



Association between Demographic Profile, Type of School and Dental Appearance Affecting Choice of Spouse among Undergraduates in Enugu, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. Author ACO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author NKO managed the analyses, contributed to the first and final draft of the study. Author NF managed the literature searches and contributed to the final draft of the study. All authors read and approved the final manuscript.

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ABSTRACT

Background: Aspects of life such as social interactions and choice of partners can be influenced by human appearance. This study identified the effect of dental appearance on the choice of spouse among undergraduate students in Enugu.

Study Design: This was a descriptive cross sectional study.

Place and Duration of Study: The study was at Federal College of Dental Technology and Therapy and Institute of Management and Technology, Enugu, Nigeria. The study lasted for 3 months.

Methodology: 402 final year students were recruited for the study but 4(1.0%) submitted incompletely filled questionnaires while 398(99.0%) submitted completely filled questionnaires. The mean age was 22.0± 2.24 years. More females 235(59.0%) than males 163(41.0%) participated in the study. Many were attending dental school 253(63.6%) while 145(36.4%) were attending non dental schools. All 379(95.2%) students who wished to get married believed that dental appearance can influence the choice of spouse. There was significant association between sex

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($P < 0.001$) and wish to get married and type of school ($P = 0.001$) and dental appearance affecting choice of spouse.

Conclusion: Many of the study participants wished to get married. Those attending dental school will consider dental appearance when making choice of a spouse and scattered teeth will affect the choice of spouse most negatively.

Keywords: Dental appearance; choice; spouse; malocclusion.

1. INTRODUCTION

Aspects of life such as social interactions and the choice of partners can be influenced by human appearance [1]. Literature search has also shown that before mate selection, it involves processes by which an individual filters the external characteristics, attitude and belief and role fit of another individual [2,3]. One of these characteristics is dental appearance.

Dental diseases and disorders can interfere with social roles like dating and mating behaviours [4]. Moreso, tooth loss affects intimacy [5]. Malocclusion is any occlusion that is not within accepted range for that population [6]. With the growing prevalence of malocclusion [7] and its effect on the quality of life of individuals especially in terms of satisfaction with appearance [8,9], the choice of life partner can be affected by this.

In south south zone of Nigeria, it was shown that choice of life partner is influenced by dental features [2]. Midline diastema, a form of dental anomaly is desirable in Nigerian culture [10] and is associated with beauty while in Nepal, it is associated with low self esteem [11].

A study in the field of social psychology indicates that an unattractive physical appearance may evoke an unfavourable social response in many facets of social interaction [12].

However, the study by Chojnacka and Gawrych in Poland [13] revealed that correction of malocclusion resulted in marriage of the patients but in Africa, malocclusion and other dental diseases remain untreated because of poor utilization of dental services [14,15,16].

There is a dearth of information on the effect of dental appearance on the choice of spouse in South Eastern, Nigeria. The study identified the effect of dental appearance on the choice of spouse among undergraduate students in Enugu. It also identified the relationship between age of student, sex of student, type of school and dental appearance affecting choice of spouse.

2. METHODOLOGY

2.1 Study Area

The study area was Enugu metropolis of Enugu state, Nigeria. Enugu State is one of the 36 states of the country. It is inhabited mostly by the Igbo ethnic group of Nigeria. They are mainly civil servants. There are about 8 universities and 10 colleges and Polytechnics in Enugu State, Nigeria.

2.2 Study Population

Final year students of Federal College of Dental Technology and Therapy (FCDTT) and a polytechnic: Institute of Management and Technology (IMT), Enugu participated in the study. Federal College of Dental Technology is an institution in Enugu metropolis that trains dental technologists and dental therapists while Institute of Management and Technology trains students in both management and technological courses. Both institutions are located in Enugu metropolis.

2.3 Study Design

The study was a descriptive cross sectional study that assessed the effect of dental appearance on choice of spouse by the respondents. Independent variables were sex, age, type of school while the dependent variable was the effect of dental appearance on the choice of spouse. All final year undergraduate students in the selected departments who gave consent to participate in the study were included in the study while those with psychological distress were excluded from the study.

2.4 Sample Size

The sample size was determined by the statistical formula proposed by Araoye [17]:

$$n = p(1-p) \times (Z_{\alpha}/d)^2$$

n = Desired sample size

p = The estimated proportion of students whose choice of life partners will be influenced by malocclusion will be taken as 50%.

Z_{α} = Standard normal deviate set at 1.96 corresponding to 95% confidence interval.

d = Margin of error or probability sampling error (0.05)

Thus,

$$n = 0.5(1-0.05) \times 1,96^2 / 0.05^2 = 385.$$

The sample size was approximated to 402

2.5 Sampling Method

All final year students in department of Dental technology and Department of dental therapy of FCDTT and department of accounting of IMT participated in the study.

2.6 Study Procedure

After observation of the section on ethical consideration, questionnaire was shared to the students in their classroom. It took the students about 10 minutes to fill the questionnaire after which the questionnaires were collected from them. Oral health education was delivered to the students afterwards.

2.7 Data collection Tool

A data collection tool was developed to elicit information on sociodemographic profile of the students (sex, age, school, Department). The second part elicited information on the desire to get married. The options were 'yes' or 'no.' Other

questions to elicit information on dental features that affect the choice of spouse were included. Multiple responses were allowed.

2.8 Statistical Consideration

Statistical Package of Social Science (SPSS) version 18 was used to analyze the data generated. Exploratory analysis was conducted to ensure data consistency. Results were expressed using frequency Tables, percentages and bar chart. Bivariate analysis was conducted to test the association between socio demographic factors, type of school and dental appearance affecting choice of spouse. The level of statistical significance was inferred at $p < 0.05$.

3. RESULTS

Three hundred and ninety eight students (99.0%) out of 402 students recruited participated in the study. Four (1.0%) had incompletely filled questionnaires. The age range was from 17 and 30 years. The mean age was 22.0 ± 2.24 years. More females 235(59.0%) than males 163(41.0%) participated in the study. Many were attending dental school 253(63.6%) while 145(36.4%) were attending non dental schools. Only 19(4.8%) students did not wish to get married. All 379(95.2%) students who wished to get married said that dental appearance can influence the choice of spouse.

Fig. 1 shows that scattered teeth 173 (45.6%) affected choice of spouse most negatively when compared to missing teeth 111(29.6%), midline diastema 129 (34.0%) and others 47(12.4%).

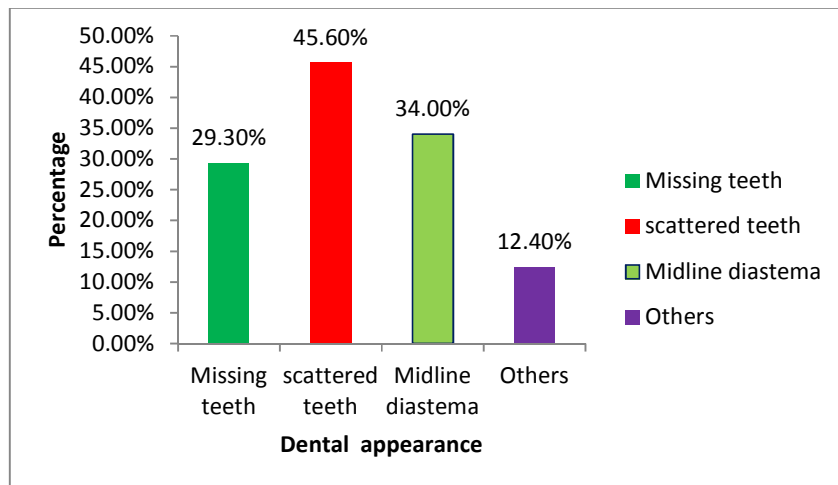


Fig. 1. Dental appearance affecting choice of spouse

Table 1. General characteristics of the study participants (N=398)

Variables	Frequency N(%)
Age(years)	
<21	109(27.4)
≥21	299(72.6)
Sex	
Male	163(41.0)
Female	235(59.0)
Type of school	
Dental	253(63.6)
Non dental	145(36.4)
Desire to marry	
Yes	379(95.2)
No	19(4.8)
Dental appearance will affect choice of spouse	
Yes	379(95.2)
No	19(4.8)
Total	398(100.0)

Table 2. Association between socio demographic profile and ‘wish to get married’

Variables	Wish to get married			P value
	Yes n(%)	No n(%)	Total n(%)	
Age(years)				0.79
<21	103(94.5)	6(5.5)	109(100.0)	
≥21	276(95.5)	13(4.5)	289(100.0)	
Sex				<0.001
Male	147(90.2)	16(9.8)	163(100.0)	
Female	232(98.7)	3(1.3)	235(100.0)	
Type of school				0.63
Dental	242(95.7)	11(4.3)	253(100.0)	
Non dental	137(94.5)	8(5.5)	145(100.0)	

Table 3. Association between socio demographic profile and dental appearance affecting choice of spouse

Variables	Response of dental appearance affecting choice of spouse			P value
	Yes n(%)	No n(%)	Total n(%)	
Age(years)				
<21	72(66.1)	37(33.9)	109(100.0)	0.64
≥21	182(63.0)	107(37.0)	289(100.0)	
Sex				
Male	110(67.5)	53(32.5)	163(100.0)	0.24
Female	144(61.3)	91(38.7)	235(100.0)	
Type of School				0.001
Dental	174(68.8)	80(55.2)	254(100.0)	
Non dental	79(31.2)	65(44.8)	144(100.0)	

Table 2 shows that there was no significant association between age ($P=0.79$), type of school ($P=0.63$) and wish to get married. However there was significant association between sex ($P<0.001$) and ‘wish to get married’. More females 232 (98.7%) than males 147(90.2%) wished to get married while 3(1.3%)

of females and 16(9.8%) of males did not wish to get married.

Table 3 highlights that there was no significant association between age ($P =0.64$), sex ($P=0.24$) and dental appearance affecting choice of spouse but there was significant association

between type of school ($P=0.001$) and dental appearance affecting choice of spouse. More students attending dental school said that dental appearance will affect choice of spouse more than those attending non dental schools.

4. DISCUSSION

Most of the study participants in this study expressed their desire to get married. This is similar to the study in Japan [18] where more than 80% of participants wished to get married. Also, more female than male participants significantly desired to get married. This is contrary to the finding in Iran [19] where more males than females wished to get married. In Africa especially in Nigeria, it is believed that husband is the honour of a woman and an unmarried lady who is of marriageable age has no place in Nigeria's socio-cultural system [20]. The few participants who have no desire to marry may have religious or personal reasons.

This study showed that choice of spouse was affected most negatively by 'scattered teeth'. This is similar to a previous study in Brazil [21] and a prior study in Nigeria showed that about two third of undergraduates considered dentition important in selection of mate [2]. This factor may have been ignored by marriageable youths in the study area resulting in the observed increase in the prevalence of unmarried ladies in recent times as observed in a previous study.[22]. Other reasons observed by the previous study included possession of economic resources, mate selection marital experience of other women, cultural beliefs and practices, family background and urbanization and education [22].

Infact, most of the respondents who were in dental school responded that 'scattered teeth' will affect the choice of spouse. This might be that these respondents can easily detect any deviation from normal occlusion when compared to other participants. This deviation can affect aesthetics of the individual and in turn affect the choice of spouse [1]. Other dental conditions like midline diastema, missing teeth, others like projected and peg shaped teeth, were shown to affect choice of spouse though not as negatively as scattered teeth.

In as much as many factors including dental appearance have been shown to be one of the features affecting choice of spouse, treatment of these dental conditions may increase the chance of youths getting married [13]. Utilizing dental

services by the study participants is recommended to enable them access dental care especially orthodontic and restorative care which will go a long way to reduce the negative impact of 'scattered teeth' and other dental appearances on choice of spouse.

5. CONCLUSION

Many of the study participants wished to get married. Those attending dental school will consider dental appearance when making choice of a spouse and scattered teeth will affect the choice most negatively.

CONSENT AND ETHICAL APPROVAL

Ethical clearance was obtained from the Ethics committee of the University of Nigeria Teaching Hospital. Permission was obtained from the heads of department while consent was obtained from the undergraduate students.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX 1: QUESTIONNAIRE

Association between demographic profile, type of school and dental appearance affecting choice of spouse among undergraduates in Enugu, Nigeria

Age.....

Sex.....

Department.....

School.....

Tick the correct answer

Do you wish to get married? Yes.....No.....

Will dental appearance affect the choice of your fiancé/fiancée Yes No...

What will you consider in dental appearance?

Missing teeth....Scattered teeth Midline diastema.....Others (specify).....

Presence of missing teeth will affect my choice of life partner? Negatively..... Positively.....

Indifferent.....

Presence of scattered teeth will affect my choice of life partner? Positively.....Negatively.....

Indifferent.....

Presence of midline diastema {gap teeth} will affect my choice of life partner?

Positively.....Negatively..... Indifferent.....

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