



ORIGINAL ARTICLE

ASSESSMENT OF FACTORS LEADING TO DECLINING INTERESTS OF STUDENTS FOR ADMISSIONS IN BACHELOR OF DENTAL SURGERY (BDS) UNDERGRADUATE PROGRAM, IN PRIVATE COLLEGES OF SOUTH PUNJAB

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ABSTRACT

Objective: To identify the factors contributing to low admission rates in BDS program in the private dental colleges in South Punjab.

Place of Study: This Study was conducted at three private Medical colleges in South Punjab: Multan Medical & Dental College (MMDC), Bakhtawar Ameen Medical & Dental College (BAMDC), and Shahida Islam Medical & Dental College (SIMDC).

Study Design: A Cross-sectional descriptive study.

Duration of Study: December 2021 to January, 2022.

Methodology: A total of 200 students appearing in interviews of Bachelor in Medicine and Bachelor in Surgery (MBBS) programs in three private medical colleges of Punjab were selected via convenience sampling. A self-administered questionnaire with closed-ended questions was given to the students. The questionnaire comprised of demographic information and factors leading to disinclination towards the BDS program. A 5 point likert scale was used to document the views of the respondents. Data was entered and analyzed by utilizing SPSS version 21. Mean score, frequency and percentages were calculated for all questions

Results: In this study, 200 applicants applying in three private medical colleges in MBBS program were chosen. Among all the participants 42.5% (n= 85) were males and 57.5% (n= 115) were females. Among all the participants 61% and 54% strongly agreed that they did not choose BDS because of better career options in MBBS and perceived inferiority complex in the dental profession respectively. 75% of the students agreed that they will only opt for BDS as career in case their merit is low on the list. 44% of the students did not choose dentistry due to lack of job opportunities in our country. 66% of the students did not choose dentistry because of their Parent's influence. The scarcity of scholarships available for dental students was an important factor and 58% were hesitant to move towards dentistry because of this. 76% of the students accepted the fact that they were avoiding dentistry because of social pressure. 60% of the students did not choose BDS, realizing that there are much better opportunities for medical graduates to work abroad than the dental graduates.

Conclusion: Better career options in medicine, lack of job opportunities in the dental profession, influence of the parents and scarcity of scholarships are the main factors contributing to decreased interest in admissions in dentistry over the past few years.

Keywords: Career, Dentistry, Education, Premedical, Undergraduate

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INTRODUCTION

Since many years, dentistry has been regarded as one of the most valuable health profession. (1, 2) Nowadays, with development and easy access to internet and other media platforms, awareness regarding maintenance of good oral health is increasing day by day and people are much more determined and conscious to maintain good dental

health.(2, 3)

The Pakistan Social and Living Measurement Survey has reported an overall literacy rate of 60% for the year 2019-2020; and 67% of the entire population resides in rural areas. (4) The burden of oral problems in Pakistan is extensive and usually affects vulnerable populations, indicating that the large number of population has low level or no awareness towards oral health.— (5). Population of Pakistan is approximately 230million and total number of dentists registered with Pakistan Medical Commission is about 25,000. This makes 1:8500 dentists to population ratio in Pakistan.(6)

There is a huge disparity in the Pakistani population regarding awareness and usage of oral health services. Population in higher socioeconomic class is well aware of dentistry, and is willing to spend a lot of money on cosmetic dentistry in contrary people in lower socioeconomic class are either unaware of oral hygiene or unable to afford expensive dental procedures. (7) The decision regarding choice of career path depends on number of factors, including personal liking, financial benefits, professional prestige, and fewer occupational hazards.(8)

According to Pakistan Medical Commission, there are fifty-five dental schools in Pakistan both in public and private sectors, of which twenty-six are in Punjab, eighteen in Sindh, ten in KPK and one in Baluchistan.(6) In the last decades, number of dental colleges governed by private sector has increased dramatically which has helped a lot in creating awareness and easy access to oral health for general population on other hand production of thousands of dentist annually has led to decreased employment opportunities and saturation of dentists in big cities.

Unfortunately, interest of prospective students, in this discipline has been waning over the past few years, indicated by a large number of vacant seats in different private dental colleges of Pakistan. According to Pakistan Medical Commission, 971 seats in BDS program at different dental colleges of Pakistan remained unclaimed during admissions 2021-22.(9)

A significant decrease in interest in admissions in BDS program was observed in 2021 particularly in private dental colleges. Despite numerous advertisements and extensions in admission dates by Pakistan Medical Commission, situation remained the same and almost half of the seats in different dental colleges remained vacant leading to an alarming situation for stakeholders especially, for the owners of private dental colleges across the country.(9)

To determine the factors leading to this declining interest of students in dental education is the major aim of this study. The topic of research seems to be unique as during literature search no studies were found to elaborate the issue of declining interest in admissions in the BDS program in Pakistan. The findings may be helpful for the policy makers

and the higher education departments to develop better policies for gaining attention of the population so as to increase the admission rates in the dental colleges. This would help in producing quality doctors which would ultimately improve the oral health status of the population and would help in earning foreign remittance by services of Pakistani dentists worldwide.

METHODOLOGY

After receiving ethical approval from the Ethical Review Board, this cross-sectional descriptive study was conducted at three private medical colleges in South Punjab: Multan Medical & Dental College (MMDC), Bakhtawar Ameen Medical & Dental College (BAMDC), and Shahida Islam Medical & Dental College (SIMDC).

To determine the factors leading to lost interest in BDS program a self-administered questionnaire with closed ended questions was given to the students appearing in interviews of MBBS programs in three private medical colleges of Punjab. The data was collected from December 2021 to January, 2022. Two hundred students were selected via convenience sampling. Informed written consent was taken and participants were asked to fill the questionnaire after their MBBS admission interviews. The questionnaire consisted of questions regarding demographic characteristics and 14 questions regarding factors leading to disinclination from BDS program. A 5 point likert scale was used to document the views of the respondents, where 1 represented strongly disagree, 2 for disagree, 3 score was for those having neutral opinion, 4 for those who agreed and 5 was for those who strongly agreed the statement. Data was entered and analyzed by utilizing SPSS version 21. Mean score, frequency and percentages were calculated for all questions.

RESULTS

In this study, a total of 200 applicants applying in three private medical colleges in MBBS were chosen. Among all the participants 85 (42.5%) were males and 115 (57.5%) were females. 122 (61%) of the participants strongly agreed that they did not choose BDS because of better career options in MBBS while only 12 (06%) strongly disagreed with the fact. 54 (27%) of the students did not choose BDS because of perceived inferiority complex in the dental profession, while 44(22%) were of opinion that the dental profession is not inferior. Only 16 (8%) did not choose BDS because of lack of awareness to the dental profession while 60(30%) were well aware of the profession and still did not choose it. 150 (75%) of the students agreed that they will only opt BDS as a career in case their merit is low on the list. 80 (40%) were unwilling to pursue career in dentistry due to the consideration that dentist is not perceived as a complete doctor in our society. Lack of job opportunities in our country was perceived as major factor for not following the career in dentistry and 88 (44%) of the students agreed

strongly to this fact. 76 (38%) of the participants denied for dentistry career due to less career progression and promotion opportunities. Parent's influence was also a major reason to avoid dental profession and 132 (66%) agreed to the fact that they were not choosing dentistry career because of parent's influence. High tuition fee in private medical colleges was not the major demotivating factor and only 36 (18%) agreed to fact that they refused dentistry because of financial reasons. The scarcity of scholarships available for dental students was an important factor and 52 (26%) were hesitant to move towards dentistry because of the opportunities for financial support. Keeping in view the current situation of dentistry in our country with scarce opportunities for specialization in dentistry, 120 (60%) of the participants denied dentistry. The Social stigma attached to the dentists of our country was the most important factor for lower preferences to dental education, 152 (76%) of the students accepted the fact that they were avoiding dentistry because of social pressure. The high cost of modern dental equipment was also an important factor in demotivating the students to pursue a dental career and 112 (56%) agreed to this fact. Considering the current situation of brain drain in our country where the majority of young professionals want to move abroad, 120 (60%) of the students did not choose BDS, realizing that there are much better opportunities for medical graduates to work abroad than the dental graduates. (Table 1)

DISCUSSION

The current study provides comprehensive information on the factors that contributed to a reduction in interest in BDS admissions at private dental colleges in South Punjab. In Pakistan over the last decade, colleges and universities registered with Pakistan Medical Commission have awarded degrees in Bachelor of Dental Surgery (BDS) to 4,869 male students and 14,185 female students. (10) In the past 10 years, 136,213 doctors and dentists have been registered with PMC. (10) Since there are few career options for dental graduates, and the prospective students are losing interest to pursue dentistry as a profession. This article examines the reasons for precarious status of dental graduates in Pakistan and the factors that have contributed to the reduction in interest in admissions. In Pakistan there is scarcity of well-planned policies and initiatives for awareness regarding oral healthcare that are in the best interests of dentists and the community at large. Any such policies and programs can be helpful in decreasing burden of oral diseases in Pakistani population and will help to safeguard the integrity of dentists and the dental community. (11)

Dentistry in Pakistan has sadly never achieved its rightful position or reputation because it has always operated in the shadow of the medical industry. (12) Due to their concerns about the future, students have begun to pursue alternative careers since the importance of dentistry has decreased as a

result of a lack of employment opportunities. Students favor MBBS since it offers more employment prospects. (13)

In year 2021, 42890 students in Punjab passed MDCAT conducted by PMC, while there are 8280 and 1369 total seats in MBBS and BDS in all private and public medical & dental colleges of Punjab. In spite of huge number of prospective students, 321 (23%) seats for BDS program remained vacant in Punjab. (9) After analysis of this situation all the stake holders including owners of private dental colleges and Pakistan Medical Commission is considering to decrease the MDCAT pass percentage for admission in the BDS program from 65% to 45% (15,16)

The current economic and inflation condition in Pakistan is posing difficulties for the entire country.—(17) The cost of private dental colleges has dramatically increased during the past two years. The Pakistan Medical Commission (PMC) has given private colleges permission to raise their tuition by 5% every year. (18) The total cost of a four-year BDS program is roughly 7 million rupees. This study demonstrates that the rise in tuition fee is one of the major factors contributing to decreased interest in admissions in BDS program.

Lack of scholarships or financial aids for the prospective students was also reported to be important factor for low preference to BDS education. The students with high academic achievements who missed the public sector merit list by fraction of marks would have been suitable candidates for BDS in Private colleges but were merely denied admissions due to their inability to pay high fee. (19)

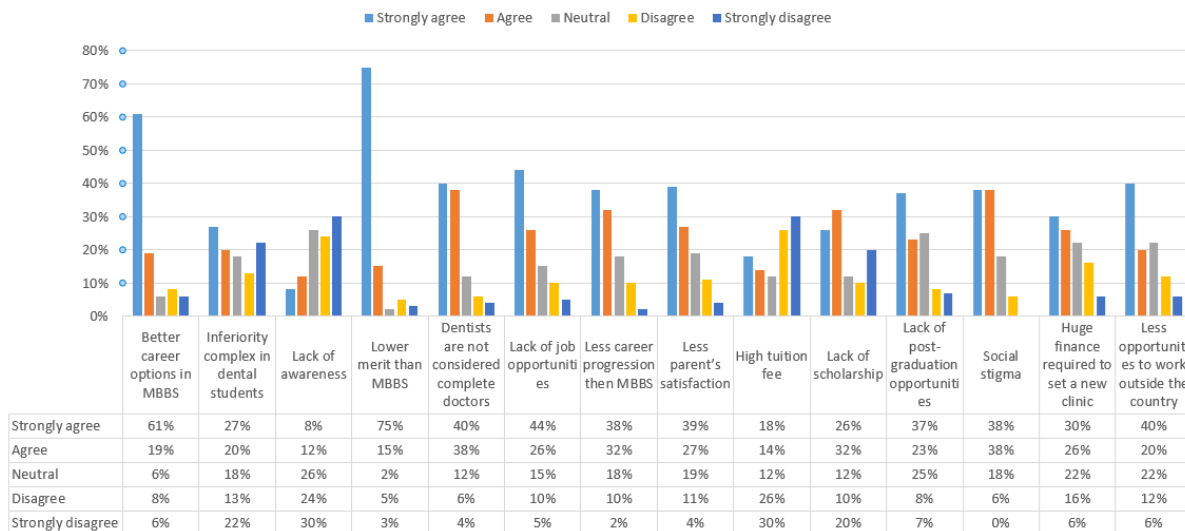
Scarcity of opportunities for higher education and specialization in dentistry was also reported to be an important factor for decreased interest in dental profession. As far as post-graduation in dentistry in different specialties is concerned, there are limited seats, limited number of supervisors, few postgraduate institutions recognized by Pakistan Medical Commission and very less postgraduate courses offered by these institutions. There are only two major lanes for dentist to follow if they want to study for any post-graduation. First one is Fellowship of College of Physician and Surgeons (FCPS) and second one is Masters in Dental Surgery. (20)

In Punjab there are four dental colleges in public sector and twenty-five dental colleges in private sector, however all these 29 dental colleges are located in only four major cities like Lahore, Rawalpindi, Faisalabad and Multan. (21)

As a result, students in these cities are more likely to pursue a BDS degree than students in cities without such universities. (22)

The government should take steps to ensure uniform distribution of these dental colleges throughout Punjab. This would enhance employment prospects in rural areas and may assist to balance the number of dentists in urban and rural areas. (12)

Figure 1: Histogram showing response of participants



Conclusion: According to the overall data, the reduction in interest in BDS admissions is mostly caused by a lack of employment opportunities for BDS graduates, unsatisfactory PGR training stipends, and low-income sources for BDS graduates.

RECOMMENDATIONS

The above-mentioned factors can be minimized by few dedicated steps by the stakeholders. These include:

1. Creation of more positions for dentists in public sector BHUs, RHCs, THQs, DHQs and tertiary care hospitals.
2. Establishing more private clinics and dental

hospitals in areas having population with poor oral health status.

3. Health education programs for improvement of oral health should be planned to increase oral health awareness among population.
4. Increase the number of postgraduate seats to meet the demand of graduating dentists. Contemporary dental sub specialties which are being practiced worldwide should be introduced, ultimately creating more opportunities for dentists to pursue their career.

Table 1: Participant's response shown in frequency and percentage

Sr. #		Responses				
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Better career options in MBBS	122(61%)	38(19%)	12(06%)	16(08%)	12(06%)
2	Inferiority complex in dental students	54(27%)	40(20%)	36(18%)	26(13%)	44(22%)
3	Lack of awareness	16(08%)	24(12%)	52(26%)	48(24%)	60(30%)
4	Lower merit than MBBS	150(75%)	30(15%)	4(02%)	10(05%)	06(03%)
5	Dentists are not considered complete doctors	80(40%)	76(38%)	24(12%)	12(06%)	08(04%)
6	Lack of job opportunities	88(44%)	52(26%)	30(15%)	20(10%)	10(05%)
7	Less career progression than MBBS	76(38%)	64(32%)	36(18%)	20(10%)	04(02%)
8	Less parent's satisfaction	78(39%)	54(27%)	38(19%)	22(11%)	08(04%)
9	High tuition fee	36(18%)	28(14%)	24(12%)	52(26%)	60(30%)
10	Lack of scholarship	52(26%)	64(32%)	24(12%)	20(10%)	40(20%)
11	Lack of post-graduation opportunities	74(37%)	46(23%)	50(25%)	16(08%)	14(07%)
12	Social stigma	76(38%)	76(38%)	36(18%)	12(06%)	0(00%)
13	Huge finance required to set a new clinic	60(30%)	52(26%)	44(22%)	32(16%)	12(06%)
14	Less opportunities to work outside the country	80(40%)	40(20%)	44(22%)	24(12%)	12(06%)

Conflict of Interest: None

Patient Consent: Inform Consent were taken

Ethical Approval: Ethical approval was taken from the IRB Shahida Islam Medical & Dental College Lodharan on Dec, 2021 vide letter no. SIMC/IRC/MMDC/ 172/21

Author's Contribution:

RS, AA & UR: Study design, data collection and analysis

HT, AyA & YAK: Manuscript preparation, drafting and revising

RS, AA & KZ: Review and final approval of manuscript

All the authors have approved the final version of the manuscript to be published

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REFERENCES

- Alkatheri AM, Bustami RT, Albekairy AM, Alanizi AH, Alnafesah R, Almodaimegh H, Alzahem A, Aljamaan K, Zurnuq S, Qandil AM. Quality of life and stress level among health professions students. Health Professions Education. 2020 Jun 1;6(2):201-10.
- Nancarrow S, Borthwick A. The allied health collective. In: The Allied Health Professions 2021 Mar 10 (pp. 27-56). Policy Press.
- Dudovitz R, Teutsch C, Holt K, Herman A. Improving parent oral health literacy in Head Start programs. Journal of Public Health Dentistry. 2020 Jun;80(2):150-8.
- Pakistan Social and Living Standards Measurement Survey (2019-20), District Level Survey Government of Pakistan: Pakistan Bureau of Statistics, Ministry of Planning Development & Special Initiatives. Available from: https://www.pbs.gov.pk/sites/default/files//pslm/publications/pslm_district_2019-20/PSLM_2019_20_District_Level.pdf
- Finance Mo. Pakistan Economic Survey 2009–10. Ministry of Finance, Government of Pakistan Islamabad; 2010.
- News Update, Admission data Pakistan Medical Commission [Available from: <https://www.pmc.gov.pk/Colleges/PublicDentalColleges>] [Accessed 4 Feb 2022]
- Hayashi M, Haapasalo M, Imazato S, Lee JI, Momoi Y, Murakami S, Whelton H, Wilson N. Dentistry in the 21st century: challenges of a globalising world. Int Dent J. 2014 Dec;64(6):333-42. doi: 10.1111/idj.12132. Epub 2014 Sep 9. PMID: 25201627; PMCID: PMC9376391.
- Lone MA, Lone MM, Lone MA, Shaikh MS, Khan F, Soomro AH. Motivational factors for pursuing dentistry as a profession in colleges of Karachi, Pakistan. JPMA. 2020 Mar 28;2020.
- List of vacant seats for transfer as of 30th April 2022: Pakistan Medical Commission [Available from: <https://www.pmc.gov.pk/Colleges/PublicDentalColleges>] [Accessed 7 May 2022]
- doctors and dentists registered with PMC 2022 [Available from: <https://dnd.com.pk/136213-doctors-and-dentists-registered-with-pmc-in-last-10-years/257472>] [Accessed 6 April 2022]
- Khan S. Challenges to Oral Cancer Prevention in the South Asian Population: A Scoping Review. 2016
- Jawaid SA. Plight of dentistry in Pakistan. Pakistan journal of medical sciences. 2020 Mar;36(3):299.
- Dagli N, Dagli R. Increasing unemployment among Indian dental graduates-High time to control dental manpower. Journal of International Oral Health. 2015 Mar 1;7(3):1.
- Katpar S, Almas K. DENTAL EDUCATION PAKISTAN (DEP) VISION 2025: A WAY FORWARD, TOWARDS PROGRESSION & GLOBALIZATION. Pakistan Armed Forces Medical Journal. 2021 Aug 26;71(5):1509-4.
- Public Notice. Lowering of MDCAT Pass Percentage for Admission in Dental Program News Update. Pakistan Medical Commission [Available from: <https://pmc.gov.pk/Documents/Others>] [Accessed 21 May 2022]
- Jolly B. National licensing exam or no national licensing exam? That is the question. Medical education. 2016 Jan;50(1):12-4.
- Asghar H, Ayub M, Shahzad SK, Shah SZ. Nexus between Inflation, Unemployment, and Economic Growth of Pakistan. Pakistan Journal of Humanities and Social Sciences. 2022 Jun 30;10(2):904-12.
- Medical And Dental Undergraduate Education (Admissions, Curriculum And Conduct) Regulations 2021. Pakistan Medical Commission [Available from: <https://pmc.gov.pk/Documents/Others>] [Accessed 20 March 2022]
- Zakaria M, Janjua SY, Fida BA. Internationalization of higher education: Trends and policies in Pakistan. Bulletin of Education and Research. 2016 Jun;38(1):75-88.
- Nawabi S, Mahboob U. Perception of parents about dentistry as a career option for their children. Journal of Islamic International Medical College

- (JIIMC). 2016 Sep 1;11(3):131-6.
21. List Of Dental Schools In Pakistan [Available From: [Http://Www.Pmdc.Org.Pk/Recognizeddentalcollegesinpakistan/Tabid/167/Default.aspx.](http://www.pmdc.org.pk/Recognizeddentalcollegesinpakistan/Tabid/167/Default.aspx)] [Accessed 17 May 2022]
 22. Pakistan Medical Commission MDCAT analysis report august September 2021 [Available at: [https://www.pmc.gov.pk/Documents/Examinations/FINAL-MDCAT2021DataAnalysisReport.pdf.](https://www.pmc.gov.pk/Documents/Examinations/FINAL-MDCAT2021DataAnalysisReport.pdf)] [Accessed 12 april 2022]