

Attitudes of medical students towards their career — perspective from Khyber-Pukhtunkhwa

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Abstract

Objective: To investigate motivations of students in choosing the medical profession and their attitude towards their future profession.

Methods: The cross-sectional study was performed at Khyber Medical College, Peshawar, Pakistan, from April 15 to 30 2011, comprising 200 medical students from all five years of the MBBS course. Stratified random sampling was used and 20 male and 20 female students from each year answered a 15-item questionnaire. Total positive score was calculated. SPSS 16 was used for statistical analysis.

Results: Leaving out the lone incomplete questionnaire, the response rate was 99.5%. Of them 132 (66%) students said they chose the medical profession of their own accord; 129 (64.8%) had a doctor in their immediate family. Mostly, students wanted to do specialization in a particular field (n=185; 93%), but the majority (n=103; 56%) had not selected a specific field at the time of the survey. Besides, 140 (70%) students wanted to choose either medicine or surgery, while only 9 (4.5%) students were interested in Public Health.

Conclusion: Though the subjects had chosen the medical profession of their own free will, some had regrets. Students were aware of the importance of specialisation in a particular field, but seemed to need career counselling to help them in their decision-making.

Keywords: Career choice, Specialisation, Medical students. (JPMA 63: 1017; 2013)

Introduction

The attitudes of students and the reasons for choosing a particular career are of great importance for policy-makers around the world.¹ The students have a number of career choices and it becomes difficult for them to choose a particular career when they are unsure. The decision process involves a number of factors that include personal interest,² peer pressure, self-motivation, financial reasons, better quality of life, etc. Medical career is unique as it is perceived to be very noble, providing an opportunity to serve fellow human beings more than any other career.³

In Pakistan, all medical schools offer a 5-year programme. The initial 2 years are for Basic Health Sciences and during the next 3 years, there is an increasing exposure to clinical rotations in affiliated teaching hospitals. It has been observed that the amount of study in Medicine is significantly higher than many other professions. During the initial years, medical students have to study significantly more than in their school life and in the latter part of their medical school, they have to put up with long hours of patient care during clinical rotations and prolonged durations of study which are physically and

psychologically very demanding.⁴ Therefore, strong motivation is needed to pursue a career in Medicine.

After completing medical school, fresh graduates face the dilemma of choosing a field for specialisation. They are seldom aware of the scope of each specialty and the number of training spots and slots available for consultants in different specialties. A study observed that the career choices of medical graduates are influenced by their experiences during their clinical years of medical school in teaching hospitals.⁵

There have been a number of studies in which career options for medical students and fields of interest have been reported both in Pakistan as well as abroad. But there is scarce data on the reasons why Pakistani students choose to pursue the medical profession and there is no data regarding career options of medical students in the northern part of Pakistan.

The current study was planned to investigate motivations of students of the Khyber Medical College (KMC) in choosing medical profession and their attitudes toward their future profession, such as choice of specialty, country preference for the future and future plans of female graduates.

Subjects and Methods

The cross-sectional study was performed from April 15 to

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April 30, 2011 at the Khyber Medical College, Peshawar, which is the leading public-sector medical college in Khyber-Pukhtunkhwa. It is affiliated with the Khyber Medical University. The study was approved by the institutional review and Ethics Board.

A total of 200 students were enrolled in the study, with 40 students from each year (1st to 5th) who were picked through stratified random sampling. The students who agreed to participate in the study were asked to sign an informed consent form.

The authors developed a self-administered questionnaire in English which is the official medium of instruction. The questionnaire was designed incorporating important parameters after extensive literature search of PubMed databases. The format of all the responses was in categorical design (yes/no or by choosing appropriate responses from all given options). The 15-item questionnaire collected data on gender, year of study, reasons for choosing medical profession, medical professionals in family, study in medical college, future plans for specialisation and choice of career in Pakistan or abroad, plans about marriage and one item specifically for females regarding their plans after specialisation.

The questionnaires were distributed and then collected back within 3 days. The questionnaire was anonymous to ensure confidentiality.

Data was recorded on Microsoft Excel Worksheet and analyzed using SPSS 16. Results were recorded as frequencies, percentages and means \pm standard deviations (SD).

Results

With just 1 (0.5%) incomplete questionnaire, the response rate was 99.5%. There were 100 (50%) male and 99 (49.8%) female respondents. There were 40 respondents from 2nd-5th year, while 39 respondents were from the 1st year.

A total of 132(66%) students had chosen the profession of their own free will; 57 (29%) chose it because their parents wanted them to be doctors; while 10 (5%) chose the career on the advice of their friends or relatives.

The presence of family members of participants in the medical profession was 129 (64.8%) (Figure).

Besides, 132 (68%) students knew before their medical schools that they would have to study a lot in KMC, while 63 (32%) did not have a fair idea. There were 121 (60%) who said they felt choosing a career in Medicine was the correct decision, while 78 (40%) felt that they had made a wrong career choice.

Regarding specialisation, 168 (84%) planned to specialise,

Table: The responses of male and female students regarding different questions.

(n=99)	Male (n=100)	Female
Reasons for Choosing Medical Profession		
Fulfill your parents' wishes	37	23
DOCTOR' with your name	5	10
To earn a lot of money	20	4
To serve ailing humanity	31	48
Any Other	7	14
Preferred Country to Pursue Medical Profession		
Pakistan	50	54
UK	16	17
USA	16	17
Gulf Countries	9	7
Australia	9	4
Which Field Would You Choose For Specialization?		
Medicine	36	27
Surgery	33	44
Public Health	5	4
Central Superior Services Exam	19	5
Any Other	7	19
When Do You Intend To Get Married?		
During MBBS	8	14
After MBBS	35	50
After House-job	40	24
During Residency	17	11
Till when do you intend to continue this profession?		
Till getting a degree	-	1
Only till House-job	-	0
Residency	-	8
Continue as Consultant	-	44
Depends on In-Laws	-	16

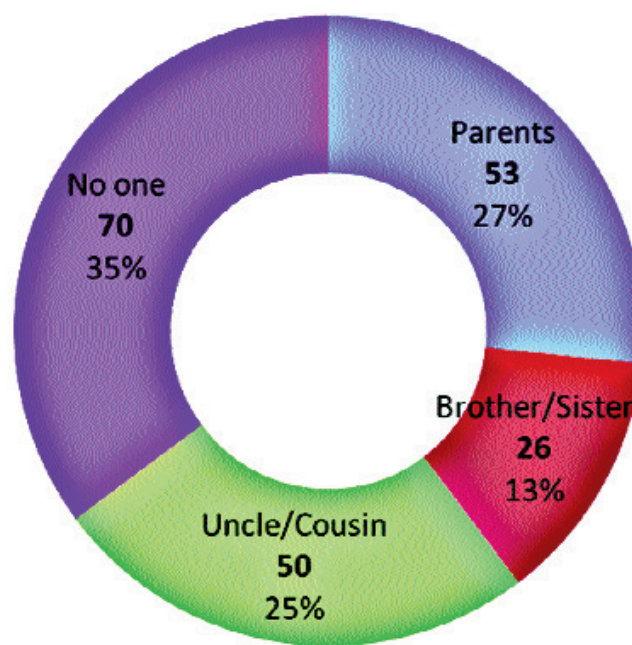


Figure: The presence of family members of participants in medical profession.

14 (7%) currently did not have any plans, while 17 (9%) were not sure about it. Amongst 185 students interested in doing specialization, 103 (56%) had a specialty in mind, while 82 (48%) were either undecided or had time to decide.

Of the total, 137 (69%) responded that they would choose a career in Medicine as a profession, while 62 (31%) said they would pursue a different career if given an option (Table).

Discussion

The attitude of our society is such that a majority of parents wish their children to become either doctors or engineers. The status of a doctor in a society, because of Medicine being a noble profession, encourages parents to persuade their children to become doctors from the very early years. For many students it's a foregone conclusion that if they get good grades they will surely select Medicine as a profession. It was observed in the current study that 57 students (29%) chose the profession because their parents wanted them to be doctors, while 10 (5%) chose it on the advice of their friends or relatives. Besides, 132 (66%) students chose it of their own free choice. One earlier study also reported that the majority of medical students chose Medicine because of personal interest.⁴ In addition, similar to this study, family influence was a very important factor (87%) and a majority of students wanted to re-select Medicine as a career if given an option, but there was a statistically significant difference between clinical and non-clinical students.

We observed that almost 65% respondents had someone in their immediate family (parents, siblings or uncle) in the profession. The main reasons reported by the students for choosing this 'noble' profession were 'to serve ailing humanity' (31% responses), 'to fulfil their parents wishes' (21% responses) and financial reasons. Again, this shows that parents' wishes were a key motivation factor for students entering the profession. There was a statistical difference between male and female students for choosing the profession for financial reasons. A study conducted in Ireland also reported financial gains as a statistically significant factor for male students compared to female students in choosing the profession.⁶

It was observed in this study that 52% students wanted to pursue their careers in Pakistan. The remaining wanted to work in the USA, UK, Gulf Countries and Australia. Similar results have been observed in other studies conducted in Pakistan. One observed that most students in the fifth year in a private medical college in Karachi, Pakistan, preferred to work in Pakistan.² Another stated that the reasons which enticed fresh medical graduates from

Pakistan to other developed countries included expectations of a better income, better training, mark of achievement and poor government policies.⁷ There is a similar trend in other developing countries, such as Malaysia. A study reported that half of students wanted to pursue the medical profession in Malaysia, while the rest preferred to go to the United Kingdom or Australia.⁸

In this study, 38% wanted to specialize in Surgery, 31% in Medicine, 4.5% in Public Health, while 12% did not want to pursue the medical profession at all but applied for positions in government by appearing in the Central Superior Services (CSS) exams and 13% wished to specialise in fields like Gynaecology and Obstetrics, and Paediatrics. It was observed that during the pre-clinical years, students were more inclined towards Surgery compared to Medicine (44 vs 19), but during the clinical years, a trend was noted for Medicine and allied subjects as future specialties [43 (Medicine) vs 32 (Surgery)]. This could be attributed to the fact that initially Anatomy and dissection motivate students to become surgeons, while latter during extensive clinical rotations in Internal Medicine and by studying Pathology for 2 years, students become fascinated by non-Surgical fields. A study also observed a change in career options of students during their medical schools from pre-clinical to clinical years.⁹ Our results were slightly different from the results of other studies conducted previously in Pakistan. One study conducted in public and private-sector medical schools observed that the top career preferences were Internal Medicine, followed by General Surgery for both public and private medical school students.¹⁰ Another reported that the top choice for career for medical students in a single medical university in Pakistan was Medicine.¹¹ In recent years, interest in Surgery has declined in developed countries like US, UK, Australia, Switzerland, as medical students prefer non-Surgical careers, while in Middle Eastern and Far-Eastern countries, Surgery is still a popular choice.¹² The majority of students who want to pursue careers in Medicine, prefer sub-specialties compared to Internal or General Medicine. A study found that 48% students preferred careers in sub-specialties of Medicine compared with 19% students who preferred Internal Medicine.¹³ Very few students in our study wanted to pursue careers in Public Health. A similar trend amongst medical students was noted by another study in 1966 and unfortunately it is similar in Pakistan even today.¹⁴ This is a favoured speciality amongst medical students of developed countries, but it is still neglected in our country as students are not aware of its significance.

In Pakistan, female doctors do face a number of challenges to continue in the profession. Our study found

that 44 female students (44%) wanted to continue to practise Medicine and specialise, but 48 female (48%) respondents were either unsure or replied that the decision of continuing in the medical profession was dependent upon their in-laws. In a study, these 2 factors accounted for about 64% of responses in perceived obstacles by female doctors to pursue the profession.¹⁵

The limitations of this study were that there was selection bias as all the students were from a single public-sector institution. It has been reported by many authors that there is a difference in career perceptions and choices between private-sector medical students compared to those from the public-sector;¹⁰ therefore, the study findings cannot be generalised. Also, the sample size was small. There were limited options for the students to choose career speciality and there were few open-ended questions. The strength of this study was that it was the first of its kind which demonstrated the motivation of Pakistani students to choose the profession and had representation from all five years of study with equal male and female representation.

Further research is needed to study the factors which persuade students to pursue careers in Medicine. Differences in attitudes of students in public and private medical schools will provide an insight for policy-makers to improve the system. Factors influencing choices of speciality will be interesting to note as it can help the decision-makers to improve the current medical infrastructure so that the difference between demand and supply could be effectively met. Educational policies should be formulated in such a way that the students and graduates are encouraged to pursue career in fields which are most needed e.g. Public Health.

Conclusion

KMC students generally chose medical profession of their own free will, but some had regrets subsequently. Career counselling seminars need to be arranged to create awareness regarding the importance of specialisation, encourage students to choose sub-specialty fields, public health, etc. A critical review by the policy-makers is required to strengthen the fields that are being

overlooked by the students, and take appropriate steps to motivate students to join those fields. Further studies need to be undertaken with a larger sample size to determine the changing trends in career preferences.

References

1. Baharvand M, Moghaddam EJ, Pouretamad H, Alavi K. Attitudes of Iranian dental students toward their future careers: an exploratory study. *J Dent Educ* 2011; 75: 1489-95.
2. Huda N, Yousuf S. Career preference of final year medical students of Ziauddin Medical University. *Educ Health (Abingdon)* 2006; 19: 345-53.
3. Draper C., Louw G. What is medicine and what is a doctor? Medical students' perceptions and expectations of their academic and professional career. *Med Teach* 2007; 29: e100-7.
4. Saad SM, Fatima SS, Faruqi AA. Students' views regarding selecting medicine as a profession. *J Pak Med Assoc* 2011; 61: 832-6.
5. Kassebaum DG, Szenas PL, Schuchert MK. Determinants of the generalist career intentions of 1995 graduating medical students. *Acad Med* 1996; 71: 198-209.
6. 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: 191-4.
7. Aly Z, Taj F. Why Pakistani medical graduates must remain free to emigrate. *PLoS Med*. 2008; 5: e2. doi:10.1371/journal.pmed.0050002.
8. Chew YW, Rajakrishnan S, Low CA, Jayapalan PK, Sreeramareddy CT. Medical students' choice of specialty and factors determining their choice: a cross-sectional questionnaire survey in Melaka-Manipal Medical College, Malaysia. *Biosci Trends* 2011; 5: 69-76.
9. Sobral DT. Selective training and cross-year clinical tutoring as educational influences on generalist career choice. *Educ Health (Abingdon)* 2001; 14: 295-303.
10. Aslam M, Ali A, Taj T, Badar N, Mirza W, Ammar A, et al. Specialty choices of medical students and house officers in Karachi, Pakistan. *East Mediterr Health J* 2011; 17: 74-9.
11. Khan H, Taqui AM, Khawaja MR, Fatmi Z. Problem-based versus conventional curricula: influence on knowledge and attitudes of medical students towards health research. *PLoS One*. 2007; 2: e632. doi:10.1371/journal.pone.0000632.
12. Deedar-Ali-Khawaja R, Khan SM. Trends of surgical career selection among medical students and graduates: a global perspective. *J Surg Educ* 2010; 67: 237-48.
13. Hauer KE, Durning SJ, Kernan WN, Fagan MJ, Mintz M, O'Sullivan PS, et al. Factors associated with medical students' career choices regarding internal medicine. *JAMA* 2008; 300: 1154-64.
14. Coker RE Jr, Kosa J, Back KW. Medical students' attitudes toward public health. *The Milbank Mem Fund Q* 1966; 44: 155-80.
15. Shaikh ZA, Ali G, Ayoob Z, Ali HG, Saleem S, TF Chohan, et al. Obstacles faced by female doctors in pursuing their careers. *JMMC* 2010; 1. Published online 2010. (Online) (Cited April 24, 2012). Available from URL: <http://www.mmc.edu.pk/jmmc/content/obstacles-faced-by-female-doctors-in-pursuing-their-careers/index.html>.