Why do you want to become a Doctor: Motives in Minds of First Year MBBS Students at a Public Medical College

Muhammad Naeem Afzal,Abdul Sattar, Masood Ahmad, Manzoor Ahmad,
Muhammad Shahzad Anwar, Zafar Ali Choudry

ABSTRACT

Background: Medical profession is highly competitive career choice in Pakistan, but motives behind in minds of students (altruistic, financial or other) have yet not been explored in Pakistan, especially in developing trends of financial based choices in society.

Objective: To look into the possible motives to become a doctor, in students who joined Khawaja Muhammad Safdar Medical College, Sialkot as first year medical students in 2018

Material & Methods: This cross-sectional survey was conducted in Khawaja Muhammad Safdar Medical College, Sialkot) in December 2017. The questionnaire aimed to ask their demographic details, their inspiration and motives to join medical education. The questionnaire was administered to 100 students entering the first year of medical college. Students were asked to mark four options (among 12 options given) they think more important motives to come in this profession. They were also given option to write any other motive important for them but not listed. Data were entered in SPSS version 20.0 and were presented as descriptive statistics.

Results: Total of 84, out of 100 students responded to the questionnaire with 70% females. Top four motives were to serve humanity (95%), gain respect in society (71%), to fulfil parents' wishes (68%), to be beneficial to family (37%). There were 19 (23%) students who thought they were pushed by their parents to become doctor.

Conclusion: Altruism based and social motives are still the most powerful motives in minds of students. Parental wishes and parental pressures to become doctor needs further exploration.

***Keywords**: MBBS students, motives, altruism*

This article may be cited as: Afzal NM, Sattar A, Ahmad M, Ahmad M, Anwar SM, Choudry AZ
Why do you want to become a Doctor: Motives in Minds of First Year MBBS Students at a Public Medical College.JSMC 2019;9(1):140-4

INTRODUCTION

Pursuing medicine as a career is highly competitive in Pakistan. Students have to achieve high marks in their intermediate (F.Sc.) or A-level exam and then also show highest performance in Medical and dental colleges admission test (MDCAT), to make a successful entry to medical education in public sector institutions. The candidates appearing in entry test is increasing every year. In 2017, 48,533 students appeared in entry test called MDCAT,[1] out of these, almost 6.5% students were selected against available 3,197 seats in public sector medical colleges.[2] Historically, this profession is chiefly related to service to humanity above self and without financial interest, that is technically named as altruism, yet financial gain is becoming important in choosing the career in recent years.[3]

A study from Gawaliar, India identified that selecting a career in medical field is a complex decision that is taken by the student him/herself but is affected by a multitude of external factors. Helping others was the top internal motive but earning money was a motive in considerable percentage of students. Many students were inspired from some relative who was already in the field. Some students agreed to the influence of parents on their decision.[4] A cross sectional study on undergraduate and graduate entry students from Ireland found that helping people and curing the disease was the main motive present in almost 90% students joining medical school as their career of choice. Still 27-39% students also pointed out financial gain as their one major motive. Other factors were intellectual satisfaction, working with people, friends studying medicine, and professional independence. Parental encouragement was a major motive in 70% of undergraduate entry students.[5] The Hungarian first year medical students however, considered high financial interests as a considerable important motive to join medical profession as career second to humanitarian aspect.[6]

Khawaja Muhammad Safdar Medical College, Sialkot

Correspondence: Muhammad Naeem Afzal,
Associate Professor, Medicine,
Khawaja Muhammad Safdar
Medical College, Sialkot, Pakistan.
Email: dr_mna1@yahoo.com

Received: October 03rd 2018, Accepted March 02nd 2019

Zarin Siddiqui identified many factors that precluded this research in Pakistan. These include lack of clarity of themes in term of evolving nature of specialties and different setups of clinical practices and lifestyle of doctors, as well as influence of their parents/guardians may affects their decisions.[7] Keeping in view our sociocultural background where students are influenced by multiple factors and personalities, as well as changing influence of economic and materialistic socialization, it is interesting to know the main motives in very minds of newly joining medical students themselves. This could be of interest for health authorities also that if financial gain and other motives that have nothing to do with altruism come on top, healthcare distribution to the majorly poor and deprived society of Pakistan may be grossly affected in the hands of these new doctors when they come in practice after few years of time. In view of paucity of local data exploring the minds of young students, we conducted this questionnaire-based study to look into possible motives to become a doctor, in students who joined Khawaja Muhammad Safdar Medical College, Sialkot as first year medical students in 2018.

MATERIAL AND METHODS

This cross-sectional survey was conducted at Khawaja Muhammad Safdar Medical College, Sialkot in December 2017. The study was approved by intuitional review board. A questionnaire was designed based on a qualitative study done in Sri Lanka[8] that identified six themes and multiple subthemes. The questionnaire aimed to ask their demographic details, their inspiration and motives to join medical education. The questionnaire was checked for content validity by one medical educationist. After approval from ethical research committee of the institute, questionnaire was administered to 100 students entering the first year of medical college. Informed consent was sought from each participant before filling in the questionnaire. Students were asked to tick four options (among 12 options given) which they think most important motives to come in this profession. They were also given option to write any other motive important for them but not listed. One question was asked to investigate influence of family in this decision. The study was conducted within one week of joining the students in their classes to reduce the risk of recall bias and influence from peers in their medical class and their medical teachers. Data were entered in SPSS version 20.0. Descriptive statistics were used to elaborate the results of different variables in question.

RESULTS

A total of 84 students filled in and returned the questionnaire, making a response rate of 84%. Out of these, 25 (30%) were male. As per district of domicile, 38 (45%) were from Sialkot (27) and Gujranwala (11) districts, and 23 (27%) were from Lahore. 62 (74%) students declared their residence in urban areas, while 12 (14%) declared it suburban and 10 (12%) as rural. Only 4 (5%) students' one or both parents were doctor. 82 (98%) students had matriculation followed by F.Sc. as their route of education, while only 2 students came from Cambridge system of education. 42 (50%) students declared that they were inspired by some close relative (uncle, sibling, cousin) to become a doctor, 3 out of these said they got inspired by this profession while visiting to a hospital. Other 50% had no such inspiratory force.

Students were asked to mark 4 top motives out of 12 listed. Each positively marked response in the list of motives was counted and represented as their frequency. Among the given motives, top 4 motives chosen by the students were, to serve humanity, respect in society, to fulfil parents' wishes, and to be beneficial to family. (Table 1) This shows that altruism and social considerations, instead of financial interests, are among the top motives for prioritizing this profession in minds of students themselves.

Among the “other” motives to opt the profession, two students said that they chose the profession to make their day of judgement (akhirat) better, and another two said that their siblings could not get admission in medical college, so they took it as challenge.

Though 23 (27%) students had not thought of the specialty they want to pursue, yet 73% students had considered a range of specialties to join in future. The top preferences were Cardiology [16, (26%)], Gynae, Surgery, Neurology, [6, (10%) each] followed by Neurosurgery [5, (8%)], Pediatrics, Endocrinology, Dermatology, and Cardiac Surgery [3, (5%) each)]. Other specialties considered were Orthopedic, Ophthalmology, Nephrology [2, (3%) each], and Medicine,

Gastroenterology, Oncology, and Urology [1, (1%) each]. While 25 (30%) students did not give any specific motives to pursue certain specialty, 29 (35%) wrote their personal interest and 11 (13%) to serve humanity as motive. Four students (5%) had experience of illness of their own or their close relative in that specialty that made them think of that specialty, while the same number thought that there is lack of good doctors in those specialties.

There were 57 (68%) students who selected the option that they are becoming doctors to fulfil parents' wishes, but even among these, 19 (23%) students openly commented that they were pushed by their parents to become a doctor. In response to the question whether they'll again become doctor or something else if given another chance, only 2 of these 19 said they'll opt for another profession. Out of the remaining 65 (77%) students who didn't comment so, 13 (20%) wanted to be something else if given another chance. (p-value 0.34)

DISCUSSION

This is the first study to probe into motives of joining medical profession in new entrant medical students in a public sector medical college in Punjab Pakistan. There was relatively high proportion of female students (70%) in our study population. This is representative of class demographics of this year at KMSMC, admitting 71 females and 29 males.[9] The change is not local but is well consistent with international demographics as well. A study from Australia has also found that number of male students is decreasing in medical schools after the introduction of structured aptitude test and interview at entry in medical schools since 1999 in Australia.[10]

Our results highlighted that altruism-based motives and social/family considerations are among top motives to join medical profession as career in Pakistani medical students. Similar results were shown by a qualitative study from Netherland on predominantly white Dutch students that also showed that to help the humanity and interest in science were predominant motivators for them.[11] Experience with any healthcare facility and social prestige associated with this profession enhanced their interest. Interestingly, that study also pointed out that parental pressure was also a motivation there. Similar thing was also pointed out in our study. A Finnish study, however, reported that although interaction with humans was top most motives, yet good salary was also second motive in selection of medical field as career in doctors in males.[12] In our study, financial gain was not among top four motives of newly entering medical students.

Our study revealed parental wish as important motivational factor in becoming doctor. More than 67% students noted it among one of four important factors in choosing this profession. It was similar to that reported from Netherland[11] where authors called it as parental pressure, and in one from India, where authors called it as parental desire and it was most important motive in almost a quarter of first year medical students.[13] In our study, however, we noted an apparent contradiction in students' response. They wanted to become doctor to fulfil parent's wishes, but simultaneously they said that family did not push them to become a doctor. It can be thought that strong expectation by the family/parents is a motivation. But do students perceive it merely their wish or an obligation for them to fulfil? This point was highlighted by Zarin Siddiqui who

Table 1: Frequency of motives to join medical profession as career (n=84)

Serial	Option (Tick any 4 out of 12)	Yes/No (%age in favor)
1.	Top students go to this field	16/68 (19%)
2.	High esteem in family	20/64 (23.8%)
3.	Respect in Society	60/24 (71.4%)
4.	Better Lifestyle	17/67 (20.2%)
5.	High financial gain	1/83 (1.2%)
6.	To Serve Humanity	80/4 (95.2%)
7.	Be beneficial to family	31/53 (36.9%)
8.	Better marriage proposals	3/81 (3.6%)
9.	Fulfil parents' wish	57/27 (67.9%)
10.	Live abroad	7/77 (8.3%)
11.	Run parents' clinic	2/82 (2.4%)
12.	Be in medical teaching	11/73 (13.1%)
13.	Others	9/75 (10.7%)

commented that students in West join medical profession after their graduation and they are mature enough for their independent decisions, while in Pakistan, students have to decide their career choice at the level of leaving high school when they are not mature enough, so influence of parents and decision based on inspiration is quite natural in our country.[7] So it is quite likely that what students call it as parents' wish is actually reflected as obligation to fulfill in their behavior making them chose this profession, while they might choose a different one if they had been given an independent choice. This does need an in-depth study to see the influence of parents' expectations on career choice in students opting and competing for medical profession. Similar conclusion was drawn in Dutch study where authors say that it is necessary to involve parents of medical students to know the extent and type of their influence.[11]

It has been a conventional thought in society that being a doctor or engineer is the leading choice of top merit students. But in our study, it was not among first four motives to choose profession for them. However, keeping in mind that students chose the option of fulfilling parents' wishes shows that the senior generation may still be thinking that top merits should go to such professions, and their children are obliging their wishes. This trend needs to be closely watched. If parental wishes or pressure wanes off, and we lose top merit students in our medical education, the effect may be adverse. The system may otherwise be benefitted by self-motivated students only in case altruism remains their main motive instead of financial gain. If low merit students join the profession with the motivation of making money out of it, it'll be disastrous to the health system. Policy makers must be watching it because it relates to the future health of our society. This also raises another important question that does same altruism-based motives exist in students of private medical colleges where they pay heavy fees to become doctor?

Although specialty choice was not the primary query in questionnaire, we asked to assess the general perceptions of freshly entering medical students. It was apparent that students were more inclined towards supra-specialties in both medical and surgical fields, and frontline primary care specialty of internal medicine, and family medicine were on bottom. General surgery and Gynecology were however still the second choice. This is in contrast to an older study done in Karachi in 2006 and a recent study from Islamabad[15] on final year medical students who reported that internal medicine, general surgery and pediatrics are among top three specialties.[14] Another study from Karachi on final year students and house officers reported in 2016 that medicine and allied disciplines are among top choice of medical students.[16] In our study too, if we group the specialties in major disciplines, medicine and allied specialties were choice of >50% students who had given it a thought. This was consistent with available literature from Pakistan,[16] and from Germany, where almost 50% students persistently opted for medical and allied disciplines in repeated questionnaires over different years.[17] In our study, 15 (17%) students indicated that they could change their profession in future or pursue a side business. Similar trend was found in a study from India where one third medical students wished to change their career if given another chance.[18] We did not ask for demotivating factors because we think that these factors should become more evident with the time exposure of students to different aspects of medical career. An in-depth qualitative study can answer such question with detail.

We recognize certain limitations in our study. This was a single center study on a limited number of students whose results cannot be extrapolated to a vast array of medical students. However, this study should be taken as an initiative to explore this potentially important aspect of healthcare future. There is a definite need of multicenter investigational study where students from both public and private sector should be included across the country, as well as motives in minds of students from different socio-cultural and economic background may be compared and analyzed. Parent's desire is a strong motivator in our study but we were unable to involve parents in this study to know their viewpoint. An important aspect that was regretfully overlooked in our questionnaire was the influence of teachers that may be important in our culture and society. This needs further exploration in career choice of students. The perceived generalizability of this study is to all the pre-medical students who wish to join the medical profession as career, but we could contact only those who were successful in entering this education system. The ones who could not clear the entry test (95%) were not

represented in this study. We suggest that further studies should invite all those students who have applied for the entry test.

CONCLUSION

Altruism and social considerations are still the top most priorities in minds of our students in joining medical profession as career. It needs to be maintained so that good service to humanity may be continued through this profession. Further study in role of parents and teachers may be interesting.

Funding/Support: The study was self-supported financially.

Conflict of interest: The authors declare that there is no conflict of interests.

REFERENCES

1. University of health Sciences, Lahore (2018). *MDCAT result notification, re-conduct 2017*. [image] Available at: http://www.uhs.edu.pk/images/etr2017.jpg [Accessed 24 Apr. 2018].
2. MBBS/BDS Admissions in Medical / Dental Institutions of the Punjab, FREQUENTLY ASKED QUESTIONS (FAQS). (2018). [ebook] Lahore: University of Health Sciences, p.6. Available at: http://www.uhs.edu.pk/mcat/questions.pdf [Accessed 24 Apr. 2018].
3. McHugh SM, Corrigan MA, Sheikh A, Lehane E, Broe P, Hill AD. A study of the factors influencing school-going students considering medical careers. Surgeon. 2011;9(4):191-4.
4. Tiwari R, Jain V, Arya R, Dwivedi S, Shrivastava D, Tiwari S. A study to assess the perception of first year medical students for choosing medical school as career. Int J Res Med Sci. 2016; 4(7): 2649-55.
5. Sulong S, McGrath D, Finucane P, Horgan M, O'Flynn S, O'Tuathaigh C. Studying medicine- a cross sectional questionnaire-based analysis of the motivational factors which influence graduate and undergraduate entrants in Ireland. J Royal Soc Med Open. 2014; 5(4): 1-8.
6. Girasek E, Molnar R, Eke E, Szocska M. The medical career choice motivations- results from a Hungarian study. Cent Eur J Med. 2011; 6(4): 502-9.
7. Siddiqui ZS. Application of career related research in Pakistan: the case of apples versus mangoes. Pak J Med Sci. 2016; 32(3): 773-7.
8. Woodward A, Thomas S, Jalloh MB, Rees J, Leather A. Reasons to pursue a career in medicine: a qualitative study in Sierra Leone. Glob Health Res Policy. 2017;2:34.
9. University of health sciences, Lahore (2018). Available at: http://www.uhs.edu.pk/mcat/01sialkot2017.pdf [Accessed 24 May. 2018].
10. Puddey BI, Mercer A, Carr SE, Louden W. Potential influence of selection criteria on the demographic composition of students in an Australian medical school. BMC Medical Education. 2011; 11: 97.
11. Wouters A, Croiset G, Isik U, et al. Motivation of Dutch high school students from various backgrounds for applying to study medicine: a qualitative study. BMJ Open. 2017; 7: e014779. doi:10.1136/bmjopen-2016-014779
12. Heikkila TJ, Hyppola H, Vanska J, Aine T, Halila H, Kujala S, et al. Factors important in the choice of medical career: A Finnish national study. BMC Educ. 2015; 15: 169.
13. Diwan V, Minj C, Chhari N, De-Costa A. Indian medical students in public and private medical schools: are motivations and career aspirations different? Studies from Madhya Pradesh, India. BMC Med Educ. 2013; 13: 127.
14. Huda N, Yousuf S. Career preference of final year medical students of Ziauddin Medical University. Educ Health (Abingdon). 2006; 19(3): 345-53.
15. Sajjad M, Khan RA, Qayyum S. Choice of specialty careers among final year MBBS students. J Int Islam Med Coll. 2016; 11(2): 81-4
16. Zia S, Abbas M, Sulaiman M, Sheikh SM. Career Choices of Medical doctors at Graduate level - A Multicenter Study. Pak J Med Sci. 2017;33(5):1086-1090.
17. Grasreiner D, Dahmen U, Settmacher U. Specialty preferences and influencing factors: a repeated cross-sectional survey of first- to sixth-year medical students in Jena, Germany. BMC Med Educ. 2018; 18(1): 103.doi:10.1186/s12909-018-1200-8.
18. Pruthi S, Pandey R, Singh S, Aggarwal A, RamavatA, et al. Why does an undergraduate student chose medicine as a career. Nat Med J India. 2013; 26(3): 147-9.