

Status of Postgraduate Training and Continuing Medical Education of Family Physicians in Pakistan

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ABSTRACT

Objectives: The study aimed to find out the status of postgraduate training and continuing medical education (CME) of family physicians of Pakistan.

Methodology: It was a 10 months postal survey between November 2009 and September 2010. Postal questionnaires were sent to randomly selected 1200 family physicians. The data was analyzed using SPSS v-17.

Results: The response rate of survey was 24%. The number of family physicians receiving any kind of post graduate training was 104 (36%) while 184 (64%) had no postgraduate training at all. Medicine was the most common subject in postgraduate training (N=19, 18% of 104). The number of family physicians holding any degree was 87 (30%). Mean weekly time spent on self education was 6.5 hours with a range of 1 to 10 hours.

Conclusions: Most of family physicians are practicing without training and mostly update their knowledge from books and use of online CME is low.

KEY WORDS: Postgraduate education, Continuing Medical Education, Family Physicians.

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INTRODUCTION

Family medicine or general practice is a clinical specialty which deals with common diseases of all body systems irrespective of age and gender

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of the patient. Australia, Canada and United Kingdom have established postgraduate training programs in family medicine which produce highly qualified family physicians for their national health care systems.¹ In Pakistan the number of general practitioners registered with Pakistan Medical and Dental Council (PMDC) is 123947 according to 2011 statistics.² According to PMDC regulations any M.B.B.S graduate who registers with PMDC is licensed for independent unsupervised practice as a registered medical practitioner even without any training. In most countries family physicians are required to undergo a three or four years structured training program in family medicine before they are licensed for clinical practice.³

The largest postgraduate institute of Pakistan i.e., College of Physicians and Surgeons, Pakistan has been promoting family medicine since 1980s in the form of its membership (M.C.P.S) and in the form of fellowship (F.C.P.S) since 1994. Many family physicians also have public or private sector jobs in the morning while they do general practice in

the evenings. These family physicians do get some training in different specialties. In addition a lot of guest lectures and continuing medical education programs are organized in local hospitals and clinics in collaboration with pharmaceutical industry to update knowledge of doctors.

The information available in this regard is sketchy and there is no study about status of postgraduate training of family physicians after passing M.B.B.S and their continuing medical education in Pakistan. The rationale of the study was to explore how family physicians in Pakistan update their knowledge through formal training and continuing medical education. The objective of the study was to determine the status of postgraduate training and continuing medical education of practicing family physicians of Pakistan.

METHODOLOGY

The duration of the study was 10 months and was conducted between November 2009 and September 2010. This was a cross sectional survey conducted in four provinces of Pakistan. The department of family medicine, FMH College of Medicine and Dentistry maintains a data base of family physicians from all over Pakistan who have been in touch with the department in the past 10 years. A random sample of 1200 family physicians was selected from the data base of 3000 family physicians in order to get the required sample size of 266 in the light of other studies which have shown a response rate of only 16%. The following parameters were used to calculate sample size Confidence level 0.5, Confidence interval ± 6 , Sample size 266, Total population 120000.

A self completed questionnaire was designed and 15 (5%) questionnaires were piloted on honorary faculty members of the department who are also practicing family physicians. The questionnaire was then mailed to 1200 family physicians with stamped self addressed return envelopes. At least one telephone call and one SMS were sent to those who did not return questionnaire. Data collection was stopped five months after initial mailing. The returned questionnaires were numbered and edited for mistakes. Two questionnaires were grossly incomplete and were excluded. Data entry was done in the department of family medicine, FMH College of Medicine and Dentistry using SPSS v-17. Data was analyzed using frequency calculation and cross tabulation of various variables. Chi square was used as the test of significance with a p value significant at 0.05.

The main outcome variables were duration and subjects of house job, duration and subjects of postgraduate courses, number of postgraduate degrees, use of different methods of continuing medical education and time spent on self education.

RESULTS

The response rate in our study was 24% (288 from 1200 letters). A total of 288 family physicians completed the questionnaire. The mean age of our subjects was 37 ± 9 years and a range of 26 to 72 years. Age was divided into categories of ten years for purpose of analysis. Most common age group was between 41-50 years ($n=107$, 37%). Frequency of age group 30 years or less was 27 (9%), 31 to 40 years was 91 (31.6%), 51 to 60 years was 57 (19.8%) and 60 years or above was 6 (2.1%). The number of males was 226 (78.5%) and that of females was 62 (21.5%). Participants from Punjab were 147 (51%), from Sind 72 (25%), from Khyber Pakhtoonkhwa 55 (19%) and from Balochistan 14 (5%).

The number of family physicians who had done house job was 275 (95.5%) while 13 (4.5%) were practicing without house job. The most common reason for not doing house job was unpaid nature of the job ($n=7$, 54%). Other were domestic reason ($n=2$, 15%), not considered necessary for practice ($n=1$, 7.6%), financial problems ($n=1$, 7.6%) and overseas employment ($n=1$, 7.6%). The mean duration of house job was 13 ± 6 months with a range of 1 to 48 months. According to requirements of P.M.D.C for house job 212 (73.6%) had completed 12 months of house job. Most common subject of house job were medicine ($n=169$, 61%) and surgery ($n=165$, 60%). Other house job subjects are shown in Table-I.

The number of family physicians receiving any kind of post graduate training was 104 (36%) while 184 (64%) had no postgraduate training at all. The mean duration of postgraduate training was 9 months and a range of 1 to 94 months. The most common duration of postgraduate training was 12 months ($n=44$, 42% of 104). The most common subject of postgraduate training was medicine ($n=19$, 18%) followed by diploma in obstetrics and gynecology ($n=16$, 15%) and pediatrics ($n=12$, 12%) as shown in Table-I. Eighty (27.8%) doctors had done one postgraduate course, 16 (5.6%) had two courses, 4 (1.4%) had three courses and 4 (1.4%) had four courses.

The number of family physicians with at least one postgraduate degree was 87 (30%). The percentage of degree holders was higher among those who had

received any kind of postgraduate training ($n=69$, 66%, $p=0.001$) than those who had not received any postgraduate training 18 (9.8%) ($p=0.001$). Age group between 41-50 years had the highest number of postgraduate training courses ($n=48$, 46% of 104, $p=0.08$) and also highest number of postgraduate degrees ($n=40$, 46% of 87, $p=0.03$). Among those with postgraduate degree 45 (52% of 87) had minor recognized diplomas followed by doctors with unrecognized certificate courses ($n=19$, 22% of 87) as shown in Table-I.

The most common reason for not receiving any postgraduate training was domestic problems ($n=81$, 44% of 184). Other reasons were financial constraints ($n=56$, 30%), no time ($n=34$, 18%), no admission ($n=30$, 16%), not considered necessary ($n=13$, 7%) and no institution in vicinity ($n=9$,

5%). One hundred fifty two (52.8%) family physicians wanted to have postgraduate training in future. Desire for postgraduate training was highest in age group 30 years or younger ($n=19$, 70.4% of 27, $p=0.001$) and among those who had no degree ($n=117$, 58.2% of 201, $p=0.005$).

The most common method of continuing medical education was reading books as shown in Table-III. The number of family physicians using internet was 133 (46.2%). The most common reason for using internet was continuing medical education ($n=103$, 35.8%). Other reasons were emailing ($n=93$, 32%), entertainment ($n=48$, 16.7%) and online business ($n=6$, 2.1%). The number of family physicians who had subscribed to any medical journal was 94 (32.6%) while 38 (13.2%) were using general newspapers and magazines for updating their information. The

Table-I: Subjects of house job and post graduate course among family physicians in Pakistan.

<i>House job</i> <i>N=275</i>			<i>Postgraduate courses</i> <i>N=104</i>			<i>Degrees</i> <i>N=87</i>		
<i>Subject</i>	<i>No</i>	<i>%</i>	<i>Subject</i>	<i>No</i>	<i>%</i>	<i>Degree</i>	<i>No</i>	<i>%</i>
Medicine	169	61	Medicine	19	18	Diploma	45	52
Surgery	165	60	DGO	16	15	Certificates	19	22
Pediatrics	56	20	Pediatrics	12	12	MRCGP	14	16
Obs & Gyne	55	20	Chest Medicine	8	8	MCPS	14	16
Chest Medicine	13	5	Ultrasound	7	7			
ENT	13	5	ENT	6	6			
Eye	13	5	Family Medicine	6	6			
Orthopedics	13	5	Radiology	6	6			
Skin	12	4	MPH	9	9			
Pediatric Surgery	7	3	Pathology	5	5			
Radiology	7	3	Skin	5	5			
Cardiology	6	2	Surgery	5	5			
Emergency	5	2	Cardiology	4	4			
Neurosurgery	4	1	MMCH	4	4			
Pathology	4	1	DPH	3	3			
Plastic Surgery	4	1	Administration	2	2			
Anesthesia	2	1	DMRD	2	2			
Neurology	2	1	DTCD	2	2			
Psychiatry	2	1	Eye	2	2			
Radiotherapy	2	1	Forensic Medicine	2	2			
Urology	2	1	Histopathology	2	2			
ICU	1	0	neurology	2	2			
			ALS	1	1			
			ATLS	1	1			
			Urology	2	2			
			Hematology	1	1			
			Homeopathy	1	1			
			Neuro Surgery	1	1			
			NSV	1	1			
			Oncology Radiography	1	1			
			Radiotherapy	1	1			

Table-II: Weekly study hours of family physicians in Pakistan.

<i>Weekly study hours</i>	<i>Weekly study hours (%)</i>
No time per week	23(22)
upto 5 hrs per week	27(26)
6-10 hrs per week	27(26)
11-15 hrs per week	14(13)
> 15 hrs per week	13(13)

most commonly used medical journals were British Medical Journal (n=15, 5.2%), Lancet (n=8, 2.8%), Practitioner (n=7, 2.4%), Pulse International (n=5, 1.7%) and Family Physician (n=5, 1.7%).

The number of family physicians doing a part time job in the morning was 131 (45.5%). Those with a part time job took out more time for their self education (n=110, 84% of 131) than those without a job in morning (n=46, 70.7% of 157, p=0.03).

DISCUSSION

Our study was a cross sectional postal study which is the most common methodology for such studies because family physicians are scattered at different practices.⁴ Our response rate was 24% which is not unusual in surveys of general practitioners.⁵ Most of family physicians were between 41-50 years of age which corresponds with the time period in which opportunities for postgraduate training and qualification were very limited in the country. Young doctors were only 9% in our study which implies that the trend of young doctors is more towards other specialties. Similar trend is also noted even in countries where family medicine is a well established specialty.⁶

In most of developed countries three to four years training is required by law to start family practice which maintains a high standard of family medicine and health system of the country.^{3,7} Unfortunately in Pakistan and some other countries like Lebanon and few African countries, no training is required for starting family practice which brings down the quality of entire health system.⁸

None of our study participant had a PMDC recognized major diploma. A large number of doctors only had certificate courses which did not even qualify as a minor diploma. About 10% of those who had no training also possessed minor postgraduate diplomas which create doubts about the quality of such diplomas.

The most common reasons for not receiving postgraduate training were domestic responsibilities and financial problems. Rigid training structure and

Table-III: Methods of continuing medical education of family physicians in Pakistan.

<i>Methods of CME</i>	<i>Methods of CME (%)</i>
Books	71.2
Journals	62.5
Internet	56.6
Medical Reps	54.2
Colleagues	53.5
Conferences	51
CME sessions	50.3

low salary packages may be directly contributing towards lack of training of family physicians. Private General Practice is quickly rewarding and gives doctors financial stability more than postgraduate training programs. Some of the doctors did not get postgraduate training because of tough competition for limited training posts. This may be directly related to increasing number of medical colleges but limited number of postgraduate institutes.

Studies have shown that doctors choose methods of continuing medical education (CME) which is familiar to them rather than an unfamiliar method.⁹ Use of internet based CME was much lower in our study which is directly related to proficiency in computer skills.¹⁰ Younger doctors had better computer skills and also more utilization of internet. Despite lower utilization of internet by doctors, the major usage was searching for clinical topics, a situation which is similar to other countries.¹⁰ Other technologies like Really Simple Syndication (RSS) feeds, Blogs and Podcasts are not used by our family physicians. Similarly memberships of online CME courses which have assessments and credit hours were not found in our study.¹¹ This is one of the most important ways of CME and studies in Middle East have shown 89% utilization of this method.¹² CME is especially of great significance in countries where family medicine is practiced without any training and it has shown to enhance knowledge of family physicians.¹³ Doctors in our study did use internet for search for clinical topics and a basic CME, but reading of medical journals and registration with authentic CME providers was low.

CONCLUSIONS

Most of our family physicians are practicing without any formal training in family medicine. They do get unstructured training in different clinical specialties in the form of prolong house jobs and postgraduate attachments. Some of family

physicians hold minor postgraduate diplomas but none had major postgraduate diploma in family medicine. Most of family physicians update their knowledge from books and use of online CME is low. Younger doctors are more computer literate and use internet more than older doctors and they are more interested in postgraduate training and diplomas.

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Dr. Fahad Anwar: Literature review and introduction part.

Dr. Asma Khan: Questionnaire design, translation and data collection. Grammar checking.

Dr. Hina Akhtar: Questionnaire design and data collection. Reviewing tables.

Dr. Mairaj Anwar Abro: Questionnaire design and data collection.