# ATTITUDES OF FINAL-YEAR DENTAL STUDENTS TOWARDS CAREER DEVELOPMENT -A CROSS-SECTIONAL SURVEY

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## **ABSTRACT**

*Objective:* To find out attitudes of final-year dental students towards career development.

Material and Methods: Cross-sectional survey was carried out on 86 students of final year BDS studying at Margalla Institute of Health Sciences, Pakistan. Non-Probability convenient sampling technique was employed. A self-administered questionnaire was used to asses the attitude of students toward specialisation and factors which affects their choices. Data collected was analysed using SPSS version 21.

**Results:** Majority of the respondents indicated their desire to pursue a speciality career (89.5%). A smaller percentage of students responded in the negative (5.8%) or as being not sure (4.7%). Parental occupation showed highly significant association with respondent's desire to pursue a speciality career (p = <0.001). From the list of career choices, Oral Surgery was the most popular both as first (47.7%) and second (23.3%) career choice. No significant differences in first and second career choices were found based on gender analysis (p = 0.095 and p = 0.974 respectively).

**Conclusion:** Majority of dental undergraduates intend to specialise in Oral surgery followed by Orthodontics as being the most popular first choice of speciality career. Having 'talent in the field' was the influencing factor determining the choice of speciality career and the time duration required to become a specialist was the major deterrent.

**Keywords:** under-graduate, attitudes, specialisation, dentistry, the field of study

## **INTRODUCTION**

The purpose of picking a specific profession and attitude of students towards their professional career is of significant importance for strategy makers around the globe<sup>1</sup> and also to preserve an enthused workforce. The medical profession is exceptional as it is seen to be extremely respectable, giving a chance to serve humanity more than other vocation.

Some factors are involved in choosing dentistry as a career, dominant ones are, self-employment<sup>2</sup>, desire for a well-paid profession<sup>3</sup>, secured job, improved quality of life, serving humanity 4 and work flexibility.

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After finishing dental school, fresh graduates face the dilemma concerning decision about specialisation. The reason behind is lack of awareness regarding the scope of different specialities and availability of training etc.

Studies have shown increase desire for post-graduation among dental graduates. A study on UK dental graduates found that almost 83% of the new dental graduates had a desire for specialization<sup>5</sup>. Same type of study reported among final year dental students from Iranian dental Institutes<sup>6</sup>. A cross-cultural comparison of attitudes among Canadian, Japanese, and Thai dental undergraduate students was conducted in 2007, which revealed an increased inclination towards specialisation of Japanese students<sup>7</sup> No such studies have been conducted in Pakistan, regarding dental speciality and career preferences among dental undergraduates.

The objective of this study was to gain insight into the attitude of Pakistani dental students towards career de-

velopment and to identify possible influencing factors.

## **METHODOLOGY**

A Cross-sectional survey was carried out. The study population was students of final year BDS studying at Margalla Institute of Health Sciences, Pakistan. Non-Probability convenient sampling technique was employed. The data was collected in the academic year 2017 during October towards the end of academic year. This study was reviewed and approved by the Ethics Committee of the Margalla Institute of Health Sciences.

Out of 97 undergraduate final years BDS students, 86 students filled and returned the questionnaire. All of the questionnaires were completed in full giving a response rate of 88.6%. Quantitative data were collected using the designed questionnaire which contained 2 sections: 3 questions were about demographics and 6 questions to check the attitude of students towards specialisation and factors which affects their choices. The questionnaire was distributed to all final year BDS students at the end of term examination 2017 to ensure maximum attendance. A full explanation of the study was provided to participants. Data collected was then analysed using SPSS version 21. Descriptive and Chi-square test was carried out to assess for the association between different carrer choices.

#### **RESULTS**

More than half the respondents belonged to the 20-23 years age group, and 81.4% of the respondents were females (Table 1). Majority of the respondents indicated their desire to pursue a speciality career (89.5%). A smaller percentage of students responded in the negative (5.8%) or as being not sure (4.7%). A large percentage of students who intended to specialise (62.3%) were the ones who had received encouragement from their institution (p = 0.047). No significant association of age (p = 0.218) and gender (p = 0.525) was found with respondent's desire to pursue a speciality career.

Parental occupation showed highly significant association with respondent's desire to pursue a speciality career (p = <0.001). For ease in data analysis, we grouped Parental occupation into four categories: Professional and managerial/technical, skilled (non-manual) and skilled (manual), partly skilled and unskilled, and others (Figure 1).

From the list of career choices, Oral Surgery was the most popular both as first (47.7%) and second (23.3%)

career choice. Followed by Orthodontics both as first (20.9%) and second (19.8%) career choice. None of the students selected Oral Microbiology and Dental & Maxillofacial Radiology as either first or second career choice (Table 2). No significant differences in first and second career choices were found based on gender analysis (p = 0.095 and p = 0.974 respectively).

The most common reason reported by respondents amongst the factors that influenced the decision to specialise was 'talent in the field' followed by 'further studying' (Table 3). Almost half the respondents indicated the time required in acquiring a specialist degree as a deterrent for specialisation (Figure 2).

#### DISCUSSION

Table-1: Percentage distribution of respondents according to age and gender

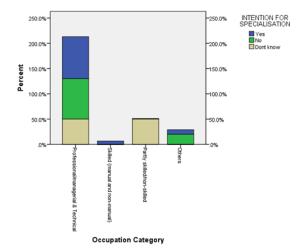
Characteristic	Percentage % (n)
Gender	18.6 (16)
Male	81.4 (70)
Age Group (years)	
20-23	76.7 (66)
24-27	23.3 (20)

Table-2: Frequency distribution of respondent's first and second career choices of speciality

Speciality	First choice of career (%)	The second choice of career (%)
Special Care Dentistry	2.3	1.2
Oral Surgery	47.7	23.3
Orthodontics	20.9	19.8
Paediatric Dentistry	1.2	0
Endodontics	5.8	15.1
Periodontics	1.2	7
Prosthodontics	4.7	4.7
Restorative Dentistry	11.6	15.1
Dental Public Health	1.2	1.2
Oral Medicine	1.2	2.3
Oral Microbiology	0	0
Oral & Maxillofacial Pathology	2.3	10.5
Dental & Maxillofacial Radiology	0	0

Table-3: Frequency distribution of factors influencing the respondent's decision the specialise

Influencing Factor	Response (percentage)
Family & friend's expectation	16.3
Social status	1.2
Reward	7.0
Talent in the field	37.2
Financial reasons	9.3
Lack of existing specialities in the field	11.6
Further Studying	17.4



**Fig 1.** Association of parental occupation on respondent's intention for specialization

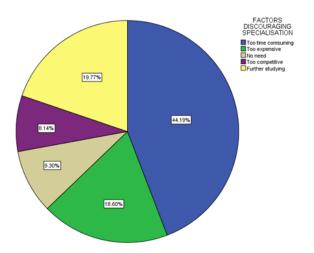


Fig 2. Percentage distribution of responses about factors discouraging specialisation

In this study, the attitude of dental undergraduate students towards post-graduation concerning age, gender and parental occupation was reported. The questionnaire response rate of 88.6% increases the validity of the study. There was no significant difference between male and female students' attitude towards specialisation in this study. This is similar to the results reported in Iranian12 and US students<sup>13</sup> and in contrast to results reported for UK students.

Majority of the students had a positive attitude towards pursuing a speciality career. This is in line with the percentage reported among Indian<sup>9</sup>, Chinese <sup>10</sup>, andUnited Arab Emirates<sup>11</sup>students, but differs from other studies that were conducted in Iran<sup>12</sup>, UK8, and Japan10. Results of a previous study suggested that a student who had received encouragement from their institution were more likely to specialize<sup>13</sup>. This stands true for the present study as students' desire to specialise was significantly associated with encouragement received from the Institution.

The most common reason reported by respondents' amongst reasons to specialise, in the present study was having 'talent in the field'. It is similar to the results reported in undergraduate students of US14 and junior doctors<sup>15</sup> and dental undergraduates in UK8. Almost half the students selected 'to time-consuming' as a deterrent for specialisation. This explains why a large number of females who although wish to specialise, but fail to do so. Majority of female dental graduates get married after graduation and investing time and energy to specialise requires maintaining a healthy balance between work and family which is not always possible. Gadve et al. reported in their study of Indian undergraduate dental students, that majority opted for short-term courses as it would help them carry out specialised treatment for their patients in private clinics without their having to invest too much time and energy in pursuing a specialist degree9. Contrary to results reported for Bristol University students<sup>8</sup>, the parental occupation had a significant impact on respondent's decision to specialise. This can be attributed to the fact that highly educated and professionally successful parents would want their children to achieve similar professional stability and success.

Among area of specialisation, oral surgery was recorded as the most popular choice for a specialist career in the current study, similar to results reported in Swedish and Nordic dental students<sup>16,17,8</sup>. The reason

for choosing this subject could be the return regarding the high financial reward due to skilfulwork<sup>9</sup>. Following Oral surgery, Orthodontics was the second most popular choice of speciality career. A previous study also reported orthodontics being highly ranked regarding financial prosperity and improving both dentists' and patients' quality of life<sup>18</sup>, hence being another popular choice for a speciality career. Oral microbiology and dental & maxillofacial radiology were selected by none of the respondents. This could be attributed to the perception of having limited employment opportunities and demand for services<sup>8</sup>.

Although the results of this study are based on a sample from a single dental institution, the results are very similar to those reported by other studies conducted in Indian<sup>9</sup> and Chinese<sup>10</sup> dental undergraduates indicating similarities in our cultures which could influence the career outcomes. Furthermore, a large number of dental students graduate each year and aspire to specialise but very few progress to specialise. There is evidence that far greater number of dentists are required to meet the Pakistani population's dental needs<sup>20</sup>. Only 9.5% registered General Dentists are Dental Specialists in Pakistan<sup>19</sup>. Reasons for this huge shortage of dental specialists could be cultural barriers especially for females who mostly become housewives after getting married, and lack of availability of training places in their city of residence.

## **CONCLUSION**

Most of undergraduate students had an intention to specialise with Oral surgery as the most popular intended subject. The results of this study can be generalised for Pakistani dental undergraduate students as our culture and beliefs mostly influence the career choices and getting a specialist professional degree is regarded equivalent to reaching the pinnacle of financial success.

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