

## Motivation for Choosing Medical and Dental Profession

SOHAIL ANJUM<sup>1</sup>, NIGHAT NADEEM<sup>2</sup>, FAHAD DOGAR<sup>3</sup>, MUHAMMAD SAAD MATEEN MUNSHI<sup>4</sup>, TALMEEZ ZAIB<sup>5</sup>, HAFSA SOHAIL<sup>6</sup>, MUHAMMAD ANWAR SULEHRI<sup>7</sup>

<sup>1</sup>Assistant Professor of Medical Education Amna Inayat Medical College, Lahore

<sup>2</sup>Assistant Professor, Department of Medical Education and Research, Lahore Medical & Dental College Lahore

<sup>3</sup>Associate professor of Community and Preventive Dentistry, Faryal Dental College, Lahore

<sup>4</sup>Associate Professor of Prosthodontics Faryal Dental College, Lahore

<sup>5</sup>Associate Professor of Biochemistry Amna Inayat Medical College, Lahore

<sup>6</sup>3rd Year BDS student, Faryal Dental College, Lahore

<sup>7</sup>Professor of Community Medicine, Amna Inayat Medical College, Lahore

Correspondence to Dr. Sohail Anjum, Email: [drsohailanjum@hotmail.com](mailto:drsohailanjum@hotmail.com) Cell: 03004410305

### ABSTRACT

**Background:** Motivation is the driving force for seeking knowledge. In learning of science motivation plays a vital role.

**Aim:** To identify the motivational factors for choosing medical and dental profession by students in a private medical and dental college.

**Methods:** A quantitative cross-sectional study was conducted in March 2019 in a private medical and dental college from among the medical students of 3<sup>rd</sup> year MBBS and BDS. A validated questionnaire was filled by 220 respondents. The questionnaire had 30 sections and a Likert scale was applied: Five – Very important to One – Not at all important. The instrument also surveyed participants' gender, age, and the education profile of parents. Results were analyzed by SPSS version 20 in form of frequencies and percentages, wherever appropriate.

**Results:** Out of total of 700 medical and dental students of 3<sup>rd</sup> year, 220 participated with 127 MBBS and 93 BDS. Among 220 students 64 were male and 156 were female respondents. The major motivational factors were: Almost 183 (83.18%) responded that these were empathic professions with 166 (75%) of them being influenced by family/friend or relative to pursue a medical or dental career.

**Conclusion:** In this study, the main motivational factor for choosing medical or dental profession was that these professions have an emphatic factor and family background, inspiration by parents/friends may also play a vital role.

**Keywords:** Career choice, medical, dental, motivation, students.

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### INTRODUCTION

Medical profession in last few years is being highly rated among students probably as it offers financial as well as socially satisfactory career. In addition, the mushrooming of medical and dental colleges has increased opportunity to get admission. To seek knowledge of science, motivation is believed essential for persuading studies of college level and keeping life-long science interest<sup>1</sup>. An improvement is required in order to improve cognitive strategies of the students, their acquisition of knowledge, their motivation and self-efficacy<sup>2</sup>. Although, in many countries, dental students motivation for studies have been largely studied using psychometric questionnaires<sup>3</sup> but motivation for career choice of medical and dental students has also been investigated in few studies. It seems that career choice of dental student may have been motivated by various factors which are different from medical students. However, the current study has provided the factors required for motivation of professional choice for medical and dental students. Presenting the difference between motivation of medical and dental students, a research has been done providing conclusive evidence in respect to the future and nature of dental profession<sup>4</sup>. The motive behind choosing career of dentistry has been globally studied which was based on diversity of samples<sup>5</sup>. This

understanding of student's motivation for the careers of dentistry and medicine may provide us with effective materials for the process of recruitment.

### METHODOLOGY

A quantitative cross-sectional survey was conducted in March 2019 in a private medical and dental college of Lahore. The identity of participants was kept anonymous. All the students available on the data collection day were included in the study. Out of 700 students, 220 participated in the study. A validated questionnaire was distributed with permission of tutor at end of the lecture to the students. On average one class was surveyed per day. The filled questionnaires were collected at same time. The questionnaire included demographic variables as age, gender of participants and educational profile of their parents. There were 30 items with central factors as: empathic profession, earning, money, flexibility, people and personal background, inspiration by family and friends, autonomy and job security etc. The participants were to rate the motives in choosing medical and dental profession as a career on a five point Likert scale: five= very important, four= important, three= neutral, two= less important and one= not at all important. After collecting data, it was analyzed by SPSS version 20 in form of frequencies and percentages, wherever appropriate.

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**RESULTS**

A quantitative cross-sectional study was carried out in March 2019 on the students of a private medical and dental college of Lahore. Out of total 700 students, 220 participated in the study. The age frequency shows most participants were between 18-20 years (Table-1). Among the 220 participants, 127 were from MBBS and 93 from BDS (Table 2) with 64 males and 156 female respondents (Table-3).

The educational profile (Table-4) shows most participants father education was graduation and above 139 (63.18%). Similarly, 11 (5%) were belonging to the medical profession, on the other scenario almost 15 (6.8) had no educational background. The mother education profile shows almost 119 (54.09%) to be graduates and above with 28 (12.7%) having no educational background (Table-5).

Table-6 shows the 30 questions asked by the respondents. The medical profession being an emphatic and caring had a high importance response 183 (83.18%). The motivation factor of family/friend or relative being in the medical field gave a positive response of a 166 (75.45%). Almost 109 (49.54%) rated medical profession jobs easier to acquire with 46 (20.90%) responding as this of not much importance. Self-employment was important for 152 (69.09%) participants and 178 (80.90%) wanted to help/treat people, with 144 (65.45%) giving importance to medical as a scientific profession.

The inspiration and encouragement by family had high importance rate of 151 (68.63%) and 110 (50%) influenced by visits to the family physician. On the other hand, 92 (41.81%) rated that flexible working hours and 105 (47.72%) rated giving time to family in medical career were not very important factors. Only 85 (38.63%) responded that entering medical profession for an earning, with 66 (30%) not taking this as of any importance. Surprisingly, 64 (29.09%) didn't think giving time to family and 85 (38.63%) that there wasn't much on call work in this profession had any importance.

Table 1: Age of Respondents

Age	Frequency	Percent
18-20 years	994	88.2
21-25 years	22	10.0
>25 years	4	1.8
Total	220	100.0

Table 2: Class of Respondents

Class	Frequency	Percent
MBBS	127	57.7
BDS	93	42.3
Total	220	100
21-25 yrs	22	10.0
>25 yrs	4	1.8
Total	220	100.0

Table 3: Gender of Respondents

Gender	Frequency	Percent
Male	64	29.1
Female	156	70.9
Total	220	100.0

Table 4: Education of Respondent Father

Education	Frequency	Percent
Matric	26	11.81
FSC/ICS	26	11.81
BSc/BA/B.com	56	25.45
MSc/MBA	57	25.9
MPhil/PhD	26	11.81
Doctor	11	5.0
None	15	6.8
Law	1	0.45
Businessman	1	0.45
Engineer	1	0.45
Total	220	100.0

Table 5: Education of Respondent Mother

Education	Frequency	Percent
Matric	27	12.3
FSC/ICS	27	12.3
BSc/BA/B.com	63	28.6
MSc/MBA	56	25.5
MPhil/PhD	16	7.3
Doctor	3	1.4
None	28	12.7

Figure 1: Most Important Motivational Factors for Choosing Medical and Dental Profession

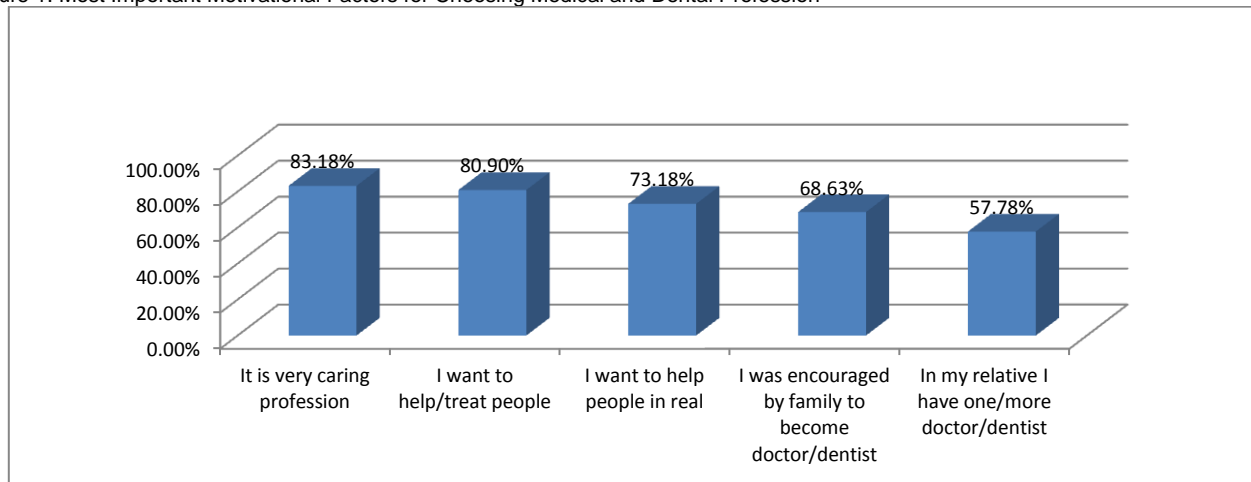


Table 6: Respondents Responses to Statements (N=220)

Statements	Very important	Important	Neutral	Less important	Not at all important
In my relative I have one/more medical /dental doctors	44 (20%)	39(17.7%)	36(16.36%)	24 (10.9%)	74 (33.6%)
In my friends, I have one/more medical /dental doctors	46 (21%)	37 (17%)	40 (18%)	28 (13%)	69 (31%)
Doctors/dentists can easily find employment	50 (23%)	59 (27%)	65 (30%)	22 (10%)	24 (11%)
Doctors/dentists are paid more than the otherwise job option	43 (20%)	52 (2%)	64 (29%)	36 (16%)	25 (11%)
I want self-employment	88 (40%)	64 (29%)	41 (19%)	12 (6%)	15 (7%)
I want to help/ treat my people	141 (64%)	37 (17%)	25 (11%)	9 (4%)	8 (3%)
This will give me the more regular timings than other professions related to health.	64 (29%)	52 (24%)	55 (25%)	24 (11%)	25 (11%)
I was encouraged by my family to become doctor/ dentist	110 (50%)	41 (19%)	41 (19%)	13 (6%)	15 (7%)
I can start independent practice after graduation	82 (37%)	48 (22%)	59 (27%)	17 (8%)	14 (6%)
I prefer to work with other people	70 (32%)	68 (31%)	49 (22%)	21 (10%)	12 (5%)
Visits to my family physician /dentist were good enough to make me think a career in medicine/ dentistry	42 (19%)	68 (31%)	51 (23%)	26 (12%)	33 (15%)
I like autonomy of doctors/dentists	54 (25%)	68 (31%)	71 (32%)	10 (5%)	17 (85%)
Such a career gives me job security	59 (27%)	75 (34%)	49 (22%)	22 (10%)	15 (7%)
Doctor/dentist have flexible working schedule	23 (10%)	27 (12%)	78 (35%)	38 (17%)	54 (25%)
Career as doctor/dentist can give enough time for my family	22 (10%)	33 (15%)	60 (27%)	41 (19%)	64 (29%)
This profession will give me opportunity to serve with my own hands	111 (50%)	50 (23%)	36 (16%)	12 (5%)	11 (5%)
It is very caring profession	129 (59%)	54 (25%)	21 (9%)	10 (5%)	6 (3%)
It is scientifically based profession	85 (39%)	59 (27%)	46 (21%)	17 (8%)	13 (6%)
I want to earn money	52 (23%)	33 (15%)	56 (26%)	35 (16%)	31 (14%)
It is prestigious	85 (39%)	59 (27%)	49 (22%)	14 (6%)	13 (6%)
In my high school, I heard a discussion about medicine/dentistry careers	35 (16%)	49 (22%)	70 (32%)	28 (13%)	38 (17%)
In my college, I heard a discussion about medicine/dentistry careers	35 (16%)	61 (27%)	64 (29%)	27 (12%)	33 (15%)
Our family physician/dentist has encouraged me	59 (27%)	46 (20%)	47 (21%)	21 (10%)	47 (21%)
I got encouraged by counselors and/or teachers	44 (20%)	42 (19%)	68 (31%)	24 (11%)	42 (19%)
There is financial security in this profession	66 (30%)	59 (27%)	55 (25%)	20 (9%)	20 (9%)
I can be my own boss	93 (42%)	50 (23%)	43 (20%)	17 (8%)	17 (8%)
I want to help people in real	122 (55%)	39 (18%)	38 (17%)	10 (5%)	11 (6%)
I had worked in some other dental /medical related field and hence I wanted to be dentist/doctor	36 (16%)	35 (16%)	52 (24%)	23 (10%)	74 (34%)
On call work is not very much	27 (12%)	35 (16%)	73 (33%)	31 (14%)	54 (25%)
Dentists/doctors do not face life and death situations routinely	22 (10%)	28 (13%)	78 (35%)	31 (14%)	61 (28%)

## DISCUSSION

Learning motivation is considered mandatory for studies at college level and an interest in science interest on a life-long basis. A trend showing low motivation levels in science learning at college level may be linked with national concern of low science literacy and aspirations in science career<sup>1</sup>. Some studies on dental students put more emphasis on the motivations of financial aspect in comparison to the helping people aspect. Contrarily, other studies emphasized on helping people<sup>4</sup>. Dental students study motivations have largely been studied in many countries using psychometric questionnaires<sup>3</sup>. Like motivation of reading questionnaire that measures various facets of reading motivations in children of elementary school<sup>7</sup>. We have used motivation questionnaire to determine motivation of medical and dental students of a private medical and a dental college of a private university in Lahore. Reasons behind choosing dentistry show significant implications for selecting and training students along with their job satisfaction in future<sup>8</sup>. The respondents showed high importance to choosing the profession as it had empathy. A study of four Nigerian dental schools related motives behind choosing dentistry to its image which students could use as a vehicle to achieve their

personal goals<sup>9</sup>. Another research documented the correlation between admission methods of dental schools and the reason of choosing this career. It suggested adding evaluation of applicant motivations by interview to these admission criteria<sup>10</sup>. In Saudi Arabia a research on private and public dental schools concluded “one or more of my relatives is dentist” being the most significant amongst the motivation factors involved to attract students towards dental profession<sup>11</sup>. This study showed significant importance by respondents to be motivated by family/friends or personal physicians in choosing medical profession. In India a research done on dental students found that being self-employed was the top most reason for joining dentistry<sup>5</sup>, and our study showed almost 70% participants wanted to pursue medical profession to be self-sufficient. To know gender differences in the motives to opt dental career, in the academic year 2000-2001 a survey was carried out on American dental students which showed that females students rated people-oriented motives as the more important while the male students rated the business related and self-employment related motives as the more important ones<sup>6</sup>. It is interesting that the purchasing professionals were motivated to achieve necessary skills and to use them to make it a strategic asset of the firm<sup>12</sup>.

The effect of friends, peers, family relations, teachers and role models to influence medicine career was also studied in United Arab Emirates. It indicated that most of the medical students mentioned that both parent's preferences as very important or considerable factor in their medicine career choice, friends had the weak influence while the mothers had strongest effect and the teacher's influence remained insignificant. So it was recommended that the parents should be actively involved in the career guidance programs at the higher secondary school level<sup>13</sup>. At Manchester University a survey directly compared the motivation of a selection of medical and dental students. Medical students showed more professional behavior putting altruism as key motivating factor than the dental students who showed more interest in financial gain<sup>4</sup>. Dentistry is regarded as social job because it bears high relationship with people. Male can be encouraged to choose profession of dentistry on account of the factor of income which is more important to them in comparison to females<sup>14</sup>. A study also revealed that motivation of choosing dental education influenced the motivation of studying; hence it put emphasis on the significance of learning context<sup>15</sup>. Personal concepts and views regarding profession have major influence on choosing dentistry career<sup>16</sup>. Dental and medical students reported a range of factors motivating for studying dentistry/medicine and that their future plans were affected by parents' education, age and marital status<sup>17</sup>. Academic achievement of students interaction and coordination were amongst different motivation aspects<sup>18</sup>. However it also appeared that initial motivation of dental students is tempered due to their professional education responsibilities, experience, increase in student debt and a perception of feeling undervalued<sup>19</sup>. Medical students ave showed specific types of controlled and autonomous motivations which appear to relate with the learner's mind-frame towards educational environment and learning. In contrast to controlled motivation, autonomic motivation is more closely related with the self-regulatory measures of academic success and learning in context to the demanding medical program<sup>20</sup>.

## CONCLUSION

The researcher concludes that the main motivational factor for choosing medical and dental profession was that these fields have a strong affiliation with qualities of empathy and compassion. In addition, family background and inspiration by parents, friends or relatives has an important and pivotal role.

## REFERENCES

1. You HS, Kim K, Black K, Min KW. Assessing Science Motivation for College Students: Validation of the Science Motivation Questionnaire II using the Rasch-Andrich Rating Scale Model. *Eurasia Journal of Mathematics, Science and Technology Education*. 2018;14(4):1161-73.
2. Kubischta F. Engagement and Motivation: Questioning students on study-motivation, engagement and study strategies. 2014.
3. Deumier L, Alliot-Licht B, Bouton-Kelly L, Bonnaud-Antignac A, Michaut C, Quilliot F, et al. Factor analysis of a motivation questionnaire adapted to predoctoral French dental students. *Journal of Dental Sciences*. 2016;11(2):123-9.
4. Crossley ML, Mubarik A. A comparative investigation of dental and medical student's motivation towards career choice. *British dental journal*. 2002;193(8):471.
5. Singh A, Saxena S, Tiwari V, Tiwari U, Vishnu V. First-year dental students' motivation for choosing the dental profession: A questionnaire study of budding dentists in Central India. *International Journal of Educational and Psychological Researches*. 2015;1(4):272.
6. Scarbez M, Ross JA. Gender differences in first-year dental students' motivation to attend dental school. *Journal of Dental Education*. 2002;66(8):952-61.
7. Wigfield A. A Questionnaire Measure of Children's Motivations for Reading. *Instructional Resource No. 22*. 1996.
8. Sapna B, Nadaf N, Badroon SNA, Rahim ZHA, Tan R. Assessment of motivational factors and career aspirations of dental interns in Davangere city: A cross-sectional survey. *International Journal of Oral Health Sciences*. 2015;5(2):93.
9. Orenuga OO, da Costa OO. Characteristics and study motivation of clinical dental students in Nigerian universities. *Journal of Dental Education*. 2006;70(9):996-1003.
10. Du Toit J, Jain S, Montalli V, Govender U. Dental students' motivations for their career choice: an international investigative report. *Journal of dental education*. 2014;78(4):605-13.
11. Nabhan AB, Alshalhoob MA, Almahaiza KM, Alqwizani ZR. Dentistry as a career: Factors and Motivational Reasons-A Comparative questionnaire study of Students of Public and Private Schools in Saudi Arabia.
12. Pagell M, Das A, Curkovic S, Easton L. Motivating the purchasing professional. *International journal of purchasing and materials management*. 1996;32(2):27-34.
13. Ausman J, Javed A, Ahmed S, Samad MA, Pour AS, Mathew E, et al. Social factors influencing career choice in a medical school in the United Arab Emirates. *Education in Medicine Journal*. 2013;5(1).
14. Hashemipour M. Dental students' motivation for entering dentistry in Kerman school of dentistry. *Iranian Journal of Medical Education*. 2006;6(1):109-15.
15. Kristensen BT, Netterstrom I, Kayser L. Dental students' motivation and the context of learning. *European Journal of Dental Education*. 2009;13(1):10-4.
16. Freire MdCM, Jordao LMR, de Paula Ferreira N, de Fatima Nunes M, Queiroz MG, Leles CR. Motivation towards career choice of Brazilian freshman students in a fifteen-year period. *Journal of Dental Education*. 2011;75(1):115-21.
17. Dastjerdi MV, Mahdian M, Dastjerdi EV, Namdari M. Study motives and career choices of Iranian medical and dental students. *Acta Medica Iranica*. 2012:417-24.
18. Firouznia S, Yousefi A, Ghassemi G. The relationship between academic motivation and academic achievement in medical students of Isfahan University of Medical Sciences. *Iranian Journal of Medical Education*. 2009;9(1):79-84.
19. Gallagher J, Clarke W, Wilson N. Understanding the motivation: a qualitative study of dental students' choice of professional career. *European Journal of Dental Education*. 2008;12(2):89-98.
20. Sobral DT. What kind of motivation drives medical students' learning quests? *Medical education*. 2004;38(9):950-7.