

## ORIGINAL ARTICLE

## PERCEPTION OF HEALTH PROFESSIONALS TOWARDS THE SCOPE OF FAMILY MEDICINE IN THE HEALTHCARE SYSTEM OF PAKISTAN

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**Background:** Background: Primary health care is the backbone of comprehensive healthcare systems, and family physicians complement horizontal health coverage. In the developed world family medicine is integral to new doctors' training but, in the developing world, there are hurdles, e.g., poorly targeted financing, lack of skills and resources, and little health professionals' interest in the specialty. **Method:** This study determined perceptions of undergraduate and postgraduate medical trainees and healthcare professionals in Pakistan about family medicine. Participants' perceptions were examined via a self-administered pre-structured questionnaire about family medicine in developing countries before and after a targeted seminar. Epi Info software (v.7) was used for statistical analysis. The  $p$ -value  $<0.05$  was considered statistically significant. **Results:** One hundred & eight questionnaires were returned post-seminar demonstrating raised participant awareness of family medicine, with the majority (postgraduate 90.00% and undergraduate 90.91%) believing that health departments should create family medicine specialist posts to encourage students and post-graduate trainees. Similarly, 89.77% undergraduates and 95.00% postgraduates believed that comprehensive family medicine in primary health could be a solution to improve health care in Pakistan. Of note, when asked pre-seminar "do you feel you would consider family medicine as career speciality?", 42% undergraduates replied yes; when asked the same question post-seminar 63% of undergraduates and 90% of postgraduates replied yes. **Conclusion:** Introducing family medicine as a subject in medical colleges will create awareness and interest towards this speciality; until then, awareness lectures and seminars by trained family physicians will help bridge the gap towards encouraging students about its benefits.

**Keywords:** General Practice; Physician; Family

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## INTRODUCTION

Family medicine is one of the key specialities which provide comprehensive primary healthcare that is accessible and affordable.<sup>1</sup> Family Physicians are the generalist doctors who are trained at postgraduate level to provide comprehensive and holistic primary care to the entire community. Family Medicine is the backbone of healthcare system around the developed World. Family Physicians act as first line contact for patients; they deliver care holistically through patient-centeredness and ongoing continuity of care. Because of this unique approach, their function is essential for the success and sustainability of any healthcare system.<sup>2</sup> Family Physicians often care for multiple generations of the same family, health care encompasses both horizontal and longitudinal care, with a focus on preventive, curative and rehabilitative stages of illness. They see the patients from birth to the time they develop multiple chronic diseases, and also provide them with palliative care when needed. Their role includes the provision of integrated, accessible healthcare services close to the patients' home. They deal with the majority of their patients' personal healthcare needs and develop a sustained relationship. They practice in the context of family and community rather than individual patients.<sup>3</sup>

In developed countries such as the United Kingdom, USA, Australia, Denmark and in most Middle Eastern countries, Family Medicine as a speciality has helped in improving health care.<sup>1</sup> The importance of a family physician who could deal with common health problems holistically has been appreciated, the main move in the developed world has been away from the super-specialised care to a more generalist approach at a primary care level.<sup>3</sup>

In the UK GPs/Family physicians are the main foundation of the National Health Service (NHS). The Royal College of General Practitioners (RCGP) is constantly working towards improving education and training of family physicians to ensure better quality healthcare services.<sup>3</sup> However, in developing countries such as Pakistan, there is still no progress in the development of family medicine as a speciality. Some of the important reasons for this under-development are poor or no postgraduate training, poor and non-existent job opportunities, and poor monetary incentives leading to an out-flux of new graduates towards secondary care. This has led to a disparity between healthcare providers and a poor understanding of the importance of family medicine amongst the health professionals.<sup>3</sup>

Due to the increased burden of disease and patients presenting with multiple complex comorbidities, a non-family physician specialist approach for a particular disease is not appropriate. Pakistan is a developing country with limited resources, therefore appointing family physicians to act as gatekeepers to manage these issues will be a more cost-effective option. The World Health Organisation has long supported the concept of comprehensive primary care for the entire community.

To encourage medical students and junior doctors to choose family medicine as a speciality and influence their speciality choices their training will need an extensive review especially in consideration of the following factors. Providing mentorship to medical students through family physicians, exposure to the speciality by doing rotations in Family Medicine posts, development of future job prospects, better development and provision of health care through appropriately staffed and equipped family health centres, processes and systems to end the disparity between healthcare professionals.<sup>4</sup>

However, in Pakistan family medicine is still not an established speciality. The concept of a trained generalist remains non-existent and general practitioners are mostly non-specialists with limited or no training in primary care.<sup>2</sup> In Medical Schools, students receive most of their undergraduate training in Hospitals with little exposure to primary care-related health problems and preventive medicine in the community. As a result, these students are unable to learn the skills necessary to work as competent family physicians.<sup>2</sup> Due to this lack of exposure, family medicine is not considered a career choice amongst medical students in Pakistan.<sup>5</sup>

They have almost entered a vicious cycle. Lack of exposure to this speciality has led the medical students and health professionals to a perception that it is a speciality with low prestige, money and personal development which can be attributed to lack of knowledge and interest.<sup>6</sup> Poor funding and developmental opportunities leads to lack of exposure thus repeating the same cycle. Also, the status of undergraduate training in Pakistan seems to be an important factor which influences student career choice in this speciality. Only a few institutions have started postgraduate training programmes in Family Medicine and also offer some exposure to their undergraduate students. The CPSP is offering MCPS and FCPS postgraduate training in family medicine, but despite this, little interest has been seen at either professional or government level to develop and introduce this as a clinical speciality.<sup>7</sup>

In most developed countries family medicine is well established with comprehensive postgraduate training programmes. This helps to equip trainees with the necessary skills to become competent family

physicians. Students have significant exposure and have clinical placements in general practice in well-established family medicine clinics run by trained family physicians. In the United Kingdom for example, despite some declining interest recently in medical students for pursuing family medicine as a speciality<sup>9</sup>, there are still a significant number of students who would prefer choosing this speciality. In general, there is a positive perception amongst medical students about family medicine in developed countries; this may be due to more contact with GPs/family physicians.<sup>8</sup> Major factors influencing their career choice and consideration for this speciality are: flexible hours, acceptable on-call schedule, better income, continuity of care and long-term relationship with patients, health promotion and prevention, social commitment, status amongst colleagues and in the community, variety of clinically challenging problems, stability and security of job and focus on patients in the community.<sup>9</sup>

Medical students in developed countries such as the UK, USA and Canada have family medicine placements in early years of undergraduate training which gives them awareness about this speciality. This early exposure affords the opportunity to observe patient-doctor relationships and understand the value of continuity of care. It not only provides one-to-one teaching by GPs/family physicians, and exposure to medical scenarios but also gives them a chance to see trained physicians as role models. This holistic approach of seeing care differently has a positive influence on the students and encourages them to choose this speciality as a career.<sup>4</sup> In Canada, although the total number of undergraduate medical trainees choosing a career in family medicine has declined, 25% considered it according to a 2003 survey.<sup>9</sup> According to a UK foundation programme office, 17.4% of year two foundation doctors (F2s) were appointed to GP training in the United Kingdom in 2015.<sup>10</sup>

Apart from the interest amongst the students and junior doctors, the department of health in the UK is also encouraging medical schools to increase exposure of their medical students to general practice/family medicine. They are increasing postgraduate training places in general practice every year, and their target of 50% of medical graduates entering into general practice may be a solution to the general practice crisis in the UK.<sup>10</sup> Medical schools are now promoting more community-based medical education as this achieves a higher number of learning objectives for medical students. Due to shorter inpatient stays, development of new sub-specialities, busy workload, lack of supervision, and increasing medico-legal issues, hospitals are now no longer the most suitable place for student's learning.<sup>10</sup>

This study was carried out in Khyber Pakhtunkhwa (KP), Pakistan, to determine the view of

health professionals regarding the importance of family medicine within the healthcare system. It aimed to identify whether medical students and healthcare professionals are aware of family medicine as a distinct speciality, whether they are aware of the role of family medicine as a speciality to improve healthcare in KP, and would they consider this speciality as a career?

## MATERIAL AND METHODS

An observational cross-sectional study was carried out to observe the health professionals' awareness about family medicine in developing countries like Pakistan. A seminar was arranged at Ayub Medical College Abbottabad, Khyber Pakhtunkhwa, Pakistan on 21st September 2016, at which an awareness lecture was delivered by the members of Association of Primary Healthcare Professionals UK to the medical students and staff of Ayub Medical College and Teaching Hospital, Abbottabad. Ayub Medical College is a public sector Medical College which was established in 1978. Ayub Teaching Hospital is 1100 bed tertiary care hospital affiliated with Ayub Medical College.

Data was collected through a self-administered, pre-structured questionnaire. This had both open and closed-ended variables and was designed by APHCP team members. The questionnaire gathered information on their level of training, previous knowledge about this speciality, career choices, factors including awareness lectures and seminars that may influence their career choice and their understanding of the role of comprehensive primary care in improving health care (a copy of the questionnaire is available upon request). All health professionals who participated in the seminar were included in this study. Data was entered through pre-coded research tool to Epi Info version 7. Statistical analysis was carried out using the Epi Info software (version 7), and for statistical significance, Chi-square test was used. A *p*-value <0.05 was considered statistically significant.

## RESULTS

A total of 108 medical professionals attended the workshop, out of 108, 50.92% (55) were female, and 49.07% (53) were male. Most of the participants (75.93%) were between the age group of 18–25 years; 18.52% (20) were at post-graduate and 81.48% (88) at the undergraduate level.

The majority of the participants were house officers 35.19% (38), followed by medical students 18.52% (20), while 15.74% (17) were postgraduate trainees and 12.96% (14) were at the professor and associate professor level. Moreover, 31.48% (34) participants were registered with College of Physicians and Surgeons of Pakistan (CPSP) training program, and only 8.33% (9) had specialised in family medicine.

When asked post-seminar about pre-seminar awareness of Family Medicine, 53.41% (47) of the undergraduates said they had not been aware of Family Medicine as a speciality comparing with 5% (1) of postgraduates. The difference is highly significant with *p*-value <0.0001 (chi-square 15.25, 95% CI 0.01–0.36), suggesting that medical practitioners are not receiving exposure to the discipline until they practice on graduation. The seminar, therefore, raised awareness, with a majority of both post-graduates (90.00%) and undergraduates (90.91%) believing post-seminar that health departments should create family medicine specialist posts to attract students and postgraduate trainees. Similarly, 89.77% (79) undergraduates and 95.00% (19) post-graduates believed that comprehensive primary health care of family medicine could be a solution to improve health care in Pakistan. It is interesting that when asked "do you feel you would consider family medicine as career speciality", only 42% (37) under-graduates replied yes as a positive choice with pre-seminar knowledge and information, and when asked the same question post-seminar (with new knowledge gained from the seminar), 63% (55) of under-graduates and 90% (18) of post-graduates replied that they would consider this speciality as a career.

**Table-1: Age and gender of health professionals**

Age Group	Male		Female		Total	
	Freq	%	Freq	%	Freq	%
18-25	38	46.34	44	53.66	82	75.93
26-35	8	53.33	7	46.67	15	13.89
36-45	4	66.67	2	33.33	6	5.56
46+	3	60.00	2	40.00	5	4.63
<b>Total</b>	<b>53</b>	<b>49.07</b>	<b>55</b>	<b>50.93</b>	<b>108</b>	<b>100.00</b>

**Table-2: Summary of results**

Questions	Yes (%)	No (%)	<i>p</i> -value
Did you know about Family Medicine as Speciality?			
<b>Undergraduate</b>	41 (46.59)	47 (53.41)	<0.001
<b>Post Graduate</b>	19 (95.00)	1 (5.00)	
Do you think Health Department should create Family Medicine Specialist post to encourage Students and Post-Graduate Trainees?			
<b>Undergraduate</b>	80 (90.91)	8 (9.09)	0.82
<b>Post Graduate</b>	18 (90.00)	2 (10.00)	
Do you feel a comprehensive primary health care of family medicine can be a solution to improve health care in Pakistan?			
<b>Undergraduate</b>	79 (89.77)	9 (10.23)	0.51
<b>Post Graduate</b>	19 (95.00)	1 (5.00)	
Before the talk, do you feel you would consider Family Medicine as a Career Speciality?			
<b>Undergraduate</b>	37 (42.04)	57 (57.95)	<0.005
<b>Post Graduate</b>	15 (75.00)	5 (25.00)	
After the talk, do you feel you would consider this Speciality as a Career?			
<b>Undergraduate</b>	55 (62.50)	33 (37.50)	<0.05
<b>Post Graduate</b>	18 (90.00)	2 (10.00)	

## DISCUSSION

This study has supported other findings in relation to the impact of transformative learning on health

practitioners.<sup>14</sup> By arranging the seminar and opening it to a cross-section of undergraduate and postgraduate medical trainees, an opportunity was afforded for participants to learn together about family medicine and attitudes were changed as evidenced by the survey results. When compared to the wider literature, it is important to place these findings within the context of The Alma Ata declaration of 1978, a key turning point in primary health care. Pakistan as with many other developing nations being signatory has yet to achieve universal health coverage; it has moved very little in terms of meeting these goals. The current sustainable development goals for 2030 have brought the focus on primary healthcare once again. Renewed efforts being focused both internationally and nationally with the support of WHO have increased awareness in some quarters of health delivery systems; it is becoming increasingly clear that these goals cannot be achieved without the implementation of family physicians in the current healthcare system. Pakistan lacks any substantial move towards this in terms of medical education. The majority of medical students are not aware of training opportunities in family medicine and so very few takes this as a career option. Studies previously conducted have shown a trend towards choosing hospital-based specialities.<sup>12</sup> When compared, our results showed a similar trend, however, there were some interesting improvements over the previously conducted studies. Our participants when made aware of the options intimated post-seminar they would consider family medicine as a career option despite apparent declining interest in the developed world. In addition, where autocratic health systems may be considered a luxury in the developing world<sup>16</sup>, this study sits well within the call for further research to guide policy makers as well as practitioners in using approaches within the community to improve outcomes<sup>17</sup>. Evidence also suggests opting for family medicine as a future discipline depends on the quality of exposure to general practice.<sup>10</sup> Studies have shown that a clinical role model also has an impact on students choosing a certain speciality.<sup>13</sup> Also, students tend to choose general practice if they have had exposure to community-based learning as is common in general practice.<sup>13</sup> Pakistani students are at a disadvantage in this as without an established environment of structured and modern primary healthcare in which family physicians practice, they have little exposure to view first-hand what it means to form long-term relationships with patients and their families as is often seen in the Western model of general practice. Apart from these factors, financial incentives, and poor remuneration in general practice also tend to deter students from choosing family medicine as a

career.<sup>11</sup> However, with up to 90% of participants post-seminar believing family medicine could improve health care in Pakistan, this study demonstrates that a simple intervention (seminar) can help educate health care professionals and trainees into understanding the need for family medicine and its impact on disease burden.<sup>15</sup> Also, as the seminar included both undergraduate medical students and post-graduate trainees, its nature meant that medical students had exposure to qualified practitioners undertaking further study and practitioners in the field (speakers). This supported another study which emphasises the importance of collaboration across sectors and disciplines.<sup>18</sup>

In terms of study limitations, the design lends itself to scrutiny due to the inherent difficulty in obtaining pre-exposure (i.e., pre-seminar attendance) measures and the lack of a control group. The research team acknowledged these limitations in planning and established that given the WHO determination in pushing the focus on primary health<sup>17</sup> it would not be ethically sound to have a control group who were not invited to the seminar for comparison. However, this acknowledgment coupled with the statistically significant change in perceptions of the scope for the speciality of Family Health shapes recommendations for future research. These include a case-study methodology approach involving multiple sources of data extending over time to determine the impact of Family Health Practitioner posts on health outcomes

## CONCLUSION

In a country such as Pakistan this specialty could be the answer to a lot of its problems in healthcare. To become its saviour, family medicine needs to firmly establish its place within policy and practice. One of the solutions could be to start increasing the awareness of this speciality amongst medical students and healthcare professionals. The Pakistan Medical and Dental Council (PMDC) issued a notification in 2014 directing all Medical Colleges in the country to examine students in Family Medicine. Unfortunately, little has been done since then towards its implementation. The introduction of family medicine departments in colleges will create awareness and interest in medical students and house officers towards this specialty.<sup>1</sup> Until then, awareness lectures and seminars by the current trained family physicians in Pakistan in medical schools will help to encourage students to explore this speciality and adopt it in the future.

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### AUTHORS' CONTRIBUTION

AJK: First Author. SA: Corresponding Author and article review. MA: Statistical analysis and author. AJK & SA conceived the idea, data collection was done by AJK and the original article written by AJK and SA. MA authored and reviewed statistical analysis, the article was reviewed again by all authors and finalised by SA.

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