in Enugu East Local Government Area, Enugu, Nigeria. Data on sex, age, type of secondary school attended, past visits to dental clinic, being aware of dentistry as a course in the university and choice of dentistry as a career was obtained. Bivariate analysis was conducted.

**Results:** Two hundred and forty one students (70.5%) were aware of dentistry while 44 (12.9%) chose it as a career. Attending private secondary school was significantly associated with awareness of dentistry ( $p=0.02$ ) as a course. Friends (30.0%) were the major source of information about dentistry while the desire to treat patients (52.3%) was the major reason that influenced choosing dentistry as a career.

**Conclusion:** Most students were aware of dentistry. The type of secondary school attended had an effect on awareness of dentistry while the desire to take care of patients was the main reason for choosing dentistry by students in the university preparatory classes.

**Keywords:** dentistry, awareness, career.

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### INTRODUCTION

Choosing a career is an important decision which usually affects the individual throughout his life. Occupational status is relevant because it determines people's place in the social hierarchy.<sup>1</sup> This choice of course of study in tertiary institution is often influenced by social status, recognition, financial implications and personal gain.<sup>2</sup> Literature search showed that students choose dentistry because of social status, desire to help people<sup>3</sup>, intellectual challenge<sup>4</sup> and existence of artistic component in dentistry.<sup>4</sup>

In a prior study, more females students studied dentistry<sup>2,5</sup> while parental influence and having a dentist in the family have been shown to affect the choice of dentistry as a career.<sup>6</sup>

A dentist is saddled with the duty of administering preventive and curative care to individuals and improving the dental knowledge and attitude of the populace. In Africa, awareness of dental care is quite low<sup>7,8</sup> and one may say that interest in dentistry may also be low because of the poor knowledge.

It has been shown that the dentist population ratio in Nigeria is 1:41,000<sup>5</sup> with a dis-

proportionate distribution in the rural and urban areas. Students choosing dentistry as a course of study in the University will go a long way in addressing the present predicament. Choosing the course out of the desire to render service to the community is regarded as appropriate as against financial gain seen in prior studies.<sup>2,4</sup>

In Nigeria, some students take dentistry as a second choice course<sup>5,7</sup> when they fail to qualify for the course of their first choice with the resultant poor attitude and performance in the profession. This may also be as a result of lack of awareness of dentistry during the high school days.

Several studies have been done on reasons for choosing dentistry as a career among dental students but there is paucity of information on factors influencing the choice among students attending examination preparatory classes into tertiary institutions. Most of the previous studies were done in the south western part of Nigeria and none in the south eastern part.

This study aimed at identifying the awareness of dentistry and the reasons for choosing the course for study among students attending examination preparatory classes into tertiary institutions in Enugu East LGA, Enugu, Nigeria. It determined the association between age, sex, type of secondary school attended, past dental visit and having heard about dentistry as a course. Also, the association between age, sex, type of secondary school

attended, past dental visit and choosing dentistry as a career was also determined.

### **MATERIALS AND METHODS**

Ethical clearance was obtained from University of Nigeria, Teaching Hospital, Enugu. Permission was sought from the proprietors of the examination preparatory classes in Enugu East Local government Area (LGA), Enugu.

#### **Study area**

The study was done at Enugu East LGA, Enugu State. Enugu East LGA is one of the LGAs that make up Enugu metropolis of Enugu State in South eastern part of Nigeria. Enugu State is one of the 36 states in Nigeria. It is inhabited mainly by the Igbo tribe and the inhabitants are mainly civil servants, traders and farmers.

#### **Study population**

The study population was made up of students attending examination preparatory classes into tertiary institution in Enugu East LGA. In Nigeria, entrance into tertiary institutions is usually preceded by writing an examination organized by a central examination board: Joint Admission and Matriculation Board (JAMB). Students who score up to a predetermined cut off point for the particular course of choice are given admission to study the course. Most students often attend preparatory classes organized by private agencies to enable them prepare adequately for the university /tertiary institution admission examination.

#### **Study design**

This was a cross sectional study of students in science class of examination preparatory classes in Enugu East LGA of Enugu State, Nigeria. Data was collected using a self-administered questionnaire. The independent variables were age, sex, type of secondary school attended, past visit to the dental clinic while the dependent variable is choosing dentistry as a course. All students attending the science class of the selected examination preparatory classes and who provided consent and assent participated in the study while those who were not psychologically ready did not participate in the study.

#### **Sample size**

The sample size for the study participants was calculated using the formula<sup>9</sup>:  $N = t^2 \times p(1-p) / m^2$ . Where N is the required sample size, p is the prevalence (32.5%) of choosing dentistry as a career in the university<sup>5</sup>, m is the margin of error at 5% standard value of 0.05, t is the confidence level at 95% precision, while standard value is 1.96. Thus,  $N = 1.96^2 \times 0.325(1-0.325) / 0.05^2 = 337.1$ . To account for 10% non-responders; the sample size

was increased to  $(33.7 + 337 = 370.7)$  approximately 371 students.

#### **Sampling technique**

Eight university preparatory classes are registered in Enugu East LGA of Enugu. Using a simple random sampling technique, three centres were chosen. In each centre, all the students in the science class that met the eligibility criteria participated in the study.

#### **Data collection Tool**

A self-administered structured questionnaire was developed. It elicited information on age, sex, type of secondary school attended, awareness of dentistry as a course, source of information on dentistry, choice of dentistry as a career and reason for the choice.

#### **Study procedure**

After ethical consideration, a self-administered questionnaire was given to the students. The filled questionnaires were collected immediately and oral health education was given to them.

#### **Pilot testing**

The questionnaire was tested with ten students who were not part of the study participants.

#### **Data analysis**

The data was analyzed using SPSS version 15. Exploratory analysis was conducted to ensure data consistency. Results were expressed using frequency tables, percentages, bar charts and pie charts.

Bivariate analysis was conducted to find the association between sex, age, type of secondary school attended, visit to the dental clinic and awareness of dentistry as a course. Also, the association between sex, age, type of secondary school attended, visit to the dental clinic and choosing dentistry as a career was also determined.

The test for significance was done using Chi square statistics and  $p \leq 0.05$  was considered significant.

### **RESULTS**

Three hundred and forty two students (92.2%) out of 371 students returned the completely filled questionnaires. More females 195(57.0%) than males 147(43.0%) participated in the study. The age of the study participants ranged from 14 to 30 years and the mean age was  $17.74 \pm 1.97$  years. Only 48(14.0%) had visited the dental clinic in the past.

Two hundred and forty one students (70.5%) were aware of dentistry. There was a significant association between type of secondary school attended and being aware of dentistry. Students who attended private secondary school were more aware ( $p=0.02$ ) of dentistry than those who attended public schools. There was no significant association between age ( $p=0.46$ ), sex ( $p=0.41$ ); past visit to dental clinic ( $p=0.15$ ) and being aware

of dentistry (Table 1). Forty four students (12.9%) chose dentistry as a career. Most students in the 17-19 year age group (54.5%,  $p=0.23$ ) chose dentistry, more females (59.1%;  $p=0.76$ ), most of those who have never visited the dental clinic (88.6%;  $p=0.59$ ) and more of those who attended private schools (65.9%;  $p=0.60$ ) chose dentistry as their career. These were not statistically significant (Table 2).

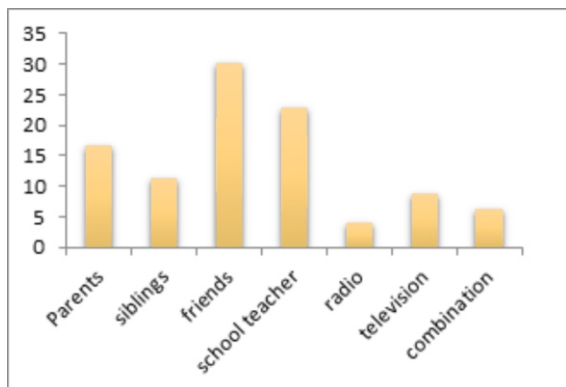
**Table 1: The distribution of study participants who were aware of dentistry as a course by age, sex, type of school attended and past visit to the dental clinics**

Variable	Awareness of dentistry		Total (n%)	P-value
	Yes n(%)	No n(%)		
Age(years)				0.46
14-16	61(25.3)	22(21.8)	83(24.3)	
17-19	143(59.3)	67(66.3)	210(61.4)	
20 and above	37(15.4)	12(11.9)	49(14.3)	
Total	241(100.0)	101(100.0)	342(100.0)	
Sex				0.41
Male	107(44.4)	40(39.6)	147(43.0)	
Female	134(55.6)	61(60.4)	195(57.0)	
Total	241(100.0)	101(100.0)	342(100.0)	
Dental clinic visit				0.15
Yes	38(15.8)	10(9.9)	48(14.0)	
No	203(84.2)	91(90.1)	294(86.0)	
Total	241	101(100.0)	342(100.0)	
Type of school				0.02
Public	81(33.6)	48(47.5)	129(37.7)	
Private	160(66.4)	53(52.5)	213(62.3)	
Total	241(100.0)	101(100.0)	342(100.0)	

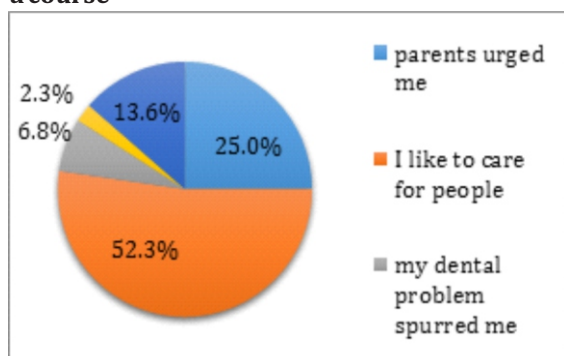
**Table 2: Distribution of study participants who chose dentistry as a course by age, sex, secondary school attended and past visit to the dental clinic**

Variable	Chose dentistry as a career		Total n(%)	P-value
	Yes n(%)	No n(%)		
Age				0.23
14-16	10(22.7)	73(24.5)	83(24.3)	
17-19	24(54.5)	186(62.4)	210(61.4)	
20 and above	10(22.7)	39(13.1)	49(14.3)	
Total	44(100.0)	298(100.0)	342(100.0)	
Sex				0.76
Male	18(40.9)	129(43.3)	147(43.0)	
Female	26(59.1)	169(56.7)	195(57.0)	
Total	44(100.0)	298(100.0)	342(100.0)	
Dental clinic visit				0.59
Yes	5(11.4)	43(14.4)	48(14.0)	
No	39(88.6)	255(85.6)	294(86.0)	
Total	44(100.0)	298(100.0)	342(100.0)	
Type of school				0.60
Public	15(34.1)	114(38.4)	129(37.7)	
Private	29(65.9)	184(61.7)	213(62.3)	
Total	44(100.0)	298(100.0)	342(100.0)	





**Figure 1: Source of information of dentistry as a course**



**Figure 2: Factors influencing choice of dentistry as a career**

Friends 73(30.3%) were the major source of information of dentistry as a course followed by school teachers; 55(22.8%) (Figure 1). The greatest reason for choosing dentistry as a course was the desire to treat people: 23(52.3%) followed by “parents urged me” 11(25.0%) (Figure 2).

**DISCUSSION**

From our study here, most students were aware of dentistry, while more than a tenth of the students chose it as a career. Attending private secondary school was significantly associated with awareness of dentistry as a course. Friends influenced awareness the most while the desire to treat patients was the major reason that influenced choosing dentistry as a career.

In this study, many students were aware of dentistry as a course. This is contrary to the finding in Tanzania where the high school students had limited knowledge about dentistry.<sup>10</sup> The increase in awareness in the study area may be as a result of increased oral health awareness programmes organized in the area. Schools are visited and the media houses broadcast programmes on dental health. Also, Enugu hosts a federal polytechnic that trains dental therapists and technologists and a University that trains dental surgeons, hence, this might have influenced awareness in the study

area.

Being aware of dentistry usually influence the choice of dentistry as a career. The students who attended private secondary schools were significantly more aware of dentistry when compared to those who attended public schools. Most of those who attended private secondary schools also chose dentistry as a career though it was not significant. On the contrary, a prior study had pointed out that most of the students studying dentistry in tertiary institutions attended public schools.<sup>5</sup> The explanation may be the current educational situation in Nigeria in which there is a shift of enrolment from public secondary schools to private secondary schools. Parents believe that teachers in private schools are more dedicated to their duties and will expose the students to adequate knowledge. A prior study had recommended that science teachers in public schools should be supervised closely so that they can be more dedicated to their work.<sup>11</sup> Friends influenced the awareness of dentistry the most in this study. This is contrary to prior studies in Nigeria and America in which parents had the greatest influence on students being aware of dentistry and choosing dentistry as a career.<sup>5,12</sup> Peer association may be the reason for this observation in the study population.

Nevertheless, this study was unable to establish a significant association between age, sex, past visit to the dental clinics, type of school attended and choosing dentistry as a course in the university.

In this study, the major reason for choosing dentistry as a course in the university was to care for the dental patients. This is contrary to previous finding in which prestige and good job opportunity were the reasons given by students in a Nigerian study.<sup>5</sup> However, it is similar to a recent study which showed that having time off for family activities and willingness to render dental care to people were the main reasons for students choosing dentistry as a career.<sup>13</sup>

The mindset of the study participants in this study is plausible because if these students eventually gain admission into dental schools, the outcome will be better than the outcome of those students who have financial gain, prestige and social status<sup>4,5</sup> as their reasons for choosing dentistry as a career. In Nigeria, several studies have shown that a greater percentage of the students studying dentistry selected it as second “choice” course resulting in dis-satisfaction and attempts at changing the course to the course of their first choice.<sup>5,7</sup> This will result in poor attitude of these dentists in the future and ultimately affect patients' management.

This study also showed that most of the students who chose dentistry as their first choice are willing to render services as dentists without low self-esteem. This will go a long way to shape dentistry in the country. The workforce will increase and delivery of oral health care in Nigeria will be improved. In as much as most of them choose dentistry because of their intention to treat patient, about a quarter chose dentistry as a career to please their parents. This is a pointer to the fact that adequate enlightenment is important for students and parents to enable them understand the implication of their actions.

### CONCLUSION

In conclusion, a lot of students in the university preparatory classes were aware of dentistry and friends had the greatest influence on their knowledge of dentistry. Type of school affected the knowledge about dentistry and the desire to care for patients was the main reason given by the students who choose dentistry as their first choice of career.

It is recommended that students should be guided properly by guidance and counselors and teachers, at the secondary school level before they choose their career and prepare for the university entrance examinations. This will enable them to choose the career of their choice, and prepare intensively for the entrance examination into the university in order get scores that will earn them admission into the university to read dentistry. The study however had the limitation of not reaching out to students who did not enroll in the extramural classes.

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### REFERENCES

1. Timis T, Danila I. Socio-economic status and oral health. *J Prev Med* 2005; 13(1-2):116-121.
2. Crossley ML, Mubarik A. A comparative investigation of dental and medical students' motivation towards career choice. *Br Dent J* 2002; 193:471-473.
3. Al-Bitar ZB, Sonbol HN, Al-Omari IK. Reasons for choosing dentistry as a career by Arab dental students. *Eur J Dent Educ* 2008; 12(2):89-98.
4. Folayan MO, Sofola OO, Khami MR, Esan AO, Popoola BO, Orenuga OO, Folaranmi N, Ligali TO, Phillips AS. Study motives, career choices and interest in paediatric dentistry among final year dental students in Nigeria. *BMC Med Educ* 2014; 14:30 doi. 10.1186/1472-6920-14-130.
5. Orenuga OO, da Costa OO. Characteristics and study motivation of clinical; dental students in Nigerian Universities. *J Dent Educ* 2006; 70:996-1003.
6. Coombs JA. An international comparison: American and Swedish dental students. *J Dent Educ* 1978; 42(12):652-658.
7. Sofola OO. Implication of low oral health awareness in Nigeria. *Niger Med J* 2010; 51:131-133.
8. Olusile AO. Improving low awareness and inadequate access to oral health care in Nigeria: The role of dentists, the government & non- governmental agencies. *Niger Med J* 2010; 51:134-136.
9. Araoye MO. Research methodology with statistics for health and social sciences. Nathadex Publisher, Ilorin. 2004.
10. Kikwulu EN, Mugonzibwa EA, Rugarabamu PG, Ntabaye MK. Tanzanian high school students; attitude towards five university professional course. *East Afr Med J* 2000; 77:143-146.
11. Olasehinde KJ, Olatoye RA. A comparative study of public and private Senior Secondary school students' science achievement in Katsina State, Nigeria. *J Educ Soc Res* 2014; 4(3):203-207.
12. Weaver RG, Haden NK, Valachovic RW. Annual ADEA survey of dental school seniors: 2002 graduating class. *J Dent Educ* 2002; 66:1388-1404.
13. Du Toit J, Jain S, Montalli V, Govender U. Dental students' motivations for their career choice: An international investigative report. *J Dent Educ* 2014; 78(4):605-613.