MEDICAL EDUCATION

Perceptions of Final Year Medical Students about Family Medicine as A Career Choice in Pakistan

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ABSTRACT

Background: Family medicine is a field in which complete and detailed set of healthcare services are provided to the patients and their families. In developed countries, freshly graduated students choose family medicine as a priority for their career. However, in Pakistan it is not the case. The present study is undertaken to determine the perceptions of final year medical students' about Family Medicine as a viable career.

Methods: A total number of 504 students participated in the study. This was a cross-sectional study. The study participants were in their final year of medical college. Data was collected using a preapproved questionnaire. Data was entered and analyzed via SPSS version 17 and Chi-Square test was used post-stratification.

Results: Only 14.3% (n=72) medical students had heard about Family Medicine. Only 18% (n=92) would select family medicine as a profession. The most frequent rationale for choosing the field of Family Medicine was the variety of patients seen in general practice (55.4% n=51).

Conclusion: There is a dire need to focus on increasing awareness about the field of family medicine among medical students. The students should be counseled on the advantages along with the disadvantages of choosing this field as a medical profession.

Key words: Perceptions; General Practice; Delivery of Health Care, Medical.

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INTRODUCTION

Family medicine is a field of medicine providing continuous and comprehensive set of healthcare services to the patient. A family medicine specialist can treat acute medical problems, can perform minor surgical procedures (suturing, circumcision, biopsies, etc), and can provide education on prevention of diseases¹⁻³. Unfortunately, family medicine is a struggling field in many countries, especially in developing countries⁴⁻⁵.

Family Medicine, also known as general practice has been recognized as a specialty in various parts worldwide. It takes years to flourish as a specialty. Several studies reported that countries with effective primary health care system have excellent results in all components of the health care system. The countries with higher number of general care physicians have better health care consequences, resulting in lower all-cause mortality rates, reduced cardiovascular mortality, and other diseases²⁻⁶.

In the hospitals in United Kingdom, general practice is included in the curriculum. General practice and community-based teaching comprises 15% of the undergraduate teaching curriculum5. Some medical schools offer early community practice exposure. Studies have shown that this undergraduate training in general practice turns out to be quite beneficial for medical students. Through one-to-one interaction, students improve their clinical skills like history taking, examination, and effective communication with the patients. In second foundation year,

they have options for four months clinical attachment in general practice. This attachment provides another learning experience. There has been a positive role of this attachment in selecting general practice as a career choice in future⁵⁻⁷.

Along with undergraduate teaching curriculum, postgraduate training in general practice is effective and well organized. Various factors like large number of applicants, number of qualified and paid trainees, and supervision by medical educational specialist in general practice makes it a good model of educational training for other countries⁵. The number of training openings in general practice has been climbing steadily in the United States from 2600 in 1989 to more than 3600 per year8. In Pakistan, basic health units are running without specialized family medicine doctors. More than 137,586 general medical practitioners are associated with Pakistan Medical and Dental Council. Most of them are practicing because oftheir Bachelor's degree and one-year internship while family medicine is a doctoral level, which requires 3-4 years of training⁹.

Although studies have asked openly about career choices but no local study is available in which opinions of final-year students have been specifically asked about Family medicine as a professional career choice. So, it becomes immensely significant to know the perception of students specifically about family medicine just before graduation. This study may also open new areas in research about factors affecting career choices among students.

METHODS

This was a descriptive, cross-sectional study, conducted in five medical colleges across Pakistan in seven months duration. The sample size was determined using OpenEpi keeping confidence interval of 95%, margin of error as 1.5 % and taking the expected sample proportion of students selecting Family medicine as 24.1%. The calculated sample size was 500 final year medical students.

Multistage sampling technique was used to get the required sample size. Five colleges from Lahore, Pakistan were selected in the first stage. All the students were selected at random. Students enrolled in current final year of selected medical colleges of Lahore were included in the study. All those students who did not give informed consent for filling the questionnaire, or who were on leaves or on rotation to other departments on the day of data collection were excluded from the study. Ethical approval was obtained prior to the study. The data was entered and analyzed via Statistical Package of Social Sciences (SPSS) version 17. Quantitative variables were expressed as mean and standard deviation while the qualitative variables were expressed as frequency and percentages. For statistical purposes, Chi-Square test was used post-stratification keeping p-value of less than 0.05 as significant.

RESULTS

In the present study, 71% (n=358) were female and 29% (n=146) were male students. Mean age of students was 23 + 2.6 years with a range of 21-25 years. Most of the students had an urban family origin 63.7% (n=321) while 36.3% (n=183) were from rural family origin. Parents of 17.9% (n=90) medical students belong to the medical profession. Only 37.7% (n=190) medical students had heard about the specialty of family medicine. Medical colleges were the most common source of information about family medicine specialty. Other sources were internet 20% (n=38), colleagues 17.3% (n=33), parents/relatives 17.3% (n=33) and medical journals 5.26% (n=10).

Table 1: Source of Information about Family Medicine.

| Source of Information about Family Medicine | %(n=190) |
|---|--------------|
| Medical College | 40% (n=76) |
| Internet | 20% (n=38) |
| Colleagues | 17.3% (n=33) |
| Parents/Relatives | 17.3% (n=33) |
| Medical Journals | 5.26% (n=10) |

In the present study, 43% (n=216) of medical students considered family medicine as a separate clinical specialty and 27% (n=135) did not consider family medicine as a separate clinical specialty. While 30.4% (n=153) of students were not sure whether family medicine is a separate specialty or not. When the students were asked if they would see family medicine as a profession for themselves, only 18% (n=92) answered in the affirmative. Interestingly, even out of those who considered this a separate specialty, only 37% (n=80) opted for family medicine as a professional career while 63% (n=136) did not choose family medicine for themselves as a career. The other reasons for choosing family medicine as a professional career are shown in Table 2.

Table 2: Reasons for choosing family medicine as a profession.

| Reasons | Percentage |
|---|--------------|
| High professional and social prestige | 43.4% (n=40) |
| Interest in Family medicine | 30.4% (n=28) |
| No night calls | 30.4% (n=28) |
| Short waiting time before admission in residency training program | 29.3% (n=27) |
| Higher overall income | 17.3% (n=16) |
| No other option | 9.7% (n=9) |
| Due to family pressure | 5.4% (n=5) |

The commonest rationale for not considering family medicine as a professional career was lack of interest in family medicine (62.9% n=146). The other reasons for not choosing family medicine as a professional career are shown in Table 3.

Table 3: Reasons for not choosing family medicine as a profession.

| Reasons for not choosing family medicine | Percentage |
|---|---------------|
| Needs vast knowledge about all fields | 25.8% (n=60) |
| No opportunities in career | 18.5 %(n= 43) |
| Less respect for Family Physicians in society | 16.8% (n=39) |
| Low income | 16.8% (n=39) |
| High responsibility of running practice | 15.5% (n=36) |
| Poor standard of Family medicine in Pakistan | 12.5% (n=29) |
| Less respect for Family Physicians in Family | 9.4% (n=22) |
| Insecurities | 9% (n=21) |
| Others | 0.8% (n=2) |

Out of the five selected colleges, only one had the department of family medicine. The students had a one-week clinical rotation in family medicine. The same college also had postgraduate training program in family medicine. The number of students from the medical college with a department of family medicine was 75 (14.9 %). Rest of the students were from medical colleges where there was no department of family medicine (85.1% n=429). Among the students form the medical college with a department of family medicine only 21% (n=16) opted for family medicine as a professional career for themselves. While 53 % (n = 40) did not opt for family medicine as a profession and 25 % (n=19) were not sure. Among the students from the medical college with no department of family medicine 17.7% (n=76) opted for family medicine as a professional career for themselves. While 44.8% (n=192) did not opt for family medicine as a profession and 37.5% (n=161) were not sure (p = 0.12).

Among all those students who choose family medicine as a profession 75 % (n= 69 out of 92) were female while only 25 % (n=23 out of 92) were male (p=0.01). Married students were more willing to choose family medicine as a career (29% n=7 out of 24) than unmarried (18% n=77 out of 421), although this association was statistically insignificant (p=0.165).

DISCUSSION

We reported that, 62.3% of students had heard about family medicine and 42.9% considered family medicine as a proper clinical specialty. Our findings suggested that students had fair awareness about family medicine through different sources of information like Medical Colleges, Internet and Colleagues. In this study, 18.3% of students agreed to consider family medicine as a professional career for themselves. If we compare this result with study done at Ziauddin University (2000-2004) in which final year students of its first five batches were included, only 5.2% medical students reported family medicine as their priority¹⁰.

There are countries where family medicine is a very popular choice among fresh graduates because of higher status, greater income and suitable working hours. Therefore, we cannot compare our results with that of Canada, Australia, Germany, and the United Kingdom as family medicine is well-established specialty in terms of repute, training facilities, job opportunities, workload and incentives^{4-9, 11-13}.

We observed that the most frequent reason for not choosing this specialty was the lack of interest in the field, no opportunities and less respect for family physicians in society. In a study, at Shifa Medical College, it was found that after the end of rotation in family medicine, 37% of students agreed to consider family medicine as a career¹⁴. Gender also had a role in our study. Female medical students seemed more interested towards family medicine as a professional career. Similar trend is also seen in a study conducted in Canada in which 69.6% female students agreed to consider family medicine as a professional career? Female may prefer family medicine more due to flexible working hours, having no night calls and easy to manage job with family.

Out of the five medical colleges included in the study, only one institute had family medicine department with one-week clinical rotation in family medicine in final year. Surprisingly, there was no impact of this rotation in influencing students towards family medicine. There is a possibility that a one-week clinical rotation is not sufficient time for exposure. Similarly in Germany, significant high rate of students agreed to consider family medicine as a professional career (32.7%) p=0.039. In this rotation, one student was attached with one family physician in the clinic. This gives them an opportunity to experience various aspects of family medicine¹⁵.

Currently, the College of Physicians and Surgeons Pakistan (CPSP) register only four institutes for Fellow of College of Physicians and Surgeons Pakistan (FCPS) in family medicine. Out of which 3 are from Karachi including the Aga Khan University Hospital, Ziauddin University, the Indus Hospital Korangi Karachi, and one from Lahore i.e., Fatima Memorial Hospital College of Medicine and Dentistry 16-19.

Currently, only six Medical Colleges have included family medicine in their undergraduate curriculum. In November 2014, PMC (formerly PMDC) introduced family medicine as a subject at undergraduate level. All medical colleges of Pakistan have been asked to establish family medicine department and introduce family medicine to undergraduate curriculum¹⁸⁻²⁰. The awareness of family medicine is expected to be higher among those who have had higher levels of exposure to the practice. There is very limited data available on the contributory factors that affect the perception of family medicine among undergraduate students negatively or positively 21-25. Therefore, further research should be focused on evaluating the various parameters affecting student perception about the specialty.

CONCLUSION

Our study reported that majority of the medical students are not aware of family medicine as a separate specialty and do not consider family medicine as a career for themselves. There is a dire need to focus on increasing awareness about the field of family medicine among medical students. The students should be counseled on the advantages along with the disadvantages of choosing this field as a medical profession.

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CONFLICT OF INTEREST

There was no conflict of interest among the authors.

ETHICS APPROVAL

The study approval was obtained from the FMH College of Medicine and Dentistry, Shadman, Lahore Ethics Review Committee.

PARTICIPANT'S CONSENT

Verbal and written informed consent was obtained from all patients.

AUTHORS' CONTRIBUTIONS

DN conceptualized the idea, did bench work, wrote the manuscript, KA helped in data collection and manuscript preparation, GU helped in designing of the project, NS overall supervised the project and finalized the manuscript.

REFERENCES

- 1. American Academy of Family Physicians. Definition of Family Medicine. 2019, data retrieved from, https://www.aafp.org/about/policies/all/family-medicine-definition.html
- 2. Singh GK, Daus GP, Allender M, Ramey CT, Martin EK, Perry C, De Los Reyes AA, Vedamuthu IP. Social determinants of health in the United States: addressing major health inequality trends for the nation, 1935-2016. Int J MCH AIDS. 2017;6(2):139.
- 3. Meads G. Primary care in the twenty-first century: an international perspective. CRC Press; 2018.
- 4. Besigye I, Mash R, Essuman A, Flinkenflögel M. Conference report: Undergraduate family medicine and primary care training in Sub-Saharan Africa: Reflections of the PRIMAFAMED network. Afr J Prim Health Care Fam Med. 2017;9(1):1-5.
- 5. Fasola OE, Alao AO, Ibisola BA, Obimakinde AM, Odekunle IC. Knowledge and perception of Family Medicine among medical students at University of Ibadan, Nigeria. S Afr Fam Pract. 2019 Aug; 15:1-6.
- 6. Harris MF, Zwar NA. Reflections on the history of general practice in Australia. Med J Aus. 2014;201(\$1):\$37-40.

- 7. Jones R, Hastie A. Undergraduate and Postgraduate education: Vive Ia difference? Educ Prim Care. 2009;20:63-4
- 8. Burford G. Family group conferencing: New directions in community-centered child and family practice. Routledge; 2017.
- 9. Pakistan Medical and Dental Council. 2014, data retrieved from,http://pmdc.org.pk/Statistics/tabid/103/Default.aspx
- 10. About the American Academy of Family Physicians. 2019, data retrieved from https://www.aafp.org/about.html
- 11. Pakistan Medical and Dental Council > Statistics. 2019, data retrieved from,http://pmdc.org.pk/Statistics/tabid/103/Default.aspx
- 12. Walkinshaw E. Family medicine continues uptick during annual residency match. CMAJ. 2011; 183(12): 775–776
- 13. Huda N, Yousuf S. Career preference of final year medical students of Ziauddin medical university. Educ Health. 2006;19(3):345-53
- 14. Harris M, Zawar N. Reflections on the history of general practice in Australia. Med J Aust. 2014;201(11):37-40
- 15. Christianson E, Bistrovsky V, Kogut B. Family Medicine in the Russian Far East. Fam Med. 2007;39 (10): 742-5
- 16. Biggs J. Postgraduate Medical training in Pakistan: Observations and recommendations. JCPSP. 2008;18 (1): 58-63.
- 17. Deutsch T, Hönigschmid P, Frese T, Sandholzer H. Early community-based family practice elective positively influences medical students' career considerations—a pre-post-comparison. BMC Fam Pract. 2013;14:24
- 18. Haq CL, Qureshi AF, Zuberi RW, Inam SN, Bryant JH. Family medicine postgraduate training in Pakistan. J Pak Med Assoc. 1992;42:69.
- 19. History. College of Family Medicine Pakistan. 2019, data retrieved from, http://cfmp.org.pk/history/
- 20. CPSP Z. College of Physicians and Surgeons Pakistan. 2019, data retrieved from,https://www.cpsp.edu.pk/
- 21. Iqbal SP. Family medicine in undergraduate medical curriculum: a cost-effective approach to health care in Pakistan. J Ayub Med Coll Abbottabad. 2010;22(4):207-9.
- 22. Lahad A, Bazemore A, Petek D, Phillips WR, Merenstein D. How can we change medical students' perceptions of a career in family medicine? Marketing or substance? Isr J Health Policy Res. 2018;7(1):52. 23. Willoughby KA, Rodríguez C, Boillat M, Dove M, Nugus P, Steinert Y, Lalla L. Assessing students'
- Nugus P, Steinert Y, Lalla L. Assessing students' perceptions of the effects of a new Canadian longitudinal pre-clerkship family medicine experience. Educ Prim Care. 2016;27(3):180-7.
- 24. Keegan DA, Scott I, Sylvester M, Tan A, Horrey K, Weston WW. Shared Canadian Curriculum in Family Medicine (SHARC-FM): Creating a national consensus on relevant and practical training for medical students. Can Fam Physician. 2017;63(4):e223-31.
- 25. Kelly C, Roett MA, McCrory K, Coutinho A, Bhuyan N, Alavi M, Ho T, Stisher C, Bentley A, Diller PM, Davis A. A shared aim for student choice of family medicine: an update from ADFM and Family Medicine for America's Health. Ann Fam Med. 2018;16(1):90-1.

