

## ORIGINAL ARTICLE

## FACTORS INFLUENCING MEDICAL STUDENTS' CHOICE FOR FAMILY MEDICINE AS A SPECIALTY IN PAKISTAN

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**Background:** Multiple factors influence career selection for medical students. In developed countries, training in family medicine is essential to start practice as a general practitioner. In Pakistan, this specialty was introduced by College of Physicians and Surgeons Pakistan in 90's but it has not been yet institutionalized. This study was conducted to identify the factors that influence students' choice for Family medicine as a specialty. **Methods:** It was a sequential (quantitative first) mix method study which was conducted in two medical colleges (one public sector and other private) of Faisalabad from April to June 2014. In first phase students' career choices were determined in a sample of 252 students. In second phase 12 students were selected randomly for interviews; six students who selected family medicine as a specialty and six students who had selected some other specialty. In depth interviews and focused group discussion were used to explore the factors that influenced them for selecting the respective specialty. **Results:** Major factor for not selecting family medicine was lack of awareness about the scope of specialty. Other factors included personal interest, feasibility and family influence. **Conclusion:** Lack of awareness and scope of family medicine is the predominant factor in influencing students for choosing family medicine as a career. Career counselling, role modelling and exposure to this specialty during clinical years can play an important role in promotion of this field.

**Keywords:** Family medicine; Career choice; Medical students; Career counselling

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## INTRODUCTION

Since 1978, main focus of the World Health Organization (WHO) is on improving primary health care facilities.<sup>1</sup> Major change occurred in health care when the trend of specialized health care services<sup>2</sup> emerged and as a result patient lost their family physicians.<sup>3</sup> Family Medicine is a specialty which caters not only for prevention but also deals with screening, diagnosis and treatment of many acute and chronic health problems. In the United States and many other countries, general physicians beside treatment of common ailments also provide antenatal care services and deliver babies.<sup>4</sup>

Total registered doctors with Pakistan Medical and Dental Council (PMDC)<sup>5</sup> are 140,000 till June 2014. Among them 30'000 are medicine or surgical specialist with remaining 110,000 general practitioners. No proper detail of family medicine specialists in Pakistan is available. According to the WHO recommendations a doctor to patient ratio for developing countries is 1:1000 and at present in Pakistan, it is 1:1764.<sup>6</sup> There is an uneven distribution of doctors in urban and rural settings. The WHO has emphasized role of emerging medical education and family medicine in 1995 to improve the primary health care services. Situation of family medicine disciplines is also very different in different countries. Factors that affect selection of this specialty would be different in

our context as we have our unique culture and problems.<sup>7</sup>

In many countries, general physicians are non-specialists who have received little or no training in primary care because they received little exposure to ambulatory and preventive care.<sup>8</sup> These doctors therefore fail to gain all the necessary skills to become competent physicians. Likewise, in Pakistan a doctor can start general practice after completion of house job training. In Pakistan, College of Physicians and Surgeons started post-graduation (FCPS, MCPS) in 1992. Agha Khan Medical University Karachi, King Edward University & Medical College Lahore, Ziauddin University in Karachi, Fatimah Memorial Hospital, Lahore and Liaquat University of Medical Sciences in Hyderabad have fully developed faculties of family medicine and they are also running post graduate training programs in family medicine. The University of Health Sciences, Lahore also intends to launch two post graduate degree programmes in family medicine in near future.<sup>9</sup>

A preference for family medicine is decreasing in developed countries for some special reasons according to their own contexts.<sup>10</sup> This study has been designed to identify the factors determining family medicine specialty choice among medical students and to find out the difference if any in the factors that affect the choice for family medicine

between private and public sector medical college students.

**MATERIAL AND METHODS**

This mix method sequential study was conducted in two; one public sector and one private sector medical college of Faisalabad from April to June 2014. In the first quantitative phase, all 252 students of final year MBBS of both medical colleges were enrolled for the study. Approval of the study was obtained from the Institutional Review Board and informed verbal consent was obtained from the students after ensuring confidentiality of their information. A pretested questionnaire was used to determine the students' choice of speciality and factors involved their career choices. The quantitative analysis of the data was done using software SPSS version 20.

In the qualitative component of the questionnaire students were asked to mention a minimum of three factors responsible for motivation of students regarding specialty choice. After this survey, individual interviews of 15–20 minutes were conducted in qualitative part.

A total of twelve students; six who had chosen family medicine and six students who selected some other speciality as career were selected for semi-structured interviews. A stratified random sampling technique was used to select male and female students from public and private sector medical college. Eight students from public sector and four from the private sector medical college were finally interviewed. The following questions were used as prompts for interviews. Questions about factors affecting speciality choice and influence of role model or monetary goals on career choice were asked as prompts for discussion.

Data analysis was done by using a constant comparison approach. Transcripts were seen and read by researcher herself and another colleague to find the key words and themes. Regular meetings were arranged to confirm the codes and then this coding sheet was used to compare the researcher interpretations. A verbatim / thematic analysis was done by the researcher herself following the guideline for verbatim/ thematic analysis given by Braun *et al*<sup>11</sup> using thematic analysis in psychology.

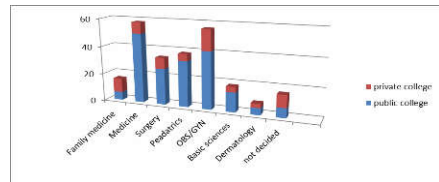
To ensure credibility during interviews, things were explained to all the participants. Interviews were recorded and Interpreted findings were shared with participants to confirm their responses. During interviews if some point was not clear then it was made clear through question answers. As far as transferability is concerned, this study was conducted among final year medical students in Faisalabad. The student mix does not vary from college to college as regards educational

background, score range and cultural dimension in Punjab. Therefore, transferability is likely.

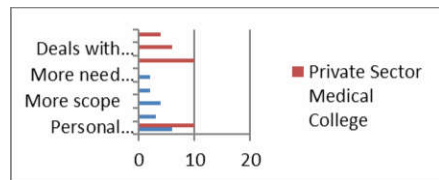
**RESULTS**

In the quantitative phase, a total of 252 students were enrolled for the study. The mean age of the students was 22.5±0.91 years. There were 212 (84%) girls and 40 (16%) boys. Majority, i.e., 190 (75%) were from public sector medical college and 62 (25%) medical students of private sector college participated. District of domicile wise, 171 (68%) belonged to developed districts and 71 (32%) were from underserved districts of Punjab. Students' response about their speciality choice is shown in figure-1.

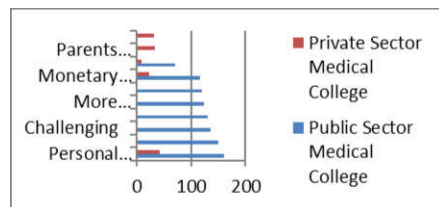
When asked about "Family Medicine", 39 (15.5%) had knowledge about it whereas 213 (84.5%) had no idea about this field. A total of 16 (7.9%) students showed their interest in opting Family Medicine as speciality. Out of these, 6 (37.5%) were from public sector college and 10 (62.5%) were from private medical college. Students were asked to state motivating factors behind their selection of "Family Medicine" and other fields as career. The responses of public and private sector students are shown in figure-2 and 3.



**Figure-1: Students' choices about speciality**



**Figure-2: Motivating Factors for selecting "Family Medicine" as a career**



**Figure-3: Motivating Factors for "Other Specialities" as a career**

The last question in the questionnaire asked students to mention at least three motivating factors for selection of the career they would choose. Responses of private and public-sector students are described below.

Two students from private sector commented that they don't know about family medicine as a specialty and they should be given exposure to this specialty so that they could know about it in detail.

#### Qualitative Part- based on interviews

**Following themes emerged from interviews:** codes were given instead of students name to maintain confidentiality.

#### Personal Interest

Personal interest was found to be the main factor in the majority of students. Students were very clear about their choice of specialty, however only one student wanted to join it because of her aptitude as she said

*"I want to join this field as I like it and I enjoy dealing with variety of problems.*

*I want to serve poor..... in remote areas".*

**SK**

*"I want to join this field as there is no doctor in my family. My nature is dynamic and I like change".*

**FM**

In the above case we see locus of control is internal although the motivating factors are different with enjoyment as a thread as stated by other students. Most of the students shared their liking first then that gave reasons for that liking and it was an interesting thing to see students when they were themselves involved in high order thinking to find the reason for their choices.

*"I am interested in this field as I want to move to Canada and my cousin has told me about this field".*

**QT**

A female student was interested in cardiac surgery and when she was asked about her motivating factors, she said that her mother is a cardiac patient and in her native city there are no proper facilities for cardiac care. So many a times students may decide to opt for some specialty due to some family member's illness. Despite aptitude personal interest/liking was highly influenced by feasibility factors that emerged as a sub theme.

#### Feasibility

This reflects adult learning principles in the sense that adults are goal oriented; therefore seek feasibility to achieve their goals. Certain people are easy going and want to avoid emergencies and don't want to pursue in such specialties where they will have to deal with emergencies. This particular factor for liking was shared by female students as they wanted

to keep a balance in their personal and professional life. One male student shared that

*"Main factor for selecting this specialty is that it will be easy for me to have my own set up. There will be no emergencies and I will be able to work in routine work days easily."*

**RM**

*"I am interested in this field as I like to be free in evenings and there will be no emergencies. A routine work with regular follow up... I enjoy this kind of work."*

**SK**

*"Safe morning timings for female doctors so it would be easy to manage family life with this job."*

**QT**

This shows that our students are well aware of their future responsibilities and they have started planning their life accordingly.

#### Family Pressure

Selection of career was influenced by family liking as well. Now days we see that many students are getting admitted in medical colleges because their parents want them to become a doctor and they decide and counsel their children for some specific field. One student shared that

*"My father is a surgeon and he wanted me to become a surgeon too as he has his own hospital and I will join him too".*

**BN**

An interesting reason was shared by a female student when she was asked about the factors which influenced her choice. She stated:

*"I was sent to medical profession by force. My parents wanted me to become a doctor" ....I am the only person in my family who joined this profession. My parents wanted me to become a doctor. Then initially I was of a mind to become a dermatologist as every relative used to ask me "What field in medicine you are going in (tum kis cheez ki doctor bun rhi ho?) .....I told them that I would like to become a skin specialist then my parents said ..What? Only a doctor of skin? That was the time that changed my thinking and after attending career counselling session I made up my mind for family medicine"*

**FM**

Another female student said that her father was not happy with her choice for family medicine specialty and she emphasized for promotion of this field by

educating general public and even doctors who are still unaware of its importance. This sharing reflected her liking for this field and a constant pressure from her father to change her choice.

*"I am interested in family medicine as I like it and I want to serve in remote areas. My father is a doctor and he does not think that family medicine is a specialty. He always asks me to rethink about my career selection. I think that not only general public but doctor community is also not aware of this specialty". SK*

#### **Holistic Approach**

Four out of six students who selected family medicine as a specialty stated that this is a field where we can learn about different diseases in a broader way. This shows that students are very well aware of importance of research in medicine and they do know that whatever health statistics we have are not adequate. This also shows interest of students in social and preventive medicine. One student said:

*"I like to work in a field where there is a variety. It is not like routine general practice being done in Pakistan. We have a great opportunity to work for our own problems and find their solution". SK*

Students' exposure to clinical setting has helped them to know the importance of referral system. As many terminal cases are reported here and there, in many cases, are due to lack of timely referral and mismanagement. Students shared their views in this regard as following

*"I think .... It is a field which is required in our set up. We need to refer patients to the consultants "This is a field where we can work to deal with our own problems. This can only be done with local correct statistics". AA*

*"It is a field where we have a good opportunity to work on prevention of diseases which is almost neglected in our system" BB*

*"Most research is done in clinical setup and we look for the cases that come to us at tertiary care. We have to work on basic level to look for the real problem. I think this is the field which will give us the space for*

*new research modalities in Pakistan". BB*

#### **Scope**

Availability of jobs is always a motivating factor for any specialty. Same is true for medical field. Students have developed their interests in some specific field just because of this reason that there is an opportunity to get good jobs as shared by students during interviews.

*"It has a good scope abroad and my cousin has told me to join this field as I intend to move to Canada.... Most of my family members reside there. So it is a rewarding field". QT*

*"I think there are very few females in family medicine and in our setup now females prefer to visit female doctors for their problem. It has a good scope" RM*

*"In my area there is need of family physicians that are well trained" FM*

#### **Part II:**

##### **Why not Family Medicine**

Total six interviews were conducted with students who had selected some other specialties other than family medicine to explore the reasons for not opting this particular field. After data analysis, following responses were recorded.

*"I don't know about this specialty. When I read this questionnaire I came across this term for the first time..... even my friends don't know" LB*

Students had no idea about this field as they got no exposure to family medicine department and their understanding was that for general practice no further specialization is required as it was shared by one student.

*"I thought it is some new term for general practice which is very common in our set up where people start practice after house job without any further training.... And I don't want to do this kind of practice" MK*

There is a probability that if students get proper exposure and training in family medicine departments then they may opt family medicine as a career. One of the students who selected basic sciences stated as

*"I might have considered this field if I knew what exactly it is..... but now at this point I will go for my selected field" ZA*

**Part III**

In order to determine the difference between public and private sector responses, following themes were identified.

**i. Career counselling**

Students of private medical college have mentioned the role of career counselling sessions in selection of career while students from public sector shared that they have not been guided properly. Students who selected family medicine from public sector college shared that they were guided by their relatives, cousins etc.

*"I know about family medicine specialty because my cousin told me and I explored more about it myself. After this questionnaire, I shared this information with my class mates as they didn't know about this specialty"* **QT**

**ii. Role modelling**

Another important factor which differentiated between private and public-sector student's career choices was role model's influence. Private sector students had mentioned that they find a role model and that's why they get inspired to join that field. While public sector students mentioned their relatives as their role models e.g.

*My uncle is a doctor and I am impressed by him since my childhood, he is my role model. AA*  
*"There is no encouragement or motivation from teacher's side. I can hardly find any moment in last five years period when any teacher encouraged us"* **BB**

**DISCUSSION**

This study explored the factors for selecting and not selecting family medicine as specialty by interviewing students of a public and private medical college. Mixed method approach has revealed not only about career choices of students but it has helped researcher to probe the factors that influence selection of family medicine and it provides an insight for different responses from private and public-sector students.

Multiple factors influence a person in the selection of some specialty/career and it is a complex phenomenon to understand.<sup>12,13</sup> In our study personal interest/individual factors like convenience of work hours, preference for technical skills and enjoying

diversity of work were found to be the main factors for selection of any specialty.<sup>14,15</sup> This indicates the major human tendency which is prevalent across different social systems.

It has been seen that family medicine is the least preferred specialty in many countries where it is a well-developed and established department<sup>16-18</sup> and our study reflects the same trends. However, after looking at the results, our context revealed an unprecedented situation which is different from the findings in other studies. Many students are not familiar with family medicine as a specialty which is contrary to other studies where students are well aware that family medicine is a specialty.<sup>14</sup>

Main factors were personal interest<sup>19</sup>, feasibility and better job options abroad for family medicine<sup>20</sup>. Main difference found in private and public-sector students was due to career counseling<sup>21</sup> and role models<sup>22,23</sup>. Looking at the quantitative as well as qualitative data, it is clear that awareness about family medicine is a major factor in adopting this specialty as a career. Further research is required to determine the awareness at country level.

General /family medicine practice is very common in Pakistan although majority of the doctors didn't get any specialization in this field. The doctor-patient ratio for developing countries is not yet achieved in accordance with the WHO standard. This shows that besides over saturation in some major specialties; there is still paucity of quality care at primary level. Looking at current trends in medical college admissions in Pakistan, the female students dominate male students. Properly developed departments of family medicine, career counselling and good role models may play a significant role in promotion of health and qualified general practitioners. Moreover, regular continuous counselling of medical students would produce good clinicians and researchers that would not only result in improved health care at primary levels but also help in establishing a proper referral system. The resultant effect will be better utilization of primary and secondary health care facilities with decrease work load on tertiary care hospitals.

**CONCLUSION**

Awareness regarding Family Medicine is lacking in medical students of both public and private medical colleges. Career counselling of medical students during academic years can help them in selecting Family Medicine as their career. Proper planning and implementation of this Family Medicine program is required for strengthening primary health care in Pakistan. With the help of Health Ministry, Higher Education Commission and PMDC, this program can be piloted in some institutions.

**Limitations:** A major limitation was the inclusion of only one private and one public sector college so the results cannot be generalized. Moreover, the private college contained only female students so we actually could not get preferences of male students in a private sector college. A further limitation was due to the inclusion of medical students only as after graduation there is a shift from one preference to another.

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