

# Impact of MRCGP [INT] Examination on Family Physicians' Knowledge and Practice: Doctors' and Patients' Perceptions

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## Abstract

**Background:** Family practice or general practice is a field of medicine that stresses comprehensive primary health care. A membership exam MRCGP [INT] was launched in 2006 by RCGP for South Asian countries to drive up standards of care provision in the community.

**Aim:** The aim of this study was to determine the family physicians' change in knowledge due to sitting the MRCGP [INT] and its impact on their attitudes and practice in Pakistan.

**Design:** Mixed method study.

**Study Setting:** Clinics of GPs/FPs in Karachi (65 GPs participated)

**Method:** The study was conducted in two phases. In phase 1, 65 doctors who had passed MRCGP [INT] were interviewed and a focus group was also held to assess the FPs/GPs perceptions. In phase II, patients were interviewed regarding the practice of the FPs/GPs. A pre-tested structured questionnaire was used for data collection. Analysis was carried out using SPSS version 16 and knowledge scores were generated.

**Results:** In this study, Major areas of strength are patient centered approach 68%, holistic care 56%. Overall patient satisfaction was found to be 52%. Moreover, all the participants in the focus group acknowledged that MRCGP has indeed brought a positive change in their knowledge and consultation skills.

**Conclusion:** Increased patient awareness has challenged health professionals, to not only increase their knowledge base, but also to incorporate this within their everyday practice. Hence, professional examinations such as MRCGP [INT] can be a reliable way for the FPs/GPs to keep their knowledge level updated.

**Key words:** Family Physicians, general practitioners, patient centered approach, consultation skills

## Introduction

Family practice or General Practice is a field of medicine that stresses comprehensive health care for the individual, regardless of the age or sex of the patient, with special emphasis on family's health(1). Family physicians/General Practitioners (GPs) (2) are considered as the back bone of health care systems. They are the first contact physicians for most of the patients and make up a high proportion of the doctors consulted by the Pakistani population. They are capable of providing care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services along with provision of preventive and rehabilitative services to each member of the family.

Most of these GPs are working in their own independent practice and are unable to receive any formal postgraduate training in their field. In addition, a demonstration of commitment to continuous professional development (CPD) is not yet mandatory for practicing doctors in Pakistan, therefore the majority of these practicing physicians are unfamiliar with continuous medical education(3) lack updated knowledge, and in turn are unable to provide quality health care.

Keeping the above-mentioned concerns in view, representatives from family medicine colleges in Sri Lanka, Bangladesh, India, Nepal, and Pakistan (4) met in 2003 and discussed the feasibility of using an accreditation in family medicine to drive up standards of care provision in the community. It was felt that studying to obtain a recognized qualification would stimulate appropriate learning, and in turn improve practice. For this purpose, a membership exam MRCGP [INT] was launched in 2006 (5) by the Royal College of General Practitioners UK for South Asian countries. All GPs having five years of general practice of which 3 years should be in Family Medicine and 2 years in subspeciality were eligible to appear in the exam (6). It is a two-part exam, in which a candidate must pass an acquired knowledge test in multiple choice formats to be eligible to sit the clinical OSCE exam.

The main aim of this study was to determine family physicians' change in knowledge due to sitting the MRCGP [INT] and their attitudes and perceptions regarding the impact of the MRCGP [INT] examination on their practice in Pakistan. To the best of the authors' knowledge, no studies have been conducted on the importance of this training in Pakistan. Moreover, in this case it provides local evidence, directly relevant to a wider context of training in Pakistan, that assessment drives learning. This in turn could strengthen the argument for further recognition and support for such qualifications at an institutional and national level within South Asian countries.

## Methods

This mixed method study was conducted between October to December in Karachi. The study was conducted in two phases. In phase I doctors who had passed MRCGP [INT] in the last 3 years were identified from the list obtained by College of Family Physicians Karachi and were approached in their respective clinics and a knowledge questionnaire was administered. A total of 65 FPs/GPs who provided written informed consent were included in the study. We excluded those, who were preparing or recently sat the MRCGP [INT] examination since they might have a different knowledge level.

In phase II of the study, the research team specifically trained for the study purpose visited the clinics of the FPs/GPs and the patients (of specific FPs/GPs) were interviewed after taking informed written consent regarding their physician's practice. Patients diagnosed with any serious psychiatric disorder, who were agitated or in severe pain, were excluded from the study. Before the initiation of the data collection, the FPs/GPs and patients were assured anonymity and standard measures were taken for maintaining confidentiality. The study was reviewed and approved by the Ethical Review Committee of the Aga Khan University.

A pre-tested structured questionnaire was used for data collection formulated by consulting the experts in the field. The FPs/GPs' questionnaire included knowledge-based scenarios on the common illnesses prevalent in the community like: management of hypertension, malaria and tuberculosis etc. The questionnaire was in English language however, it was translated in Urdu and then was back translated to English to check for consistency between both versions.

A modified version of the General Practice Assessment Questionnaire (GPAQ) was used to obtain patient perception on clinical practice of the physician. Studies have documented that it's an internally reliable instrument (7-9). The questionnaire was available in English and Urdu languages and a modified Urdu version of GPAQ was used for data collection.

Analysis was carried out using the Statistical Package for Social Sciences (SPSS), version 19. Descriptive statistics in terms of proportions for categorical variables and means and standard deviations for continuous variables were generated. To assess the knowledge level of FPs/GPs frequencies of all questions related to knowledge were calculated. All the correct answers were given a '1' mark and incorrect '0' and at the end all the correct answers were summed up and scores were dichotomized based on the median split of the scores. Any scoring above the median was categorized as having adequate knowledge and below the median as having inadequate knowledge.

Patients' perspective related to their GPs/FPs consultation skills was assessed through GPAQ and their responses were marked on a 5-point Likert scale. However, for

analysis purposes the categories of agreement and disagreement were merged to form a binary variable.

**Focus group:** It was of 30 minutes' duration and conversations were audio taped. The hand written notes were double checked with the audio recordings. Interview transcripts were assembled and analyzed to identify themes. The data were independently coded by two researchers and the discrepancies were resolved by discussion.

## Results

A total of 65 FPs/GPs were enrolled on the basis of the eligibility criteria and the response rate of 100%. Table 1, represents the Sociodemographic and academic characteristics of the FPs/GPs. Fifty-one percent of the FPs/GPs were between 36 to 45 years and 72% were females. Moreover, 43% of the doctors were practicing for more than 15 years and the majority, 71% of them did not receive any structured training. Overall, 69% of the FPs/GPs had an adequate knowledge score on the scenario-based questions. A substantial number of FPs/GPs were attending CME sessions however; 20% of them were attending on a quarterly basis. In addition, almost all the participants (86%) attended a preparatory course at a private institution. The participants responded that the main source of information for MRCGP [INT] was friends 25% and CME/seminars/workshop 23%.

Figure 1 depicts reasons for taking MRCGP [INT] examination as reported by the Family Physicians. The main reason for taking this exam was to improve knowledge and skills as stated by the majority of physicians 65%, however, 22% of physicians opted for an exam to achieve monetary gains and promotions, while 20% took the examination due to peer pressure.

Figure 2 shows the Major areas of strength of GPs/FPs consultation style as perceived by their patients. Major areas of strength are patient centered approach 68%, holistic care 56%. Overall patient satisfaction was found to be 52%.

Figure 3 depicts comparison of perception of GPs/FPs with or without structured training regarding Impact of MRCGP [INT] exam on their clinical skills. This graph shows improvement in overall skills however all the domains of consultation and communication skills are better in FPs/GPs who have undergone structured training.

### MRCGP focus group Results:

The focus group consisted of 5 females and 4 male doctors. There were 5 general practitioners, 2 fellows and 2 internists. General practitioners had 5 years, while fellows had 3 years and internists had 2 years working experience respectively.

### Motivation for the exam:

There were different reasons for doctors to appear in the exam. Amongst them peer pressure and update knowledge were the most common and followed by better job opportunities and monetary benefits etc.

"Majority of my friends' have achieved higher degrees and are working on senior posts in different institutions so I also decided to appear in this exam and achieve some higher degrees"

"I decided to appear in this exam because I wanted to update my knowledge and improve my patient's satisfaction level"

### Modification in Practice:

All the participants felt improvement in their practice, specifically in making a diagnosis and offer cost effective management plan which is hallmark of general practice. They were of the opinion that their consultations have become more patient centered now and they are involving patients in decision making.

"Before appearing in the MRCGP [INT] exam I used to refer the majority of the cases to subspecialty but now after clearing exam I have become more confident and can deal with the majority of clinical problems more confidently".

Another important issue was ability to offer cost effective management plan (investigations and treatment). All of them were of the opinion that improved diagnostic ability has helped them and now they offer cost effective management plan for their patients.

"Previously, I used to advise a lot of investigations to make a diagnosis, now I only offer few selected investigations" Patient satisfaction is a strong measure in the evaluation of quality of care as it reflects the experiences of those who receive care. All the participants agreed that they have seen improvements in their patient satisfaction levels.

"There is increase in number of patients and follow up and they are more satisfied."

"My counseling skills and diagnostic skills have improved and my patients are more satisfied"

Two internists also appeared in the exam and they also felt improvement in their practice

"After giving this exam we are capable of dealing with children and females, previously we use to only see medical problem now our horizon of practice has widened"

Holistic approach towards the patient was another important modification in clinical practice felt by everyone in the group.

"Previously there was no concept of a holistic approach; now we are dealing with patient as a whole rather than giving just symptomatic treatment to our patients"

**Motivation for attending further CMEs:**

All of them agreed that attending regular continuous medical education sessions has contributed to update their knowledge.

“Previously it seemed that we are far behind in medical knowledge than our friends who were working in different academic institutes but now we are updated with recent knowledge and are more confident and motivated to learn more”.

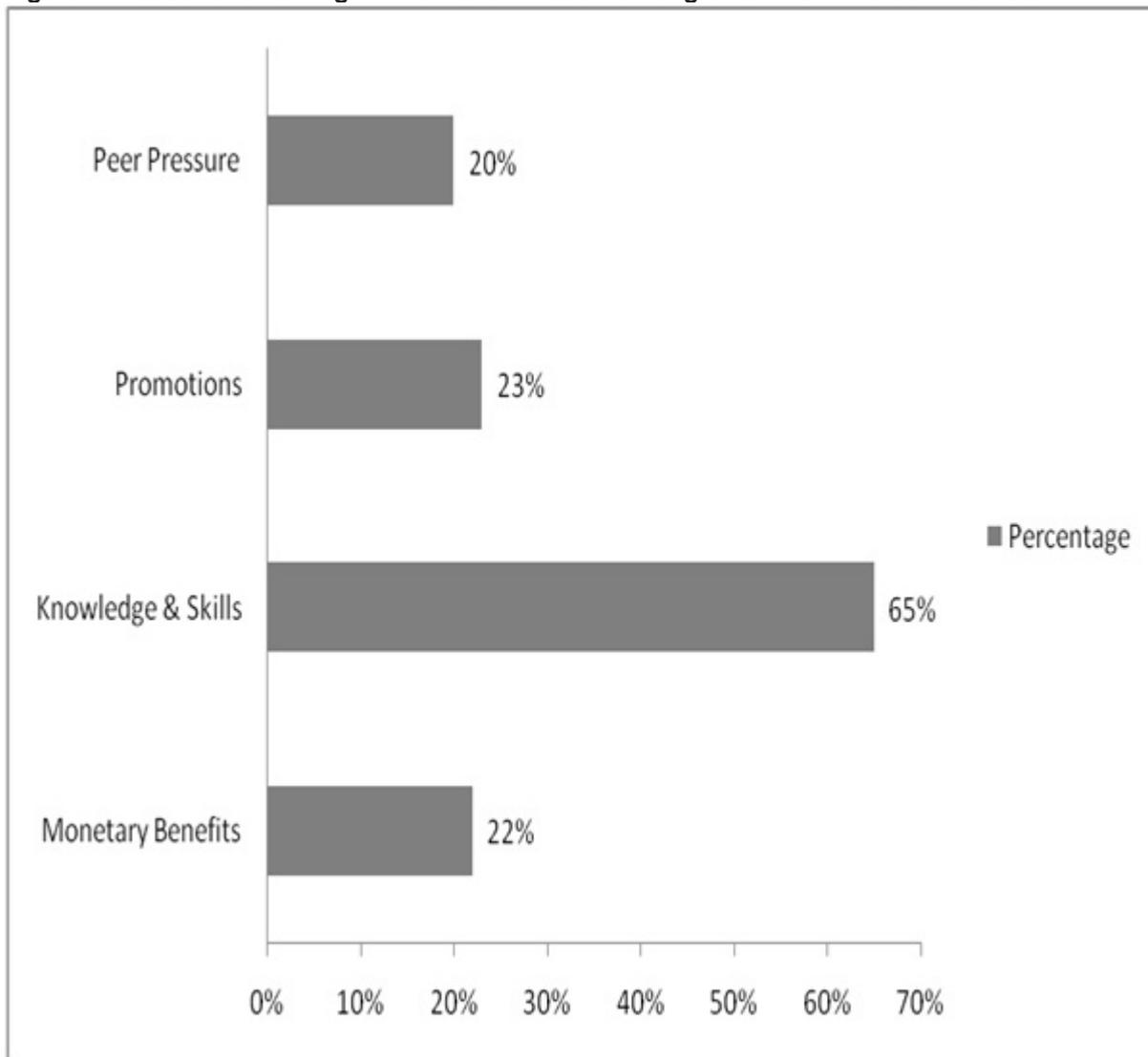
**Disadvantages of the exam:**

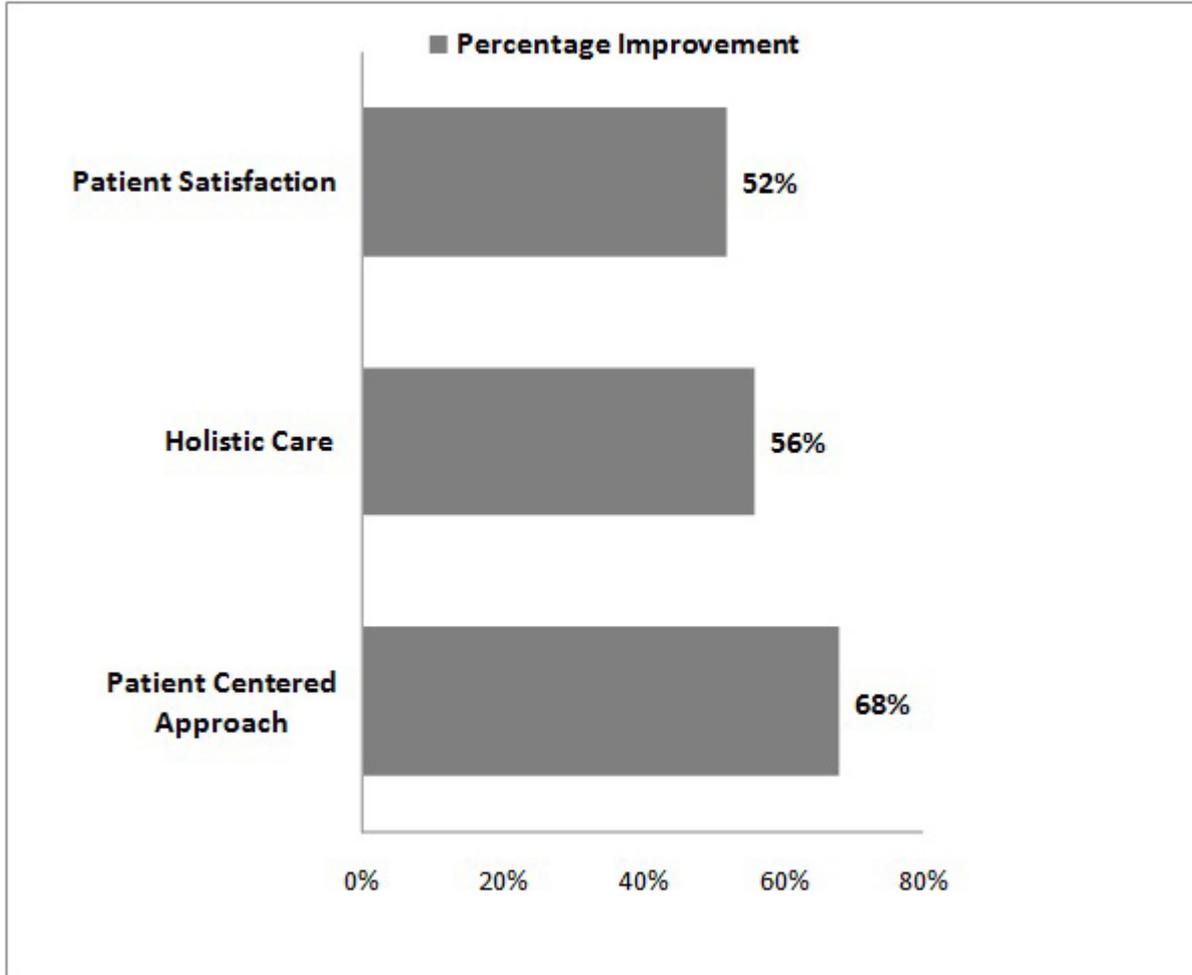
All the physicians stated that it requires full preparation especially for OSCE exam as its main component is communication skills with patient centered approach.

“It is costly, a preparatory course and workshop is required to pass this exam as it requires recent updated knowledge with communication skill as major part of OSCE exam.”

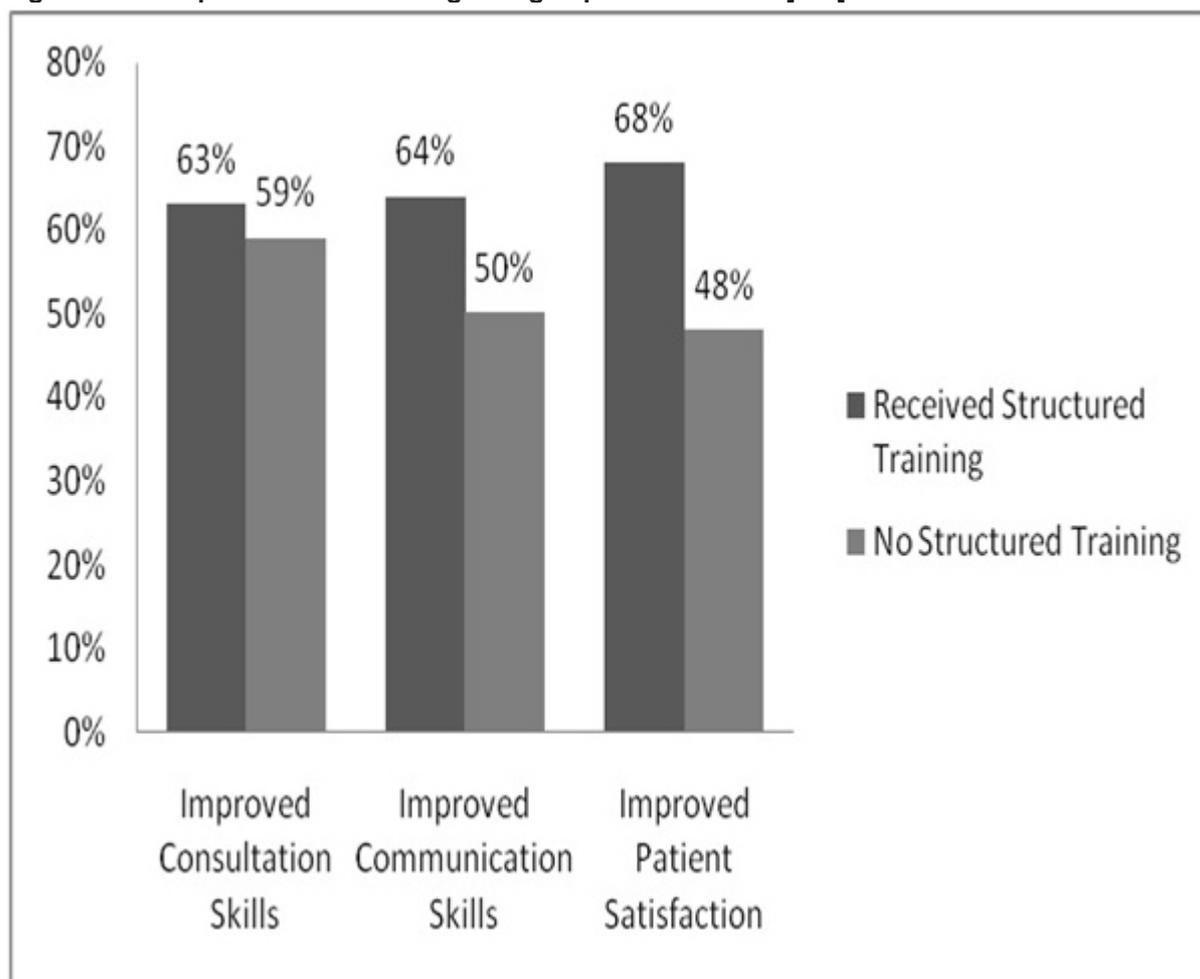
**Table 1: Sociodemographic characteristics of general practitioners**

Characteristic	frequency(N)	percentage (%)
<b>Age (Years)</b>		
25-35	7	11
36-45	33	51
>45	25	38
<b>Gender</b>		
Male	18	28
Female	47	72
<b>Years of Practice</b>		
<5 years	18	28
5-15 years	19	29
>15 years	28	43
<b>Current working post</b>		
Physician practicing independently	51	78
Physician in Private institution	14	28
<b>Received Structured Training</b>		
Yes	19	29
No	46	71
<b>Knowledge Score</b>		
Adequate	45	69
Inadequate	20	31
<b>Attending CME Sessions</b>		
Yes	53	81
No	12	19
<b>Frequency of attending CME</b>		
Weekly	30	46
Monthly	22	34
Quarterly	13	20
<b>Source of Information for MRCGP examination</b>		
Friends	42	65
CME	15	23
Seminars/Workshops	8	23

**Figure 1: Reasons for taking MRCGP examination among GPs/FPS in Karachi-Pakistan**

**Figure 2: Major areas of strength of GPs/FPs consultation style as perceived by their patients**

Multiple response question sum cannot be 100%

**Figure 3: Perception of GPs/FPs regarding Impact of MRCGP [INT] exam on their clinical skills**

Multiple response question sum cannot be 100%

## Discussion

### Summary of main findings:

Recent advancement in the field of medicine drives the need for the FPs/GPs to keep their knowledge up-to-date. The results of this study as analyzed through focus group discussion and quantitative research reveals that CME sessions and workshops play a significant role in improving the consultation skills of the doctors and is a possible reason for the change in their clinical practice.

### Strengths and Limitations:

Firstly, to the best of the author's knowledge this is the first epidemiological study conducted to see the impact of MRCGP [INT] examination on FPs/GPs knowledge and practice in Pakistan. Secondly, focus group discussions were also conducted in addition to the quantitative section so as to give voice to doctor's perceptions regarding impact of MRCGP [INT]. There was no drop out among the study participants. (Doctors, patients)

The study also has some limitations: the study suffered difficulties in the recruitment of FPs/GPs and their patients, due to clinic timings, and some of the doctors were reluctant to be scrutinized for their patient handling. Through the results of this study, we cannot truly measure

the change in the doctors' knowledge and practice skills as we do not have data on their baseline knowledge and patient satisfaction level before they begin to prepare for the examination. Moreover, this is a cross sectional study so it is inappropriate to draw causal inferences that the change in knowledge and skills is solely due to MRCGP [INT]. Next, we measured the performance of FPs/GPs through patient's level of satisfaction; this can also bias the results as patients who have been visiting a specific FP for a long time, generally will have a better satisfaction as compared to others.

### Comparison with existing Literature:

This study's results are consistent with other studies conducted which suggests that physician's knowledge declines after graduation(10-11). However, a majority of the study participants in this study also responded that the major reason to sit for the MRCGP [INT] examination was to enhance their knowledge and skills.

There is general consensus on the significance of CME on refreshing the technical skills and scientific knowledge of the FP (12 ,13). However, some studies oppose this explanation, indicating that a single event cannot bring a change in clinical practice until and unless it is interactive and a need based approach used (14). A major reason for high attendance in CME sessions in our study results can

be because of the fact that CME's are an integral part of the preparatory course of MRCGP. Studies suggest that training through a workshop using constructive feedback has improved communication and consultation skills among general practitioners (15,16,17).

Good communication skills are essential to establish a doctor-patient relationship (18,19). It has been evident from past studies that communication skills of doctors have a significant impact on patient satisfaction, medical outcomes, and thus on medical costs (19-22), however unfortunately communication skills is not given so much importance and has not been explicitly taught in undergraduate students therefore there is a dire need for a well-designed communications skills training programs to improve patient satisfaction with family practitioners (23, 24). The current study results are parallel with another study that suggested, MRCGP [INT] had a positive impact on the communication skills of the FPs/GPs(25). Likewise, in this study 68% of the patients reported that they had observed an improvement in their GPs/FPs consultation style, they are more empathic towards them and involve the patient more frequently as evident from Figure 3.

The GPs generally do not go through any special, structured training programme, however, by appearing and clearing this exam GPs have very well identified their learning needs they were previously unaware of and are now skilled to expand and apply their factual knowledge (26).

**Implication for future research and clinical practice:** Postgraduate examinations are widely used internationally as markers of excellence, but if they are to have any meaning, then relationships between exam performance and actual clinical practice should be demonstrated. In addition, comparison studies with doctors who do not sit for the examination is warranted.

Increased patient awareness due to media and internet has challenged health professionals, to not only increase their knowledge base, but also to practice it routinely. Hence, professional examinations such as MRCGP [INT] can be a reliable way for the FPs/GPs to update their knowledge for both who received structured training and those who did not. Refresher training programmes are essential for the continuous improvement in the doctors' knowledge and skills.

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## References

1. Family medicine vitally important for healthcare. [cited 2020 4th December]; Available from: [www.cpsp.edu.pk/SP\\_Notification/Bull-feb.pdf](http://www.cpsp.edu.pk/SP_Notification/Bull-feb.pdf).
2. Family Medicine 2020 [cited 2021 5th January]; Available from: [http://en.wikipedia.org/wiki/Family\\_medicine](http://en.wikipedia.org/wiki/Family_medicine).
3. Shah, N., et al., Continuing Medical Education as a tool for Postgraduate Qualification for Family Physicians. *Pakistan Journal of Medical Sciences*, 2011. 27(1).
4. RCGP leads the way on international promotion of family medicine 2006 [cited; Available from: [www.medicalnewstoday.com/articles/42883.php](http://www.medicalnewstoday.com/articles/42883.php).
5. The South Asia MRCGP [INT] [cited 2021 5th January]; Available from: [www.rcgp.org.uk/.../GP20070088%20International%20Newsletter%20Issue%2035.pdf](http://www.rcgp.org.uk/.../GP20070088%20International%20Newsletter%20Issue%2035.pdf).
6. MRCGP International rule and regulations. [cited 2021 22th January]; Available from <http://mrcgpintsouthasia.org/rules-and-regulations/>
7. Hankins, M., et al., Measuring patient satisfaction for the Quality and Outcomes Framework. *The British Journal of General Practice* 2007. 57(542): p. 737.
8. Baker R. Development of a questionnaire to assess patients' satisfaction with consultations in general practice. *Br J Gen Pract*. 1990;40(341):487-490.
9. Mead N, Bower P, Roland M. The General Practice Assessment Questionnaire (GPAQ) - development and psychometric characteristics. *BMC Fam Pract*. 2008; 9:13. Published 2008 Feb 20. doi:10.1186/1471-2296-9-13
10. Tracey, J. M., Arroll, B., Richmond, D. E., & Barham, P. M. (1997). The validity of general practitioners' self-assessment of knowledge: cross sectional study. *BMJ (Clinical research ed.)*, 315(7120), 1426–1428. <https://doi.org/10.1136/bmj.315.7120.1426>
11. Custers EJ, Ten Cate OT. Very long-term retention of basic science knowledge in doctors after graduation. *Med Educ*. 2011;45(4):422-430.
12. Goodyear-Smith F, Whitehorn M, McCormick R. General practitioners' perceptions of continuing medical education's role in changing behaviour. *Educ Health (Abingdon)*. 2003;16(3):328-338.
13. Toftegaard BS, Bro F, Falborg AZ, Vedsted P. Impact of continuing medical education in cancer diagnosis on GP knowledge, attitude and readiness to investigate - a before-after study. *BMC Fam Pract*. 2016; 17:95.
14. Zeiger RF. Toward continuous medical education. *J Gen Intern Med*. 2005;20(1):91-94. doi:10.1111/j.1525-1497.2004.30049.x
15. Nystrup J, Larsen JH, Risør O. Developing communication skills for the general practice consultation process. *Sultan Qaboos Univ Med J*. 2010;10(3):318-325.
16. Houwen J, Lucassen PLBJ, Stappers HW, Assendelft PJJ, van Dulmen S, Olde Hartman TC. Medically unexplained symptoms: the person, the symptoms and the dialogue. *Fam Pract*. 2017 Apr 1;34(2):245-251. doi: 10.1093/fampra/cmw132.
17. Siriwardena AN, Edwards AG, Champion P, Freeman A, Elwyn G. Involve the patient and pass the MRCGP: investigating shared decision making in a consulting skills examination using a validated instrument. *Br J Gen Pract*. 2006;56(532):857-862.

18. Greco M, Spike N, Powell R, Brownlea A. Assessing communication skills of GP registrars: a comparison of patient and GP examiner ratings. *Med Educ.* 2002;36(4):366-376
19. Ha JF, Longnecker N. Doctor-patient communication: a review. *Ochsner J.* 2010;10(1):38-43.
20. Bensing J. Doctor-patient communication and the quality of care. *Soc Sci Med.* 1991;32(11):1301-1310.
21. Fortin AH 6th. Communication skills to improve patient satisfaction and quality of care. *Ethn Dis.* 2002;12(4): S3-61.
22. Jung HP, Wensing M, Grol R. What makes a good general practitioner: do patients and doctors have different views? *Br J Gen Pract.* 1997;47(425):805-809
23. Graf J, Loda T, Zipfel S, Wosnik A, Mohr D, Herrmann-Werner A. Communication skills of medical students: survey of self- and external perception in a longitudinally based trend study. *BMC Med Educ.* 2020;20(1):149. Published 2020 May 11.
24. Gondal M, Mushtaq S, Shahzad A, Zaidi Z, Moin S, Gillani A M. Introducing Communication Skills Teaching into the Curriculum. *Journal of Rawalpindi Medical College (JRMC);* 2011;15(1):42-44
25. McKinstry B, Guthrie B, Freeman G, Heaney D. Is success in postgraduate examinations associated with family practitioners' attitudes or patient perceptions of the quality of their consultations? A cross-sectional study of the MRCGP examination in Great Britain. *Fam Pract.* 2005;22(6):653-657.
26. Siriwardena AN, Edwards AG, Campion P, Freeman A, Elwyn G. Involve the patient and pass the MRCGP: investigating shared decision making in a consulting skills examination using a validated instrument. *Br J Gen Pract.* 2006;56(532):857-862.