## PERCEPTIONS OF FIRST YEAR MEDICAL STUDENTS TOWARDS MEDICAL EDUCATION AND MEDICAL PROFESSION

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#### ABSTRACT

**Objective:** To determine the first year medical students about the reasons of joining medical education, effective tools to enhance their learning and their future specialization interests.

Design: Descriptive cross sectional study

*Place and duration of study:* Two private medical colleges of Islamabad, Pakistan from 1st March 2014 to 31st March 2014.

*Materials and methods:* All the first year medical students of both private medical colleges were included. A questionnaire proforma included questions regarding demographic profile, reason of choosing medical profession, expected type and medium of teaching, co-education versus non-co-education, financial support for studies and career choices. Descriptive statistics and chi square test was used to determine the strength of relationship between different variables.

**Results:** A total of 180 first year medical students participated in the study. The mean age of the participants was 19.2 (+- SD 1.12). Gender distribution was comparable in both medical colleges (54% males versus 46% females). Majority of the participants joined medical profession due to their passion (56.7%) and agreed that getting respect is the main reason of joining this field, 73.3% participants were in favour of co-education. Effective tools of learning were combination of lectures, practicals and small group discussions (SGD). Majority intended to do specialization in future and amongst them, Surgery (51.7%), Obstetrics/Gynaecology (16.1%), Medicine (10%), Paediatrics (8.3%), Radiology (0.6%) and others like Anesthesia/Pathology/Basic sciences (9.3%) ) were their preferred fields of interest.

*Conclusion:* Passion of medical profession and getting respect is still the main reason of joining medical profession. The traditional fields of medicine are still preferred by majority of the students.

### Keywords:

perceptions, students, medical profession

## INTRODUCTION

Medical profession is considered to be one of the most popular profession of majority of the bright students of Pakistan who pass their intermediate examination with high grades. Unfortunately there is a very limited number of government medical colleges leading to the shortage of doctors in the country. In the recent years, there has been a rising trend of private medical colleges in Pakistan approved by the Pakistan Medical Commission (PMC) to overcome the shortage of doctors in the country.<sup>1</sup> These private medical colleges are

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Dr. Maria Habib Shifa College of Medicine, Islamabad E.mail: mariahabibawan@gmail.com expensive and faculty members are trying their best to deliver the knowledge that is based on new teaching practices like Problem-based learning (PBL) and interactive sessions to enhance the academic competencies of the students.

Choice of a career is a difficult decision for the students which not only involves self awareness of the interests and certain personality characteristics but is also influenced by extrinsic factors like family influence, role modeling and peer tutoring.<sup>2</sup> The choice of specialty by the students directly affects the distribution of health care personnel in different fields.<sup>3</sup> For the choice of ideal specialty, it requires proper guidance regarding the scarcity and saturation of the healthcare personnel in that field.<sup>4</sup> Previously medical education was driven in the form of traditional teacher centered lectures which is now shifted to problem based learning and small group discussions. These interactive sessions strengthen interpersonal skills and enhance problem solving capacity of the students.<sup>5</sup>

Becoming a doctor in a private medical college not only requires a lot of dedication and hard work but financial implication too. Staying up-to-date with the latest technology while sacrificing the family time is difficult. So this study was conducted, to determine the students' perspective for joining medical education, effective tools to enhance the learning and the future specialization interests among first year medical students.

#### **MATERIALS AND METHODS:**

After taking ethical approval from the institutional ethical committee, this descriptive cross sectional study was conducted in two private medical colleges of Islamabad, Pakistan from 1st March 2014 to 31st March 2014. A total of 180 first year medical students participated in the study. To develop the questionnaire proforma, we performed consensus meetings with all the authors of the study. After extensive literature search on attitudes of the medical students towards their career, a validated questionnaire was designed.2-5 After explaining objectives of the study, first year medical students of both private medical colleges who were willing to participate in the study were included. Students who were unwilling to participate or those who had filled incomplete proformas were excluded from the study. A questionnaire proforma included questions regarding demographic profile (age, gender, marital status and highest qualification), reason of choosing medical profession, expected type and medium of teaching, coeducation versus single gender education, financial support for studies and career choices. Statistical package for social sciences (SPSS) version 21 was used for statistical analysis. Descriptive statistics and chi square test was used to determine the strength of relationship between different variables. P value <0.05 was considered statistically significant.

#### **RESULTS:**

A total of 180 first year medical students participated in the study, 85 (47.3%) from one private medical college and 95 (52.7%) from the other. The mean age of the participants was 19.2 (+-SD 1.12). Gender distribution was comparable in both medical colleges. Majority of the participants were single and maximum had done intermediate examination [table I]

Variables		Number (n)	Percentage (%)
Gender	Males	97	54
	Females	83	46
Marital	Married	4	2.2
status	Single	176	97.8
Type of education	Intermediate A levels Other	164 11 5	91.1 6.1 2.8

Majority of the participants joined medical profession due to their passion (56.7%) while others joined due to parents wishes (18.9%), just by the way (3.9%), and other reasons which they did not specify (20.5%). Males joined this profession more because of parents wish (p<0.01).

Finances for the students were managed by their fathers in majority of the cases (83.3%) whereas mother, grandparents, brothers and guardians contributed to the rest of them.

Regarding choice of private or public sector, many participants wanted to join public medical colleges and the most stated reason being better fee structure in public sector as shown in Fig 1. There were no gender differences about the choice of private or public sector medical colleges (p>0.05).



# Fig 1: Reasons of joining public sector medical college

More than 70% of the participants agreed that being respected is the main reason of joining this field while others stated financial reward and self employment as the other reasons.

Majority of the participants were in favour of coeducation (73.3%) because co-education builds up self confidence and that medical field can never be genderbiased whereas those in favour of separate education system for both sexes were due to religious beliefs only and this opinion was shared by both sexes (p>0.05)

Most participants were expecting a mixture of self study and spoon feeding by the teachers (77.8%), whereas 14.4% were expecting self-study and only 7.8% were expecting spoon feeding by the teachers. No gender differences were noted in view of this type of teaching (p>0.05). When asked about the options of preferred and effective tools of learning, majority were in view of combination of lectures, practicals and small group discussions (SGD) as shown in Fig 2.



Fig 2: Effective tools of learning in medical college

The preferred medium of teaching was a combination of English and Urdu both by most of the participants (75.6%), only few were in favor of English (18.9%), Urdu (3.3%) and other local languages like Punjabi (2.2%)

Surgeons were the role models of more than half of the participants (59.4%) followed by physicians (18.9%), bureaucrats (3.9%), engineers (2.8%) and others (15%). Males were more inclined towards surgeons, bureaucrats and engineers as role models as compared to females (p=0.025). Majority of the participants wanted to practice medical field as a career in future (96.7%) and to become surgeons (55%), physicians (20%), obstetrician/ gynecologist (14.4%), radiologist (0.6%) and pathologist/nutritionist/anesthetist (6.7%). Regarding gender distribution, all the females intended to persue medical field as a career but males were also interested in fields other than medical for their career (p=0.023)

When inquired about their intention to do specialization in future, 96% were in favor of it. Their preferred fields of interest were surgery (51.7%), obstetrics/gynecology (16.1%), Medicine (10%), pediatrics (8.3%), Radiology (0.6%) and others like Anesthesia/Pathology/Basic sciences (9.3%). Females were more interested in field of obstetrics/gynecology and pediatrics whereas males wanted to choose surgery and medicine as their preferred fields of specialization (p=0.00) while those who didn't intend to do specialization were more interested to work as general practitioners, Civil superior services(CSS) officers or businessmen and no gender differences were observed in it (p=0.07).

## DISCUSSION

In our study, majority of the participants joined medical profession due to their passion for accepting intellectual challenges and desire to help others which is in line with the results of study by Labiris G et al on Greek medical students who chose medical profession with the desire of helping patients and scientific basis of the medical knowledge.<sup>6</sup> Males in our study put more emphasis on parents desire of choosing this field for them. A study conducted by Zaib S on first year medical students of Rawalpindi medical college, Pakistan<sup>7</sup> found that 31% of the medical students chose medical field because of parent's desire which is in contrast to the results of our study as only 18.9% of the participants joined medical profession due to their parents' wish which might be due to the fact that they have to self finance the studies.

Bhatti MA et al conducted a study in a private medical college of Rawalpindi and found that the fathers of the children who opted for private medical education were mostly businessmen, doctors, engineers, advocates and judges<sup>8</sup> which is similar to the results of our study as father was the source of financial support in more than eighty percent of the students in our study.

Majority of the students of private medical college wanted to join public medical colleges if the opportunity was given and the most stated reason was a better fee structure as compared to private medical colleges. A cross sectional survey conducted on medical students regarding the choice of medical profession by Saad SM et al mentioned that the primary reason of entering the medical profession by the medical students was to serve humanity<sup>9</sup> whereas financial reward ranked lower in order which is in line with the results of our study.

With advancement in teaching practices, there is an increasing emphasis on interactive sessions, small group discussions and problem based learning. The most effective tools of learning according to majority of the participants were a combination of lectures, practicals and small group discussions. Our results are supported by a study conducted on students of five medical colleges of private and public sector and the students reported that the lectures should be replaced by clinical sessions and they showed increased interest to move from didactic teaching to problem based learning to enhance active learning.<sup>10</sup>

Surgery was the most opted specialty, followed by obstetrics/gynecology, medicine, pediatrics, radiology and others like anesthesia/pathology/ basic sciences. Similar studies were conducted in France,<sup>11</sup> Kenya,<sup>12</sup> and Bangladesh<sup>13</sup>, to highlight the career choices of medical students and found that surgical and medical fields were the most chosen fields for speciality and gender influenced the choice of speciality as obstetrics/ gynaecology, paediatrics and to work as general practitioners were mostly chosen by females. In contrast to the results of our study, Hill EJ reported a significant drop of applications for residency in surgery<sup>14</sup> and Boyle E found only 18% of the students intended to persue surgery as a career.<sup>15</sup> Are C et al. reported the most common reason of not choosing surgery was a perception of unhealthy lifestyle.<sup>16</sup>Very few participants in our study were interested in non-clinical, non-medical fields which is in line with the results of Korean medical schools.17

## CONCLUSION

Passion of medical profession and getting respect is still the main reason of joining medical profession. The traditional fields of medicine are still preferred by students for specialization.

## **CONFLICT OF INTERESTS**

None

## **DISCLOSURE OF FUNDING**

Nil

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