

Decoding Dental Dreams: Exploring Specialty Preferences of Dental Interns of Pakistan

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ABSTRACT

Background: Dentistry is a rapidly expanding field with the development of various specialties. Multiple factors impact the choice of that specialty. Understanding and modifying those factors will help with the advancement of the dental profession. **Objective:** To understand the factors behind the choice made by dental students regarding their speciality career path. **Study Design:** Cross-sectional descriptive study. **Settings:** Various dental colleges of the public and private sectors of Pakistan. **Duration:** Six months from 01-07-2024 to 31-12-2024. **Results:** Oral and maxillofacial surgery was the preferred field, while public health and basic sciences were the least preferred fields among young dentists. **Conclusion:** Authorities must pay attention to the less preferred fields of specialties to avoid any disparity.

Keywords: Specialty, Dental graduates, Career in dentistry.

INTRODUCTION

Dentistry is a rapidly evolving field with thousands of students graduating every year. Currently, according to the Pakistan Medical and Dental Council, we have 40577 registered dental graduates in Pakistan, with more entering annually.¹ With this growing number of dental graduates, the field and job market have become competitive, and having a postgraduate degree has become of utmost importance not just for career advancement, but for securing better opportunities in the job market.

Choosing a specialty is a pivotal decision that shapes the future trajectory of a dentist's professional journey. Various factors can influence that decision, which can be broadly divided into external and internal factors. Internal factors often include personality traits, personal interests, and professional attitudes, while external factors encompass financial considerations, job market conditions, and social influences.² Understanding these factors can guide students in making informed career choices. While internal factors often dominate the

decision-making process, external pressures such as financial considerations and job market dynamics cannot be overlooked, highlighting the complexity of specialty selection.³

Dentistry in Pakistan has two career paths if a student decides to pursue a postgraduate degree. One path is to choose one of the clinical sciences, which include orthodontics, prosthodontics, operative dentistry, and endodontics, or oral and maxillofacial surgery. The other option is to choose one of the basic sciences subjects like dental materials, oral biology, oral pathology, or community dentistry. The length of the program for most of the clinical sciences is 4 or 5 years, which varies from basic sciences programs, where it is 3 to 4 years long.⁴

Understanding the trends and motivations behind specialty selection is of significance for healthcare policy makers and governing bodies. Understanding the preferences of dental graduates will help identify gaps and predict the future distribution of dentists in various fields. Attention can then be paid to the fields that have less preference to incentivise future dentists to choose

them to ensure an equal distribution of professionals in all fields.⁵

This research aims to explore the factors influencing dental students while making a choice for their future post-graduation and to identify less preferred fields of post-graduation.

METHODS

The ethical approval for this study was obtained from the Institutional Review Board of Fatima Jinnah Institute of Dental Sciences, Lahore, Pakistan, letter number 158/FJIDS, dated 03-06-2024. Data was collected from interns doing their mandatory one-year house job from various institutes in major cities of Pakistan. An 18-item questionnaire was developed and shared with subject experts for validation, followed by a pilot study for its reliability. It was then shared via WhatsApp and email with the participants. The questionnaire included the consent of the participants, followed by two sections. The first section asked about the sociodemographic of the participants, the second section had questions about the choice of postgraduate specialties, and the reasons for choosing that specialty. A total of 180 responses were collected, out of which 169 forms were included in the study. The sample size for this cross-sectional study was calculated using the confidence level at 95% and z score at 1.96.^{6,7} The participants who did not complete the survey form were excluded from the study.

Data was analysed using SPSS version 23.0. The demographic data was analysed by calculating the frequencies and percentages for the qualitative variables, including age and gender. The association of demographic variables with the choice of dental specialty was determined by the chi-square test of independence.

RESULTS

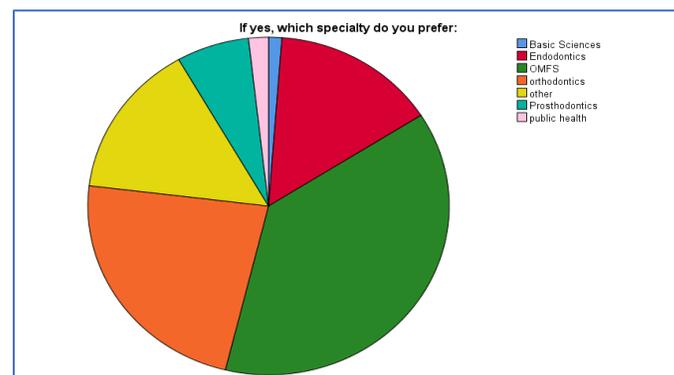
A total of 169 respondents completed the survey (n=169), out of which 44 (26%) were males and 125 (74%) were females. Out of 125 females, 108 wanted to pursue their careers further by opting for a postgraduate degree, while 17 of them were satisfied with general dentistry. Among the males, 39 participants wanted to opt for a postgraduate degree, while 5 were content with their graduate degree.

Oral and maxillofacial surgery was the field chosen by most of the participants (n=64, 38%), both among males (n=22, 50%) and females (n=42, 33.6%). The second most preferred specialty was different for males, which was endodontics, chosen by n=8 (18.2%), while among females, orthodontics was the second most chosen specialty (n=32, 25.6%). Basic sciences and public health were the least preferred specialties. This trend is shown in Figure 1.

When asked about the career counselling sessions, 65.1% of the students say that they have received a career counselling session in their institutes, while 88.2% students wish for these sessions.

When students were asked about the reason behind their choice, 49.7% said that they enjoyed providing care in that field, followed by 14.2% who chose the specialty based on financial interests.

Figure 1: Preferred specialties



From among the reasons given for choosing a particular field of postgraduation, the most common reason given for choosing a specialty was that the participant enjoys providing care in that field (n=84, 49.7%). Other more commonly chosen reasons were the salary status of that field (n=24, 14.2%), quality of life (n=20, 11.8%), and type of patients seen (n=13, 7.7%).

The correlation between the choice of specialty and the reason for making that choice is given in Table 1.

Most of our participants wanted to pursue their careers in Pakistan (n=128, 75.7%). When asked if they are happy with dentistry as a career choice, the majority (n=155, 91.7%) of the participants responded positively.

Table 1: Cross-tabulation of preference for specialty with the reason for making the choice

If yes, which specialty do you prefer		Family Responsibility	Job Security	High Income	Quality of Life	Salary & Future Potential	Type of Patients	You Enjoy Providing Care in that Field	Total
Basic Sciences	Count	0	0	1	0	0	0	1	2
	% within specialty	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%	100.0%

Endodontics	Count	0	3	0	0	5	2	15	25
	% within specialty	0.0%	12.0%	0.0%	0.0%	20.0%	8.0%	60.0%	100.0%
OMFS	Count	5	0	3	0	4	7	45	64
	% within specialty	7.8%	0.0%	4.7%	0.0%	6.3%	10.9%	70.3%	100.0%
Orthodontics	Count	0	1	2	1	5	6	24	39
	% within specialty	0.0%	2.6%	5.1%	2.6%	12.8%	15.4%	61.5%	100.0%
Other	Count	1	4	2	3	5	1	9	25
	% within specialty	4.0%	16.0%	8.0%	12.0%	20.0%	4.0%	36.0%	100.0%
Prosthodontics	Count	1	0	0	0	0	2	8	11
	% within specialty	9.1%	0.0%	0.0%	0.0%	0.0%	18.2%	72.7%	100.0%
Public Health	Count	0	1	0	0	1	0	1	3
	% within specialty	0.0%	33.3%	0.0%	0.0%	33.3%	0.0%	33.3%	100.0%
Total	Count	7	9	8	4	20	18	103	169
	% within specialty	4.1%	5.3%	4.7%	2.4%	11.8%	10.7%	60.9%	100.0%

DISCUSSION

Dentistry in Pakistan is still in its growing phase, and our study indicates a healthy trend showing great ambition and professionalism on the part of young doctors. The choices that have been made by the young professionals show not only their career-oriented approach but also an insight into the ever-increasing demands of the field of dentistry.

The dental students should be aware of the diversity and the challenges associated with the future of dentistry in Pakistan, as they should be prepared to meet the global standards in patient care and excellence in treatment.

Oral and maxillofacial surgery was the most popular choice among the interns in this study. This correlated strongly with a similar study that was conducted in Kinshasa University, showing a strong predisposition of young graduates to choose oral and maxillofacial surgery as their future career.⁸ However, other authors have reported endodontics as the first choice, while orthodontics is the second preferred specialty.⁹

When asked about the reason why the students are making the choice, the majority reported that they enjoy providing care to the patients presented in that field. Other reasons include financial status and quality of life, which are associated with the choice of field. This shows that the primary factor for making this decision is internal, which outweighs many strong external factors. Personal passion not only fosters a deeper commitment to the field but also contributes to the long-term professional satisfaction and reduced burnout often associated with high-stress-level fields like dentistry. However, external factors like financial gains and quality of life associated with a particular field can influence the decision of the

students as well. A study conducted by Zulfiqar et al. showed similar findings where personal joy and motivation were found to be the primary influencing factors in making the choice of future career path.¹⁰ Knowledge improvement and career progression are other motivational factors reported in studies.¹¹ These findings highlight the significance of early mentorship, which can build students' their confidence in making independent, interest-driven careers.

Our study showed that many students are inclined towards receiving career counselling sessions from their teachers and mentors. While many colleges are now conducting such sessions, it is of imperative importance to not only show the various career pathways to the students but also to guide them towards less saturated fields with better opportunities. Individual counselling sessions by the faculty members of the same institutes would help the students to identify their strengths and limitations. Mentorship can successfully change the perspective of a student, as demonstrated by an interesting study conducted by Muhammad et al., which showed the difference in results when the students were counselled regarding the postgraduate degree options. Before the counselling session, most of the students in that study chose endodontics as their choice of specialty. However, it changed to oral and maxillofacial surgery after counselling.¹² This indicates the role of mentorship and counselling at the level of undergraduates and how it can influence the future choice of students. By offering personalized advice, the mentors can guide students, leading them to a fulfilling and sustainable career path.

One of the major concerns that arises from the results of this study is that public health and basic sciences were chosen by a very small number of participants. A reason

for this could be that not many students are made aware of the post-graduation programs being offered in Pakistan in these fields. Public health is related to the management of hospital administration, and the faculty of basic sciences has the most important role in the formative, pre-clinical years of dental students. This indicates a lack of incentive and motivation for the students to choose these fields.¹²

CONCLUSION

The majority of interns plan to opt for postgraduation after an internship in Pakistan. The primary reason for the selection of a particular field was the enjoyment of providing care in that specific field. The most preferred speciality differed between male and female interns, suggesting that they are influenced by different factors.

LIMITATIONS

The data of this study were collected from a few dental institutes of Pakistan, which may not fully represent the diversity of dental students across the country. More studies of larger sample sizes with the inclusion of the majority of dental educational bodies should be conducted for a more comprehensive understanding of these factors.

SUGGESTIONS / RECOMMENDATIONS

The authors would like to make some suggestions regarding this matter, as it has been seen from this sample that some fields are overflowing as compared to other fields of dentistry, and this difference will create a void in the future.

1. Student scholarship programs should be started along with research grants for basic sciences and public health as an incentive to encourage young graduates. Awareness regarding these grants should also be spread through community outreach programs among dental students. These initiatives can mitigate financial burden commonly associated with dental education, which can encourage students to make career choices based on passion. It will also encourage a culture of critical thinking and will strengthen the academics of students, which will make them eligible for advanced training.
2. Universities and other hiring authorities should be encouraged to reevaluate the pay scale of these fields to attract and facilitate future specialists.
3. Career counselling sessions should be regularly provided to all final year students and young interns

to make them aware of the prospects of various fields. These counselling sessions can help direct the students in less saturated fields to overcome any gaps or shortcomings.

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CONFLICT OF INTEREST / DISCLOSURE

There is no conflict of interest.

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