

Preference of final year medical students towards family medicine as a career choice: A comparative study from Pakistan

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Abstract

Introduction: Career choices by newly graduated doctors play an important role in the provision of health care and for the making of health policies. Family Medicine is not being recognized as a specialty of choice among the health care society. The objective of this study was to see the preference of final year medical students towards family medicine as a career choice and its associated factors.

Methodology: This was a cross sectional study conducted among final year medical students of private and government medical colleges who were exposed and not exposed to family medicine teaching, after taking informed consent.

Results: Out of a total of 175 students 158 planned to go for specialization. Among them a small number, 16 from government and 4 from a private university, planned to join family medicine residency. The majority (74) from private university believed that there is a difference between general practitioner and family physician. Nearly all of them (75) believed holistic care approach as a main domain of family physicians. All private and few government university students said that Family Medicine should be incorporated as a subject in the undergraduate medical curriculum.

Recommendations: Family Medicine is in its infancy stage and requires the dire need to increase its awareness through sessions and seminars among health care professionals.

Key words: Family medicine, career choice, medical students

Introduction

Family Medicine is a primary care medical specialty providing comprehensive health care to the individual and the family regardless of sex, age or type of problem(1). A family physician plays a major role in integrating and coordinating care provided to patients and their families. Family practitioners can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

It is a well-known specialty throughout the world however its importance was overlooked in developing countries like Pakistan (2,3) until 2014 when the Pakistan Medical and Dental Council recognized its importance and incorporated Family Medicine as a subject in undergraduate curriculum (4). However, its status is still in infancy stage and only very few medical colleges have included this specialty as a formal subject in final year (2, 3).

Career choices of new graduate doctors play an important role for individuals and society in terms of provision of health care and health policy decisions. Undergraduates face challenges in making decisions about their career paths in their student life; hence after graduation they choose their career paths based on the influence of general trends of society and may end up in joining a specialty which may not be an appropriate choice for them (5).

The choices selected by newly graduated doctors are being influenced by many factors including exposure to the specialty as a subject during their undergraduate years, interest in the subject, peer pressure, monetary benefits, future prospects and job prestige. Unfortunately, family practice has not been a popular choice by the majority of the new graduates throughout the globe, perhaps due to perceived low monetary benefits, lack of awareness of its role in the community, poor exposure during student life etc(6).

In developing countries like Pakistan, Family Medicine still fails to get popularity as a career choice in medical students due to their limited exposure during their clinical years. A study done by final year medical students towards family medicine as a career showed only 18% of students opting for family medicine as a career choice for similar reasons as described above (7).

The objective of this study is to compare the preference of final year medical students (exposed and not exposed to family medicine during their clinical years) regarding family medicine as a career choice and factors associated with it. The results of this study will help us understand student's views about career choices and can help to design modifications in the curriculum, to make it more relevant, interesting and inspiring for the students.

Methodology

This was a cross sectional study conducted among medical students of two medical colleges of Karachi a mega city of Pakistan from July to Sept 2019. One was a private medical university having an undergraduate Family Medicine curriculum and the other was a government medical university with no such curriculum. Students from final year MBBS belonging to both the medical institutes were invited to participate in the study as they were about to graduate and were fresh to make up their mind for career choices.

Sample Size:

Sample size was calculated using WHO sample size determination software. Since this was a comparative study limited data was available on this topic, therefore a prevalence of 50% (maximum variance) was obtained, with 95% confidence interval and 8% bound on error, a total of 151 students was estimated. The sample size was further inflated 15 % for non-responders yielding a sample size of approximately 175 participants.

Ethical consideration:

Written informed consent was obtained from the students after explaining the study objectives. The students were free to withdraw at any time without giving any reason. Strict confidentiality was maintained throughout the process of data collection, entry and analysis. The Ethics review committee of both the institutes reviewed and approved the study protocol and followed the principles of the Declaration of Helsinki.

Development of Questionnaire:

The questionnaire was formulated by consulting literature and peers. The language of the questionnaire was in English and there was no need for translating this questionnaire to Urdu. Questionnaire was pre tested on 10 students, to look at the flow and clarity of questions so that modifications were made accordingly. Overall, the questionnaire took 10-15 minutes to be completed.

Students of both sexes, who gave consent to participate were included in the study and those who were absent on the day of the data collection or did not provide consent to participate in the study were excluded.

Questionnaire:

The questionnaire was divided into two portions. The first part included questions related to students' age, gender, their career preference, reason for choosing a particular specialty, and factors influencing their choice of medical specialty. The second part included questions related to their exposure and their perception of Family Medicine as a career. It also assessed their opinion regarding inclusion of Family Medicine in the undergraduate curriculum. Most of the questions were single best type and students had to choose one option that fitted the best according to their opinion.

Analysis:

The analysis was performed on SPSS version 19. Students were divided and analysed within two groups (private and government). Their baseline information on demographics was analyzed using descriptive statistics. For continuous variables such as age, means and standard deviation were reported. For categorical variables such as gender, preferred specialization, reasons for choosing a particular entity et. proportions were obtained. Pearson χ^2 and Fisher exact statistics was applied where appropriate for categorical variables. Results were considered statistically significant if the two-tailed p-value was less than 0.05.

Results

A total of 175 medical students were approached out of whom 164 participated in this study with a response rate of 94%. Out of these 164 students 75 were from private medical college and 89 from government medical college. The mean age range of the students was 22+ 7 years with a predominance of male 90 (55%) as compared to female 74 (45%). The majority 155 (94%) of the students in both the groups had an intention to go for specialization in future.

Figure 1 clearly depicts future specialty choices preferred by these young students. The majority of the students in both groups preferred Internal Medicine as a career choice however Family Medicine was chosen by only (2%) of the students in both the groups.

Most common reason for choosing a particular type of speciality was interest in subject as stated by the majority 74% of the students followed by other reasons. Around 8% kept monetary benefits as a major reason while flexible working hours was a special area of interest for 7 % of the students. Approximately 6% were influenced by parents or friends while deciding speciality choice and only 5% of the students planned to choose a specialty after being inspired by a role model.

Table 1 demonstrates perception of students regarding Family Medicine and General Practice. Nearly all 73 (97%) of the students belonging to private medical college were familiar regarding Family Medicine specialty however more than half 55 (62%) of the students in Government College had also heard about family medicine. Nearly all 74 (99%) of the students in private medical college were able to differentiate services offered by family physicians as compared to specialists, however on the other hand a large number of students 57 (64%) of government medical college failed to identify any difference among two types of consultations.

On questioning about need of incorporation of family medicine as a formal subject in undergraduate curriculum all 75 (100%) of private medical college students and half 43 (48%) of the government college students gave a favorable response.

According to the students of the private medical college the most common reason for incorporation into the curriculum was for provision of basic medical knowledge 49 (65%) whereas seeing a large number of patients 25(58%) was cited as the main reason by students of the government college. When asked about their opinion regarding recognition of family medicine as a specialty in Pakistan, the majority from both the groups 75(100%), 72(81%) showed a positive response. Similarly, they also agreed to the fact that Family Medicine filter clinics should be present in every hospital of Pakistan.

Figure 2 represents Attributes of family physicians as perceived by medical students. The majority from private medical college agreed that they provide preventive care (63%), patient centered (56%) and holistic care (68%) to their patients which is a unique quality which differentiates them from specialists while only few from government college students agreed to this fact.

Discussion

Family Medicine is a distinct specialty providing holistic care for the whole family. It is an undisputed fact that this specialty has not been fully recognized as an important field in Pakistan. The focus of this study was to compare the preferences of final year medical students private and government medical university students (exposed and not exposed to family medicine during their clinical years) regarding family medicine as a career choice and factors associated with it.

Our study showed that the majority of the students preferred Medicine, Surgery, Pediatrics and Gynecology and Obstetrics as a specialty for career choice while Family Medicine was preferred by only few 4% of the students. These results are similar to a study done in Pakistan by Aslam M et al (8) and Khader Y et al (9) . The probable reason for this could be lack of awareness among students regarding Family Medicine as a distinct specialty as most of the students belonging to the government medical university were not exposed to family medicine during their clinical years (10,11). However surprisingly even those who were exposed to this specialty during their clinical years were not influenced to choose Family Medicine as a career choice, perhaps because of less monetary gain and lack of post fellowship opportunities (7).

The most common reason for choosing a particular type of specialty was interest in subject as stated by most of the students, followed by peer pressure, high income potential and flexible working hours. These findings are similar to a study done among medical students of a government college in Karachi by Rehman A et al (12). The most probable explanation for this might be less monetary reward which is assumed as a major motivating factor while choosing a medical specialty. This finding is thought provoking for higher authorities concerned with planning and organization of medical education in Pakistan, and they need to understand and remunerate this important specialty accordingly.

Figure 1

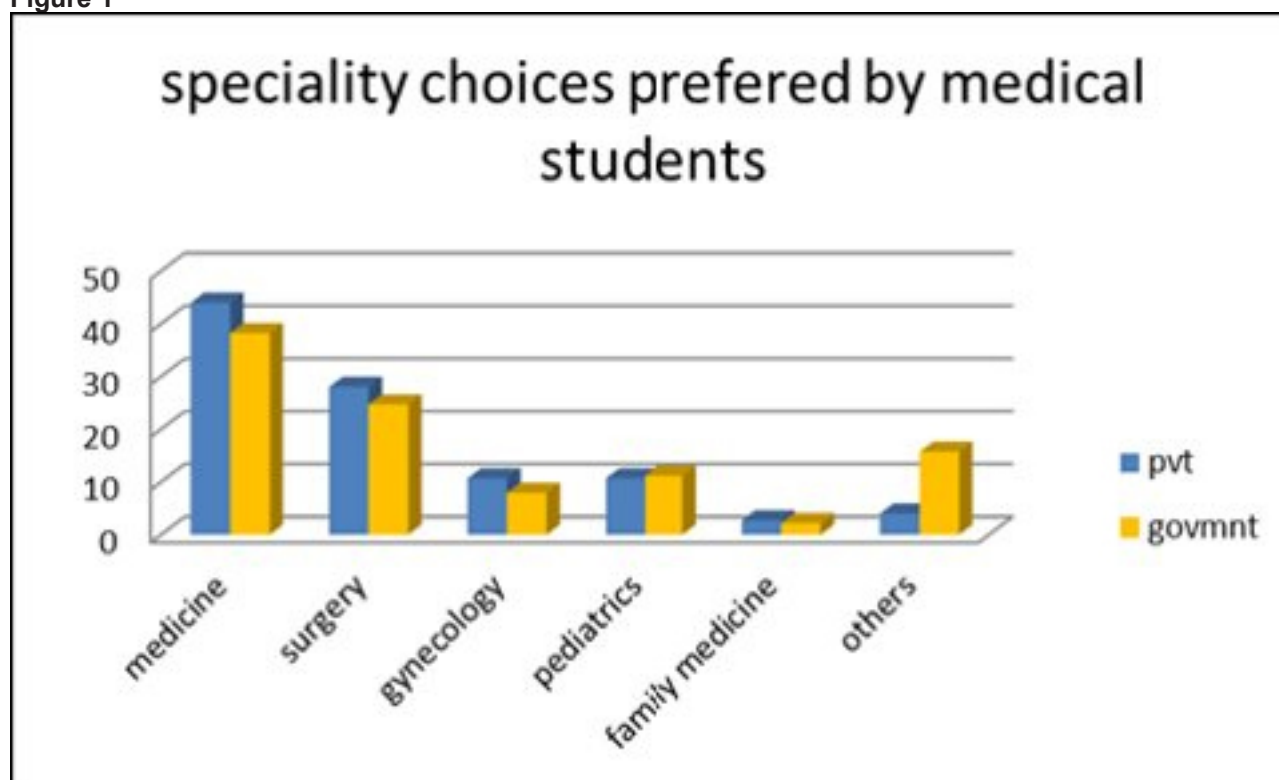
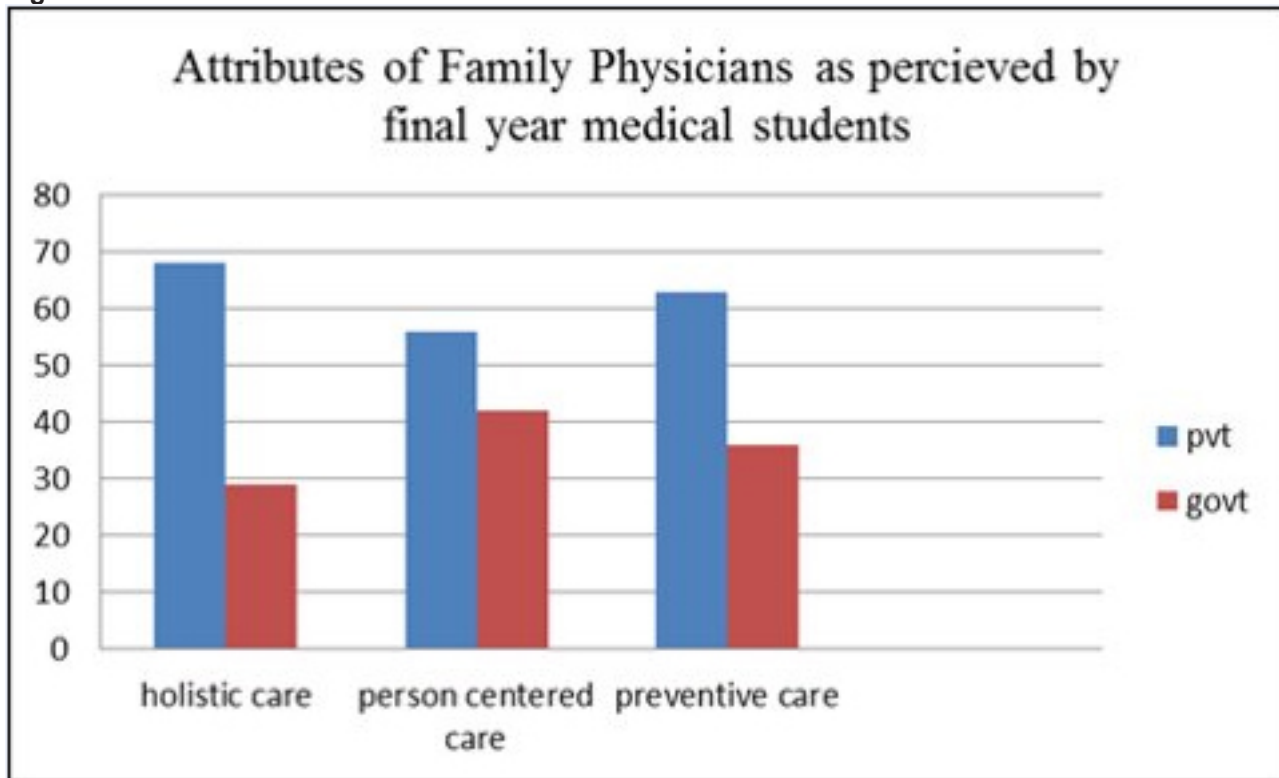


Table 1: Students' opinion regarding Family Medicine and General Practice

Variables		Private medical university N (%)	Government medical university N (%)	<i>p-value</i>
1. Do you have any idea regarding family medicine				
1.	Yes	73 (97)	55 (62)	0.00
2.	No	2 (3)	34(38)	
2. Did you find any difference between family physician and specialist				
1.	Yes	74 (99)	32 (36)	0.00
2.	No	1 (1)	57(64)	
3. Did you find any difference between family physician and general practitioner				
1.	Yes	18(24)	45(51)	0.00
2.	No	57(76)	44(49)	
4. Do you think family medicine should be part of under graduate curriculum				
1.	Yes	75(100)	43(48)	0.00
2.	No	0	46(52)	
5. Reason for family medicine as part of undergraduate curriculum				
1.	Provide Basic Knowledge	49(65)	13(30)	0.01
2.	Important for students	8(11)	5(12)	
3.	Seeing large number of patients	18(24)	25(58)	
6. Do you think family medicine should be approved as specialty in Pakistan				
1.	Yes	75(100)	72(81)	0.00
2.	No	0	17(19)	
7. Do you think each hospital in Pakistan should have family medicine filter clinics				
1.	Yes	74(99)	70(79)	0.00
2.	No	1(1)	19(21)	

Figure 2



When inquiring about perception of medical students regarding Family Medicine and General Practice, nearly all (97%) of the students from the private medical university and more than half (62%) from government medical university were familiar with Family Medicine specialty however they were unable to find any difference between Family Physician and General Practitioners' role and surprisingly this perception was more among medical students of private medical university who were exposed to Family Medicine rotation, however private university students were able to differentiate between family physicians and specialists.

The most likely reason for this behavior was duration of rotation as currently Family Medicine rotation was only for a few weeks in the private university which was not sufficient to give them an actual flavour of Family Medicine and allow them to understand and differentiate the distinct roles of Family Physician from General practitioners and specialists. This signifies the importance of duration of rotation which should be kept in mind by medical educators while designing curriculum.

In addition, role of mentorship or attachment with a Family Physician may help to improve clarity regarding Family Medicine specialty as seen by a study in Germany, where significant high rate of students agreed to consider Family Medicine as a professional career (32.7%) when they were attached with one family physician in the clinic thus giving them the opportunity to experience various aspects of family medicine(13).

The majority of the students from private medical university agreed that Family Physicians provide holistic care which differentiates them from specialists however only a few (9%) said that they are able to treat common disease

as their knowledge is only limited to common diseases. These results are contrary to a study done among final year students at a University of Helsinki where students considered seeing multiple problems as a negative feature of GPs attributes (14). Similarly, studies done by Selva Olid A (15) et al considered treating common diseases as less challenging and as a negative factor for career choice.

Despite its under recognition as a specialty for career choice, the majority of the medical students from the private medical university and few from the government medical university considered Family medicine as a distinct specialty and according to them holistic care, and ability to treat common diseases prevalent in the community were the main positive attributes which differentiated a Family Physician from a specialist. The most probable reason for this response of private medical university students is related to their level of awareness and exposure which they have experienced during their rotations in Family Medicine. These results are similar to a study done in Finland among medical students by L. Kuikka (14). This shows that exposure to Family Medicine rotation can improve understanding about specialty and its importance and may further help to improve student's willingness to opt for it as a career.

All of the private medical university students and nearly half (48%) of the government university students agreed that it should be included in the undergraduate curriculum as it provides basic knowledge to students followed by holistic care for the patients, similar to a study done by Iqbal SP (16) at Shifa international Islamabad. However, this concept is still in its infancy stage as evident by the opinion of various other studies where students do not consider family medicine as a preferred choice for career.

This specialty is still trying to gain recognition and is facing various challenges. Medical students are still confused about the concept of Family Medicine and are unable to appreciate the crucial role of the specialty in improving and strengthening weak and compromised health care systems of developing countries like Pakistan. There is overall lack of prestige compared to other specialties, and poor level of satisfaction among General Practitioners (17) due to low monetary benefits and less support from government etc. All these factors may portray a negative picture of the specialty leading to lesser motivation to opt for it as a career choice.

For this purpose various means can be used including initiating and strengthening of Family Medicine departments in medical colleges as mandated by PMDC, introducing focused community based teaching to give students the actual flavor of pattern of disease burden in the community (18), mentorship by general practitioners (19), career counseling and guidance of medical students including promotional seminars by the faculty to enhance awareness especially for final year students as they are at a stage where they are about to make decisions regarding their future career and choose a path which is suitable for themselves (20). These interventions will improve the likelihood of students choosing Family Medicine as a career choice with a profound effect on delivery of quality health care in this country.

Strength/Limitations:

This study has several limitations, as it was conducted in two medical universities of one province, thus it may not reflect the whole country. Larger scale studies are required to make a conclusion however the result of this study can give an idea about perception of specialty among medical students and these results can be used to develop strategies to increase awareness regarding Family Medicine in the country.

Conclusion

This calls for a need of strengthening Family Medicine as an essential component of medical school curriculum. Medical educators should realize the relevance of the medical curriculum to the actual health needs of the community and should work together with the policy makers to produce doctors who can cater to this need of the country. Family medicine rotation as part of undergraduate medical curriculum may help in fostering an interest among medical students in this newly emerging subspecialty which could have a profound effect on delivery of quality health care in this country.

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