

Gender-Based Motivational Factors For Choosing Dentistry As A Career By First Year Dental Students Of College Of Pakistan

Faiza Siddiq¹, Seemi Tanvir², Ayesha Fazal³, Ayesha Naveed⁴, Sadia Sajjad⁵, Sadia Manzoor⁶

Abstract

Objective: Dentistry, also known as “Dental Medicine” is opted for various reasons like prestige, socioeconomic status or personal desire. However, some join dentistry just to fulfil the wishes of their parents. Students who choose dentistry by their own choice excel better in this field. Another general impression is that mostly female students prefer it. To have a true picture of these impressions in our society, we planned this study to identify the reasons and motives of undergraduate dental surgeons for joining dentistry.

Methods: A cross-sectional study, was conducted on 278 students at Margalla College of Dentistry, from December 2020 to April 2021 after the approval of the Ethical review committee of the institute. - The probability judgmental sampling technique was used. Students who consented were included in the study. A self-administered questionnaire was used to collect data which was analyzed using SPSS 21.

Results: In this study, about 48.4% of students selected dentistry as their first choice but out of these only 48.9% did prior career planning. Female students 76 (49.6%) opted for dentistry as compared to male students 12 (30.7%). However, there was an insignificant difference regarding career choice between both genders ($p=0.591$). Prominent motivating factors were flexible work patterns (63.5%), self-employment (63%), financial security (44.8%) and parents wish (25%).

Conclusion: Students chose Dentistry not only due to their interests but also because of flexible work patterns, financial security and self-employment. Both genders have more or less the same inclination towards dentistry.

Keywords: Career; Dental students; Factors; Pakistan; Undergraduate.

¹ Demonstrator, Department of Oral and Maxillofacial Surgery, Margalla Institute of Health Sciences, Rawalpindi; ² Assistant Professor, Department of Pathology, Margalla Institute of Health Sciences; ³ Lecturer, Department of Medical Education, School of Dentistry, SZABMU/PIMS, Islamabad; ⁴ Associate Professor, Department of Medical Education, Lahore Medical College and Institute of Dentistry, Lahore; ⁵ Assistant Professor, Department of Community Dentistry, Margalla Institute of Health Sciences; ⁶ Assistant Professor, Department of Dental Material, Islamic International Dental College, Islamabad.

Correspondence: Dr. Seemi Tanvir, Assistant Professor/Head of Department Pathology. Email: dr.seemi.salman@gmail.com

Cite this Article: Siddiq F, Tanvir S, Fazal A, Naveed A, Sajjad S, Manzoor S. Gender-Based Motivational Factors For Choosing Dentistry As A Career By First Year Dental Students Of College Of Pakistan: Factors for Choosing Dentistry. JRMC. 2023 Dec. 30;27(4): 575 - 579. <https://doi.org/10.37939/jrmc.v27i4.2146>.

Received January 19, 2023; accepted November 11, 2023; published online December 30, 2023

1. Introduction

Career selection is a crucial step in an individual's life. Considering all the decisions a person makes in his or her life: career choice is the most difficult one, as it has a lifelong impact and everything gets tailored around it afterwards.¹ It seems personal choice but a lot of factors motivate or demotivate it.² Motivation is the reason(s) for acting or behaving in a particular way, especially required for becoming a healthcare professional who has to work with empathy.³ “Dentistry”, also known as “Dental Medicine”, is a prestigious profession that can be opted for numerous reasons other than self-interest and motivation, which could be for making money, family pressure, respect and adjustable working hours.⁴

In Pakistan, “Bachelor of Dental Surgery” (BDS) is a four-year academic program, with one year of internship and a house job, under the Pakistan Medical and Dental Council, which is the regulatory body.⁵ Dentistry requires a lot of hard work, studying day and

night, and tiring working hours but still it has been reported that most students join dentistry just to fulfill the wishes of their parents.⁶ But a major chunk of those students do not pursue it in the future.⁷ Choosing dentistry without self-interest can lead to cynicism, consternation, and melancholy which eventually affect the efficacy of the upcoming dental surgeons.⁸ Students who choose dentistry by their consent excel better in this field than those who opt for dentistry because of the wishes of their parents or when they have no motivation or desire of their own.⁹ Motivational factors for students opting for dentistry and selection criteria for institutes even within different institutes of the same country.¹⁰ These motivating factors should be kept in mind and considered for the selection of students in their respective fields because later on they have to deal with the community.¹¹

Knowledge of the motivating factors for choosing dentistry is important as these elements should be taken into account when an individual decides on his

career. In addition, the selection of self-motivated individuals can enhance the productivity of the health care system.¹² Insight into these perceptions can also help education providers to make a comprehensive overview.¹³ So, we planned the present study to identify reasons and motives of undergraduate dental surgeons for joining dentistry and based on the observations career counselling of students could be advised, if required.¹⁴

2. Materials & Methods

A total of 278 undergraduate students participated in the cross-sectional study, conducted at Margalla College of Dentistry, Rawalpindi from December 2020 to April 2021 after the approval from the Ethical Review Committee of Margalla Institute of Health Sciences, Rawalpindi (Reference# FZ/93/21). The sample size was calculated by OpenEpi sample size calculator¹⁵ with a 95% confidence level and margin of error of 0.05 in the population of 1000 first-year students of all dental colleges of Rawalpindi and Islamabad (Table 1). The probability judgmental sampling technique was used. All BDS students, who were willing to participate were included in the study. Those who had some sort of mental illness or had undergone some adverse life event in the past month were excluded from the study. A validated self-administered questionnaire was used to collect data.¹⁶

The questionnaire was divided into two sections. The first section included demographic information of the participants including age, gender, institute of training, father's occupation and mother's occupation, duration of analyzing decision for joining dentistry and college chosen as first choice.

The second section contained a five-point Likert scale where the students were asked to indicate their level of agreement with statements outlining various factors like personal, and humanitarian reasons for choosing dentistry, and financial and societal impact that could have influenced their choice of dentistry as a career. Data was analyzed by using Statistical Package for Social Sciences Version 21.0.

Descriptive analysis was carried out and represented as frequency and percentages. Categorical data was analyzed using cross-tabulation with the Chi-Square test, where a p-value less than 0.05 was considered significant.

3. Results

Out of 278 students, 192 gave consent, response rate was 69.6%. There was more participation of female students (79%) than male students (21%). Social demographic data showed that 31% of the students had their fathers in the armed forces. About 51% chose dentistry without any prior career planning and took a decision immediately at the time of admission. Only 17% of students did workup before choosing a career. Table 1 As a whole about 48.4% of students choose dentistry as their first career choice. Among those who didn't opt for dentistry as their first choice, 81.3% of females opted for MBBS whereas 71.4% of male students wanted to join the armed forces.

Table 1: Demographic Information of Participants

Variables	n(%)	
Gender	Males	39 (20.3)
	Females	153 (79.9)
Institute of Training	Margalla Institute of Health Sciences	55 (28.9)
	Foundation University College of Dentistry	43 (22.4)
	Islamic International Dental College	20 (10.4)
	Islamabad Medical & Dental College	37 (19.3)
	Army Medical College	37 (19.3)
Father's occupation	Government job	12 (6.25)
	Armed forces	60 (31.25)
	Business	31 (16.41)
	Doctor	28 (14.58)
	Other	11 (5.73)
Mother's occupation	Doctor/Dentist	7 (3.6)
	Housewife	178 (92.7)
	Others	7 (3.6)
Duration for finalizing the decision to join Dentistry	Immediately	98 (51.0)
	Less than one month	36 (18.81)
	Less than six month	17 (8.9)
	Less than one year	8 (4.2)
	More than one year	33 (17.2)
Dentistry chosen as first choice	Yes	93 (48.4)
	No	99 (51.6)

Table 2 showed that the majority of the participants (64.6%) had some personal interest in dentistry but it was not their first choice. About 84.9% desired to serve humanity after becoming a dentist. Flexible working hours were motivating for 63.5% of participants. About 63% reported that they desired to have self-employment in future. In the financial security domain, 44.8% admitted money as a motivating factor while 21.7% remained neutral. Around 65.6% of participants agreed

that they joined because of pride in being called “Doctor”. Participants opted for dentistry under the influence of their parents (35.4%) or friends (34.9%). 27% didn’t have exposure to dentistry. About 94

students (48.9%) gathered information regarding dentistry before opting for this profession. Approximately 57.8% disagreed that they already had a doctor in their families.

Table 2: Factors Affecting Career Choice

Factors affecting Career		Strongly Agree n(%)	Agree n(%)	Neutral n(%)	Disagree n(%)	Strongly Disagree n(%)
Personal/Humanitarian	Personal interest	72(37.5)	52(27.1)	51(26.6)	11(5.7)	6(3.1)
	Desire to serve/help people	95(68.5)	68(35.4)	23(12.0)	4(2.1)	2(1.0)
	Flexible work pattern	78(40.6)	44(22.9)	33(17.2)	18(9.4)	19(9.9)
	Desire for self-employment	62(32.3)	59(30.7)	38(19.8)	22(11.5)	11(5.7)
Financial/Societal	The desire for financial security	37(19.3)	49(25.5)	52(27.1)	23(12.0)	31(16.1)
	Pride in the title ‘Doctor’	68(35.4)	58(30.2)	36(18.8)	21(10.9)	9(4.7)
	Social status	32(16.7)	63(32.8)	52(27.1)	22(11.5)	23(12.0)
Influence by others	Career Talk/Information	45(23.4)	49(25.5)	37(19.3)	25(13.0)	36(18.8)
	Prior experience of treatment	30(15.6)	39(20.3)	37(19.3)	34(17.7)	52(27.1)
	Prior exposure to Dentistry	33(17.2)	43(22.4)	52(27.1)	25(13.0)	39(20.3)
	Siblings/friends persuasion	29(15.1)	38(19.8)	31(16.1)	22(11.5)	72(37.5)
	Family Doctor	31(16.1)	28(14.6)	22(11.5)	28(14.6)	83(43.2)
	Parents Persuasion	37(19.3)	31(16.1)	46(24.0)	22(11.5)	56(29.2)

4. Discussion

The choice of career is very crucial for a person. It is a decision that has a strong impact on an individual’s life. It won’t be incorrect to state that this decision has marked effects on the whole family including parents and siblings. Although the choice of career should be the decision of that particular person in our society, this decision is not taken by the individual alone.¹⁷ The current study has pointed out a few factors that influenced this decision. A very encouraging finding of the present study was the most prominent motivating factor for opting for dentistry and that came out to be “personal interest”, about 45.8% of students selected dentistry as their first choice. On the other hand, observations of a study conducted in India reported that dentistry was not the first choice of 79% of dental students.¹⁸ However, quite a number opted for dentistry under the influence of their family and this remained a continuous mental stress for them.¹⁹ Among other contributing agents, opting for the profession on humanitarian grounds provided a ray of hope leading to the betterment of the society in our study. A study conducted also reported the other influencing factors like financial security and societal outcomes but to a lesser extent.²⁰ Contrarily, observations of a study conducted in Tehran in four dental colleges in 2017 do not correspond to the present study and showed that high-level income,

good social status and work independence were the most common career motivations.²¹ There was no significant difference between the both genders in taking dentistry as their career. Contrarily, more females opted for dentistry in the study reported by Siddiqui et al.¹⁸ These observations match with the results of a study conducted in Finland by Terhi Karaharju Suvanto, which showed female dental surgeons perceive themselves as comforters and health promoters.²² On the other hand, the astonishing motivating factor having the highest percentage revealed in one of the studies done internationally is that dentists can give sufficient time to their families due to flexible and adjustable work patterns and preference for self-employment.²³ It was worrisome to find that a large number of participants took their career decision in no time despite no counselling sessions or discussion sessions. Contrary to these findings, studies have shown that sessions are planned and conducted before taking a profession and the pros and cons are discussed with the individual many times. It has also been shown in some studies that students challenge themselves for higher ranks and executive positions and dentistry is one of the milestones.²⁴ Research and scientific study is another purpose for opting for dentistry that should be aimed at the coming generations.²⁵ Scrutinizing dental studies may help in the evolution of reasons for students opting for dentistry and producing better dentists in the future. A study of these influences can help us rectify the

negative factors and the possibility of their eradication can arise.²⁶ Selections based on personal liking enable a person to stick to his or her choice through thick and thin. Studies show better performance for students who select their careers themselves.²⁷

5. Conclusion

The profession of Dentistry is opted for due to personal interest as well as its flexible work pattern, financial security and self-employment. Both genders have more or less the same inclination towards dentistry. Parental wishes or pressure also influence career choice. Timely career counselling can help individuals to decide much better for themselves, resulting in a more beneficial person contributing to the wellbeing of mankind.

CONFLICTS OF INTEREST- None

Financial support: None to report.

Potential competing interests: None to report

Contributions:

F.S, A.F - Conception of study

F.S, S.S, S.M - Experimentation/Study Conduction

A.F, A.N, S.S - Analysis/Interpretation/Discussion

F.S, S.T, A.F - Manuscript Writing

S.T, S.M - Critical Review

A.N - Facilitation and Material analysis

References

- Supriyanto G, Widiaty I, Abdullah AG, Yustiana YR. Application expert system career guidance for students. *InJournal of Physics: Conference Series* 2019 Dec 1 (Vol. 1402, No. 6, p. 066031). IOP Publishing.
- Nisar S, Alam A, Khan IA, Khan M, Ahmed I, Hussain S, Qazi A, Bibi N. Effect Of Career Selection On The Performance Of Medical Students Of Bkmc Kpk, Pakistan. *Journal of Khyber College of Dentistry*. 2021 Dec 31;11(04):2-5.
- Malik M, Haider Z, Hussain A. Perceived emotional intelligence, work life balance and job satisfaction among healthcare professionals in Pakistan. *International Journal of Pharmaceutical Research & Allied Sciences*. 2019 Apr 1;8(2):80-6.
- Yousuf W, Kazmi SM, Quraeshi S, Khan M. Motivation and Future Intentions of Dental Students in Karachi, Pakistan. *Pakistan Journal of Medical Research*. 2019 Mar 31;58(1):26.
- Khan FR, MCPS F. A Proposed Curriculum for 5-years BDS Programme in Pakistan and its Comparison with the Curricula Suggested by PMDC and HEC. *JPDA*. 2020 Oct;29(04):170.
- Griffin B, Hu W. Parental career expectations: effect on medical students' career attitudes over time. *Medical education*. 2019 Jun;53(6):584-92.
- Tosun Mi, Arici M, Kaplan A, Deryahanoglu G. How Effective Are Parents'professional Goals On Individuals?. *Spor ve Rekreasyon Arařtırmaları Dergisi*. 2023 Jun 6;5(1):88-99.
- Wang Y, Jones BF, Wang D. Early-career setback and future career impact. *Nature communications*. 2019 Oct 1;10(1):4331.
- Mmadi PJ. Reasons for choosing social work as profession: a case study of prospective students at the university of Limpopo. *Social Work*. 2022;58(3):239-53.
- Halawany HS. Career motivations, perceptions of the future of dentistry and preferred dental specialties among Saudi dental students. *The open dentistry journal*. 2014;8:129. doi: 10.2174/1874210601408010129
- Allen ES, Grolnick WS, Córdova JV. Evaluating a self-determination theory-based preventive parenting consultation: The parent check-in. *Journal of Child and Family Studies*. 2019 Mar 15;28:732-43. <https://link.springer.com/article/10.1007/s10826-018-01309-0>
- Douglas PS, Rzeszut AK, Merz CN, Duvernoy CS, Lewis SJ, Walsh MN, Gillam L. Career preferences and perceptions of cardiology among US internal medicine trainees: factors influencing cardiology career choice. *JAMA cardiology*. 2018 Aug 1;3(8):682-91. doi:10.1001/jamacardio.2018.1279
- Siebert AL, Chou S, Toubat O, Adami AJ, Kim H, Daye D, Kwan JM. Factors associated with underrepresented minority physician scientist trainee career choices. *BMC medical education*. 2020 Dec;20:1-7.
- Kass E, Miller EC. Career choice among academically excellent students: Choosing teaching career as a corrective experience. *Teaching and Teacher Education*. 2018 Jul 1;73:90-8. doi: 10.1016/j.tate.2018.03.015
- Ngamjarus C. n4Studies: sample size calculation for an epidemiological study on a smart device. *Siriraj Medical Journal*. 2016 Jun 9;68(3):160-70.
- Lukandu OM, Koskei LC, Dimba EO. Motivations for a career in dentistry among dental students and dental interns in Kenya. *International journal of dentistry*. 2020 Jul 29;2020. doi:10.1155/2020/1017979
- Hanna A, Rounds J. How accurate are interest inventories? A quantitative review of career choice hit rates. *Psychological bulletin*. 2020 Sep;146(9):765. doi:10.1037/bul0000269
- Siddiqui M, Sultan A, Mehta A, Juneja A. Career intentions, choices, and motivation of undergraduate dental students toward dentistry. *Archives of Medicine and Health Sciences*. 2022;10(1):136-40. doi: 10.4103/amhs.amhs_61_22
- Shaik PS, Pachava S, Palli CB. Factors affecting stress among students in dental colleges of neo-capital state in India. *Journal of Indian Association of Public Health Dentistry*. 2019;17(1):41-47. doi: 10.4103/jiaphd.jiaphd_72_18
- Lee PC, Lee A. The importance of career goal in relation to academic performance: A case study of hospitality management students. *Journal of Teaching in Travel & Tourism*. 2018 Apr 3;18(2):159-76. doi:10.1080/15313220.2017.1420518
- Mohebbi SZ, Gholami M, Chegini M, Ghoreyshi Y, Gorter RC, Bahramian H. Impact of career choice motivation on academic burnout in senior dental students: A cross-sectional study. *BMC Medical Education*. 2021 Dec;21(1):1-8.
- Karaharju-Suvanto T, Choroszewicz M, Näpänkangas R, Suominen AL, Tolvanen M, Koivumäki J. The reproduction of gender differences in early career choices and professional

- identity of young dentist in Finland. *European Journal of Dental Education*. 2021 Aug;25(3):451-9.
23. MONICA B, MARY J JA. Work life balance and career plans of female dentist entrepreneurs. *Journal of Contemporary Issues in Business & Government*. 2020 Jul 1;26(2).
 24. Tuononen TA, Suominen AL, Lammintakanen J. Career path from a dentist to a leader. *Leadership in Health Services*. 2018 Sep 20;31(4):384-97.
 25. Kenny ME, Blustein DL, Meerkins TM. Integrating relational perspectives in career counseling practice. *The Career Development Quarterly*. 2018 Jun;66(2):135-48. DOI.org/10.1002/cdq.12128
 26. Seow LS, Chua BY, Mahendran R, Verma S, Ong HL, Samari E, Chong SA, Subramaniam M. Psychiatry as a career choice among medical students: a cross-sectional study examining school-related and non-school factors. *BMJ open*. 2018;8(8).