BMJ Open A nationwide survey of public healthcare providers' impressions of family medicine specialists in Malaysia: a qualitative analysis of written comments

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ABSTRACT

Objective: To examine impressions of public healthcare providers/professionals (PHCPs) who are working closely with family medicine specialists (FMSs) at public health clinics.

Design: Cross-sectional study.

Setting: This study is part of a larger national study on the perception of Malaysian public healthcare professionals on FMSs (PERMFAMS).

Participants: PHCPs from three categories of health facility: hospitals, health clinics and health

Main outcome measures: Qualitative analyses of written comments of respondents' general impression of FMSs.

Results: The participants' response rate was 58.0% (780/1345), with almost equal proportions from each public healthcare facility. A total of 23 categories for each of the 648 impression comments were identified. The six emerging themes were: (1) importance of FMSs; (2) roles of FMSs; (3) clinical performance of FMSs; (4) attributes of FMSs; (5) FMS practice challenges; (6) misconception of FMS roles. Overall, FMS practice was perceived to be safe and able to provide effective treatments in a challenging medical discipline that was in line with the current standards of medical care and ethical and professional values. The areas of concern were in clinical performance expressed by PHCPs from some hospitals and the lack of personal attributes and professionalism among FMSs mentioned by PHCPs from health clinics and

Conclusions: FMSs were perceived to be capable of providing effective treatment and were considered to be important primary care physicians. There were a few negative impressions in some areas of FMS practice, which demanded attention by the FMSs themselves and the relevant authorities in order to improve efficiency and safeguard the fraternity's reputation.

Strengths and limitations of this study

- The first strength of this study is its nationwide coverage of the three different public healthcare facilities.
- The second strength is that the findings of the study were triangulated with different methods and sources, including existing literature.
- A limitation of this study is that, owing to the small sample size at state level, and with such unequal contributions from the three different healthcare facilities, the representativeness and generalisability of the findings to any of the states should be viewed with caution.

INTRODUCTION

cooperation and collaboration between family physicians and other specialists, either explicit or implicit, are of critical importance to the care of many patients. 1-3 Working together among healthcare professionals requires teamwork across a complex set of inter-professional relationships and services. Thus, it requires skilful management of self and others, and having a mindset of vigilance should lead to continuous improvement.⁴ In addition, practising holistic medicine requires family medicine specialists (FMSs) to be aware of the comprehensive healthcare needs of each patient, and they are often required to orchestrate coordinated hospital care for their patients.⁵ ⁶ Knowing the impression that other healthcare professionals/providers have of FMSs with whom they have worked should allow the continuous improvement of FMSs and maintain effective delivery of primary healthcare.^{7–9}



Malaysia is a federation of 13 states and 2 territories, with 70% of its more than 28 million population living in urban areas. 10 Life expectancy at birth is about 73 years, and non-communicable diseases are the major cause of mortality and morbidity.¹⁰ Healthcare services consist of government-run public health clinics and hospitals, and private medical services are mainly provided by private health clinics or general practices and hospitals. 10 Public sector health services are administered by the Ministry of Health through its central, state and district health offices. 10 Public health clinics are under the coordination and administration of their respective district health offices. 11 12 General practices are usually solo practices run by non-specialist doctors, and, similarly to private hospitals, they are mainly sited in urban areas.¹⁰ On the other hand, public health clinics are evenly distributed throughout the country, with smaller clinics in the more remote areas. The bigger public health clinics have resident doctors, are headed by FMSs, and are equipped with complete in-house facilities that range from medical laboratory tests, plain x-rays and pharmacies. Thus, the public primary care service takes a multidisciplinary team approach to patient care. It includes a nutritionist or dietician, pharmacist, physiotherapist, occupational therapist and paramedic, who have undergone specialised training in diabetes education, obstetric ultrasonography, eye care and emergency care. These health clinics are linked to public hospitals with an established referral system that is as seamless as a referral within a healthcare facility. 11 12 FMSs are therefore often involved in communication with hospital specialists in caring for patients who need secondary or tertiary care. The public health system is financed mainly through general revenue and taxation collected by the federal government, and thus patients have to pay only nominal fees to obtain comprehensive healthcare from public health clinics and hospitals.¹⁰ On the other hand, the private healthcare system is funded either by the patients themselves or private health insurance.¹⁰

Despite the 20-year history of FMSs in primary care practice in this country, neither the general public nor healthcare professionals understand all that family medicine and its practice represent. Realising that something has to be done if the specialty is going to remain healthy, leaders of the Family Medicine Specialists' Association (FMSA), universities, the Family Health Development Division (BPKK) and the Ministry of Health initiated this study to examine the impressions of public healthcare professionals (PHCPs) who are working closely with FMSs at the public health clinics. The results of this study may also inform the relevant parties and stakeholders about PHCPs' experiences of working with FMSs and their impressions about the clinical competency and performance of FMSs. This could serve as feedback in continuous improvement of FMSs' professional attributes and medical practice leading to more effective intersectoral healthcare services and primary care delivery.

METHODS

This was a cross-sectional study using a postal survey throughout Malaysia in 2012 reporting on the qualitative analyses of written impressions of PHCPs from three categories of health facility: hospitals, health clinics and health offices. This study was approved by the Medical Research Ethics Committee (protocol number from the National Medical Research Register: NMRR-11-1054-9190). Only a brief description of the methodology of the study is provided in this paper as details have been published elsewhere. ¹³ ¹⁴

Instrument

The item assessing respondents' impressions is worded 'My general impression of an FMS is....' This openended item was one of the two open-ended items of a total of 39 items in the questionnaire, 37 of which used the Likert scale of strongly disagree (a score of 1) to strongly agree (a score of 5). The other open-ended item asked respondents for their expectations of FMSs. 13 The questionnaire was written in English; it was then back-translated into Malay. Each of these questionnaires was tested for face and content validity on 10 PHCPs from each healthcare facility. The feedback received was used to further improve the questionnaire. The English version was given to hospital specialists, while the Malay version was given to PHCPs at health clinics and health offices. This study aimed to analyse the written impressions given by the PHCPs.

Settina

Five health clinics with FMSs were randomly selected from each state in the country. An invitation to participate in the study was given to each health office of each state (Jabatan Kesihatan Negeri) and district health offices (Pejabat Kesihatan Daerah) that have health clinics selected within their districts. All general hospitals in the 13 states and one district hospital from each state in Malaysia were also invited to participate in the survey. ¹³

Subjects

PHCPs were invited to participate voluntarily and were asked to complete an information sheet. The inclusion criterion of having had previous personal encounters with FMSs was emphasised in the information sheet. 'Encounter' was defined as any form of contact between FMSs and PHCPs, such as through referral letters, direct consultation in-person or via telephone, emails and meetings, either official or unofficial or at scientific conferences. At health clinics and health offices, all categories of PHCPs except health attendants were invited to participate. At hospitals, only doctors who were clinical specialists or consultants were invited. The survey excluded all house officers. Respondents were coded according to the state and healthcare facility in which they practised. ¹³

Sampling

Sampling comprised initial invitations to all the selected public healthcare facilities, followed by convenient sampling of participants at the participating centres. ¹³ Questionnaires were posted by courier to the site coordinators at the participating centres. Completed questionnaires were returned to the investigators by the same courier service.

Data analysis

The thematic analysis method was used to analyse PHCPs' written comments. 15 Respondents were coded according to the state and category of health facility in which they worked. The state code used the Road Transport Department coding system for vehicles. C was the code for clinics, A for health offices and H for hospitals. Identifying data were removed to ensure anonymity. Four investigators as a working group constructed categories of themes and agreed on the categorisation of themes into domains, using an iterative process of discussion. Written comments in the Malay language were translated into English by the four investigators who were all fluent in both languages. These translated comments were reported in italicised font so that they could be distinguished from comments that were originally written in English by the respondents. The number of categories per PHCP and the total number and frequency of categories were documented. Finally, the distribution of categories within each theme determined.

RESULTS

The response rate from the health centres following the initial invitation was 40.0% (60/158), while the response rate from the participants was 58.0% (780/1345). Almost equal proportions of completed questionnaires were received from each public healthcare facility. Four states (Melaka, Sabah, Pahang and Johor) contributed almost half (47.6%) of the total responses, whereas Selangor, Putrajaya/Kuala Lumpur Federal Territories and Negeri Sembilan combined contributed only about 10% of the total responses. Hospital PHCPs generally wrote more lines of comment in response to the openended item asking about their impressions of FMSs

compared with non-hospital participants (table 1). However, PHCPs at clinics and health offices recorded more categories compared with PHCPs at hospitals. These differences might suggest a broader perspective on FMSs held by PHCPs at clinics and health offices. This was in contrast with hospital PHCPs, whose encounters with FMSs may be more focused around clinical or medical issues, thus the encounters were more in terms of the depth of the experiences.

Comments made varied in length, between one and 91 words. A total of 23 categories from 648 written comments were identified through the coding process (table 2). The number of categories identified for each comment ranged between one and five. Based on the categories, six themes for the impression comments emerged: (1) importance of FMSs; (2) roles of FMSs; (3) clinical performance of FMSs; (4) attributes of FMSs; (5) FMS practice challenges; (6) misconception of FMS roles (table 2). While looking for relationships between the themes, we observed diversity in the level of abstraction and aggregation of categories within themes. At the same time, an underlying construct that allowed the investigators to connect categories from different themes and to the different healthcare facilities was identified.

In the overall impression comments, the most common themes were 'Attributes of FMSs' (481/1166), 'Importance of FMSs' (225/1166) and 'Clinical performance of FMSs' (221/1166). The importance of FMSs was generally recognised by PHCPs across the three different healthcare facilities (figure 1). Most PHCPs at clinics (248/469) and health offices (163/359) commented on attributes of FMSs, compared with PHCPs at hospitals (109/338), who mostly commented on clinical performance (figure 1). Hospital PHCPs were the most impressed with FMS practice challenges, but at the same time were the least impressed with, and mostly misconstrued, FMSs' roles (figure 1).

Personal and professional attributes

The most commented upon attribute of FMSs was personality, such as whether they were approachable, professional, polite, committed, disciplined, hard-working and adjusted well to the health clinic.

		Public healthcare facility, n (%)					
	Total, n (%)	Health clinics	Health offices	Hospitals	χ² test	p Value	
My general impression of an FMS is							
1-line comment	100 (12.8)	35 (12.5)	33 (13.3)	32 (12.8)	29.51	< 0.0001	
2-3-line comments	271 (34.7)	93 (33.1)	98 (39.4)	80 (32.0)			
4-5-line comments	176 (22.6)	70 (24.9)	56 (22.5)	50 (20.0)			
>5-line comments	101 (12.9)	34 (12.1)	14 (5.6)	53 (21.2)			
No comment	132 (16.9)	49 (17.4)	48 (19.3)	35 (14.0)			
Total	780 (100.0)	281 (100.0)	249 (100.0)	250 (100.0)			

Table 2 Impression themes and categories

Theme definition	Categories
Importance of FMSs	
▶ Presence of an FMS was perceived to be important to the	Important at health clinic
existing healthcare system, medical service, running of	2. Essential for patient care
clinic or to the community	3. Essential for primary care/community health
Roles of FMSs	
▶ Functions or contributions that an FMS was playing or	4. Educator to other primary care professionals
could make	5. Clinical resource person
	6. Involvement in public health
	7. Involvement/non-involvement in community activities
Clinical performance of FMSs	
▶ Perceived quality of, or achievement in, clinical work	8. Better/not better than a medical officer
	9. Often being away/not being around at health clinics
	10. Not seeing many patients
	11. Effective
	12. Satisfactory/good
	13. Appropriate/inappropriate practice
Attributes of FMSs	
 Personal characteristics of an FMS involving work or interpersonal relationships 	14. Admirable/undesirable personality, eg, approachable, professional, polite, committed, disciplined, hard-working, well-adjusted at the health clinic
	15. Communicates well/poorly
	16. Knowledgeable/not knowledgeable/research/publication

official duty
FMS, family medicine specialist.

facing in professional practice

FMS practice challenges

Misconception of FMS roles

QA24: I feel that an FMS is knowledgeable in family health care. It should be easy to consult him or her particularly about difficult and complicated cases. An FMS is dedicated, committed and responsible, and other staff have confidence in him or her in managing and treating patients.

Perceived difficulties and challenges an FMS might be

▶ Uncertainty of roles, or aspired to roles, for an FMS that

were inappropriate to an FMS's professional training or

Figure 1 Distribution of number of categories within the six impression themes. Theme 1, importance of FMSs; theme 2, roles of FMSs; theme 3, clinical performance of FMSs; theme 4, attributes of FMSs; theme 5, FMS practice challenges; theme 6,

misconception of FMS roles.

FMS, family medicine specialist.

KA13: FMS in B district (anonymised name of a place) is ethical, dedicated, responsible, has vision and possesses good moral values and tolerance that make him a role model for other staff members.

17. Good/poor team work/team member18. Cares/not cares for staff/subordinates

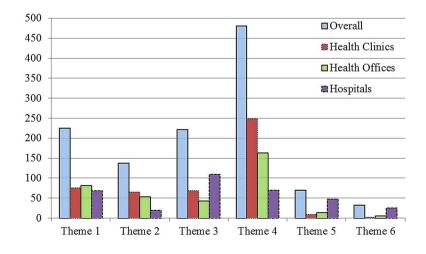
22. Inadequate autonomy given to FMSs

23. FMSs' unknown roles and responsibilities

19. Heavy work load

20. Heavy management work21. Inadequate number of FMSs

TC14: He is responsible and very cautious in his work.



JH22: Very hardworking, caring, respectful and respectable colleagues who have patients interest as central focus

Importance of the availability of FMSs

The importance of having an FMS at a primary care facility was almost unanimous among the respondents. FMSs' professional services and availability at the local health clinics were highly appreciated. Impressions on their importance were in line with the principles of family medicine as generally taught in medical schools and during professional training of FMSs.

QA32: The service of an FMS is very much needed in a polyclinic to provide comprehensive care and treatment to patients as it avoids the need for the patients to be referred elsewhere.

MC59: I feel the services provided by an FMS are very important especially in general health care as this can reduce cases of various chronic diseases thus reducing hospital overcrowding. Apart from that, an FMS also plays an important role in enhancing the quality of primary health care by providing a holistic health care to the community.

SH19: Important[to] maintain ... patient's general well-being[and] management of patient's illness. Front-liners of health system...

WH28: Someone who can provide comprehensive health care to patients with restricted resources.

Clinical performance and roles

Clinical performance of FMSs received the most recorded comments from PHCPs at hospitals. They wrote the most comments on clinical performance of FMSs among the six emerging themes (figure 1). This was not surprising knowing that PHCPs at hospitals are clinical specialists and often have clinical consultations with the FMSs. Understanding was shown on the practice environments of family medicine and the clinical skills required of an FMS.

CH16: A medical personnel with vast experience in handling general medical/surgical diseases supported by 'optimal' laboratory and ... facilities suitable to their knowledge and skill ... in the out-patient and community based setting.

KH63: FMSs provide more thorough and professional assessment and investigations on patients' physical or emotional complaints. They talk to specialists in multi-disciplinary practice and give full support if the main treating doctors embark on any management for patients. They also assist when they are asked to help.

TC11: Always respond promptly to patients who need urgent treatment.

DA10: A person who is strict in carrying out his or her work and complies with the principles of FMS.

Besides being perceived as a clinical consultant to patients and fellow primary care physicians, the other role of an FMS that impressed the clinic staff was as a teacher, educator or trainer for other primary care professionals. The past experience of FMSs and their involvement in research activities and publications were perceived as respected means of solving patient-related or clinical problems. These qualities were highly regarded in their teaching role.

CC12: The presence of an FMS at health care clinics helps the staff and medical officers to give consultation regarding a patient's treatment plan. FMS is also the person to be consulted in managing high-risk cases.

BC39: A specialist often gives specific advice and treatment to patients referred to him or her by medical officers. Through professional training, education, profession, publication and experience, a specialist is able to treat the patient's health problems.

Misconception of the roles of FMSs

Nevertheless, there were some misconstrued ideas on the roles of FMSs, mostly from PHCPs from health offices and hospitals. The main reason may be lack of familiarity with the daily duties of FMSs, which focus more on primary medical care than primary health care. The loose usage of these terms in the local context might have contributed to this mix-up of roles between an FMS and a family health physician, a sub-category of public health discipline. It was apparent that some PHCPs at hospitals were unsure of the scope of clinical services carried out by FMSs and the profiles of patients that FMSs were seeing.

JH43: Limited scope of services. Manage all cases at [health clinic] rather and only see specific case.

MH39: They generally manage medical conditions such as diabetes and hypertension. Not sure whether they handle any ENT (ear, nose and throat) cases.

KH56: Their roles of managing the patients are limited. They are like a general practitioner.

QA33: Not very sure of the role of FMSs in the health clinic. Are their tasks limited only to treating patients, or are they responsible to look further into health issues faced by the community?

JA31: FMSs are needed as a reference group for field cases such as Malaria. However, there are some FMSs who refuse to get involved in fieldwork.

FMS practice challenges

In spite of some misconstrued ideas on the roles of FMSs, many PHCPs from health offices and hospitals

recognised family medicine as a challenging specialty. This was observed from the respondents' impressions on the variety of problems encountered by patients and the potentially different responsibilities borne by FMSs because of being the only clinical specialist in a health clinic.

AH60: An integrated specialty in medicine to provide primary care treatment and management for patients. To me, family medicine is a challenging field as patients present in various ways, often early and non-classical as well as having different expectation from their primary care doctor.

DA04: It's a challenging job that requires multitasking and good time management as there is only one FMS in a district.

SH10: An all-rounder. Able to manage all kinds of patient. A busy profession. Has to do research, runs clinic and works do public health.

Concerns and negative impressions

Hospital specialists expressed concerns about FMSs' clinical and administrative competencies in their demanding working conditions. To some of the hospital specialists, FMSs lacked leadership skills and did not appropriately supervise their primary care doctors at the health clinic especially in the preparation of referrals of patients for further care. Lack of thoroughness of clinical knowledge such as in management of certain organ system problems and medical emergencies was also raised, probably by the related medical specialists at the hospitals.

DH62: A group of specialists who:- 1) is very demanding for our health care 2) bears huge responsibility 3) does not communicate much with counterparts in hospitals 4) does more administrative and research work.

JH31: Key component of primary health care in Malaysia. However, many may not be prepared to deal with the managerial aspect of their job and may lack leadership skills.

CH30: Good, however, medical officers seldom consult the FMS especially on referral to hospital.

JH44: Good in managing diseases in the community, but may lack experience in managing emergency cases.

SH48: A specialist that is able to handle a myriad of cases as per their training. Unfortunately, not all FMSs are capable or committed.

As there were categories for negative impressions for the themes of Clinical performance and Attributes of FMSs, it was observed that PHCPs from hospitals (17.3%) expressed more negative impressions than those from health clinics (12.9%) and health offices (13.1%). Many negative impressions concerned the unavailability of FMSs for clinical duties, undesirable

personality, and poor communication skills. Although these impressions could have arisen from some personal experience and be localised to a few FMSs, these impressions need to be given proper attention as they may lead to a bad reputation for the family medicine fraternity.

KH60: 1) Doing minimum work on family medicine specialist job and never been able to be differentiated from MO (medical officer) in out-patient unit other than may be able to prescribe list A medication. 2) Not playing active role in counselling & educating patient. 3) Not able to prescribe & manage simple medical conditions [such as] DM (diabetes mellitus) & HPT (hypertension) before referring for further care.

AH54: Poor. The MOs are a reflection of the FMS. If a specialist can correct/teach their MOs; many lives can be saved instead of just referring after damage done. Checks [should be made] if their MOs are really on duty[and are at the] clinic during their 'alleged' on-call.

MH45: Complacence in their job '8-5 job only', not playing their role as 'community clinicians' adequately.

JH47: Very insignificant. Rarely contact us directly regarding problems or issues[faced by patients]. They might be consulted at clinic level, but all the referral letters are done by[the] juniors MOs.

KH56: They are poor communicators, in my opinion.

Another negative impression came from the primary care doctors (medical officers) who worked in close relationship with FMSs over some considerable length of time in the same health clinic. The issue was FMSs' availability and their honouring of appointments made with patients.

SC70: As a medical officer, I feel more comfortable to refer patients to a specialist at hospitals rather than to an FMS. This is because I often ended up seeing back the referral cases as the FMS did not turn up to meet the patients despite the appointments made. The FMS was on leave, had to attend meetings or was busy with other non-clinical things. Some patients who were supposed to have a follow up with the FMS have not seen the FMS for more than a year. FMS does not function in S (anonymised name of a place).

MC56: Sometimes patients are not satisfied with the FMSs as they are often away to visit other clinics, attend courses/meetings/seminar, etc.

Negative impressions on FMSs' working ethics and interpersonal relationship skills were also expressed by health office PHCPs. This information might come from public complaints posted to the respective health office who was the official stakeholder for the health clinic. Worse still was the impression on the concerned FMS when it came from a member of staff based on his/her real personal experience.

DA09: It is their attitude that is important. Some of them have a negative attitude, not particularly helpful and are very calculative in treating patients.

CA16: During the FMS's service period in this clinic, the FMS does not communicate effectively with the medical officers and other staff. The FMS is not friendly to staff and patients. Does not show respect or accept suggestions from the subordinates and patients (I am also one of the FMS's patients).

We also noted there were some mixed impressions, mainly from hospital PHCPs. Some acknowledged the importance of FMSs and the primary care system but criticised the underperformance of FMSs based on their experience. This impression could have arisen from poor learning attitudes of FMS trainees.

AH68: Poor. My interaction with them has left me with mixed responses. Most often during their training their laid-back attitude has resulted in deterioration of[the] patient. It is understood[that] every individual has their own respective learning curve, even after graduating, [FMSs severely lack] certain basic/ core medical principles. If the heads have poor/up-to-date knowledge how can[we expect] the junior health clinic doctors to learn?

DH54: Depends on individual. Certain FMS in my area are good, but there is a [particular] FMS in one area who [does] not practise good management/[does] not manage patients appropriately.

DISCUSSION

This study provided a report on the qualitative analysis of written comments of PHCPs' impressions on FMSs as part of a larger national study on the perception that Malaysian PHCPs have about FMSs (PERMFAMS). Hospital PHCPs produced more written comments, but the responses from PHCPs at health clinics could be coded into more categories. As the coding strategy decided upon was meant to provide quantitative weight to the categories of impression, the analysis showed that the hospital-based PHCPs, who were mostly clinical specialists and consultants, had given more detailed accounts of their impressions in each impression category, especially Clinical performance of FMSs. Since this was a study on FMSs, it was not surprising that most comments focused on the attributes of FMSs.

The generally positive impressions of FMSs expressed by PHCPs in this nationwide study was in parallel with findings from the earlier PERMFAMS study, which reported the results of a structured questionnaire assessing clinical performance, professional attitudes and research visibility of FMSs. ¹³ However, some of the negative impressions may explain the battered image of FMSs in scientific communities and media in the past. The comparatively few comments on clinical incompetency and unprofessional behaviour, as quantified by the

number of categories, should not reduce the importance of these issues in the primary medical care practice of FMSs.

Impressions expressed by hospital PHCPs

Negative perceptions of family physicians by hospital specialists are not uncommon. The 17 The reasons may be constrained resources and facilities and apparently professional inadequacy of clinic staff when providing a variety of health services to people with a wide spectrum of health conditions at public health clinics. This was further challenged by patients who presented with diverse health and cultural beliefs and undifferentiated symptoms, and in high numbers. Pecause of these inherent characteristics of family practice—may be more so in Malaysia—it has been said that family or general practice faces more ethical issues and challenges than other medical practices.

The availability and accessibility of care provided by FMSs were major issues drawn from the written impressions. Having more and frequent appointments was thought to be an important element of primary healthcare by most people, in addition to satisfaction with interpersonal communication and relationship continuity.²⁶ Family medicine practice, with its time pressures, was at higher risk of guideline non-adherence:²⁷ ²⁸ prescribed more medication, reduced advice on lifestyle changes, and lowered the quality of management of chronic diseases (eg, chronic angina, bronchial asthma and type 2 diabetes mellitus). 28 29 These challenges in primary healthcare delivery and performance are also experienced by many other countries.³⁰ On top of these, the quality of care may be further strained by relative understaffing of units and non-practice of principles of family medicine in the management of specific diseases. Supportive resources such as diabetes educators, asthma nurses, dieticians and counsellors, which are widely available in hospitals, are not usually available in public health clinics. The PHCPs might have had a better impression on this aspect if they had a better understanding of the family medicine specialty, such as in managing undifferentiated symptoms and uncertain medical conditions, which require the unique skills of family medicine. This management of undifferentiated early clinical symptoms, often without a clear diagnosis and involving non-specific medical care, should not be alluded to as clinical incompetency.

Impressions expressed by PHCPs at clinics and health offices

This study also presents the impressions of close health allies of FMSs: PHCPs at clinic and health office levels. The impressions expressed by these PHCPs mostly concerned the attributes of FMSs. The different emphasis of these impressions was expected, as PHCPs at health clinics and offices are in closer personal contact with FMSs compared with the relatively more clinical

encounters with PHCPs based in hospitals. Although the positive impressions again outnumbered the negative ones, the domains of attributes studied were crucial to effective primary care delivery. These attributes would decide whether the FMSs concerned were able to foster an effective team working relationship and lead by example with authority and knowledge.³¹ It was likely that these negative impressions expressed by PHCPs at health clinics and offices were problems localised to certain areas of practice and medical conditions. ¹³ This might suggest that inter-professional collaborative care would be easier to perform and more effectively maintain through more informal contacts.³² Another possible cause of the negative impressions was, as was rightly appreciated by some PHCPs, the fact that the family medicine specialty is indeed a challenging medical discipline. It demands wide knowledge on medicine and health administration. 18 20 The variety of skills that need to be kept up to date while in family practice as a public FMS could easily be overwhelmed by the sheer daily workload at a typical public health clinic. This appreciation by PHCPs at clinics and health offices may have been facilitated by a better understanding of the family medicine specialty with increasing numbers of FMSs, and their influence, in public and private practices. This has offered 'more than encounter' opportunities for PHCPs to know FMSs in person and their practices.33

Implications of the impressions

The negative impressions, if not corrected, could severely damage the reputation of the family medicine fraternity. These negative impressions serve as strong and important reasons for consideration of improvement initiatives by the relevant authorities. First and foremost, the FMSs themselves need to be mindful of their professional conduct and personal attitudes, such as in improving communication with hospital specialists and showing more caring attitudes when dealing with their own clinic staff, to ensure that their image is free of tarnished perceptions. Otherwise, they could pose a serious threat not only to their own reputation, but also to their role and function as FMSs in the delivery of primary medical care services. Moreover, FMSs may need to improvise on their existing practice and be available more often at clinics for their patients by having a more efficient appointment system and also for the clinic doctors by providing the much required medical opinion before a referral.³⁴ ³⁵ In addition, FMSs could organise relevant and timely in-house echo-training to fulfil their staff's educational needs, which may at the same time improve adherence to evidence-based medicine in managing diseases and referring patients to hospital. The FMSA, BPKK and universities or colleges that provide training programmes should be informed and produce appropriate curriculumimprovement initiatives.³⁹ In supporting their specialist members, the FMSA could organise relevant clinical updates on a regular basis, serving as an advocate of

standardised practice in primary medical care and fighting for members' employment rights and benefits. The BPKK, which is the current main administrator and caretaker of this specialty in the public service, may want to grant more self-rule to FMSs and in return demand them to be more responsible and accountable with regard to clinical performance. This may stimulate growth and maturity of FMSs and the family medicine fraternity. 40 The Ministry of Health in comparison with the BPKK could do more in allocating appropriate resources that are in proportion to the increment in workload at each clinic, as well as having more allied professional posts and opening up more opportunities for further training and promotion to higher posts in the careers of FMSs. 41 42 Universities and training colleges are best positioned to produce FMSs with the desired skills and qualities for this country, and they should only confer graduation on truly competent FMSs. In order to be able to produce such FMSs, universities and training colleges need more capable academic staff, thorough training programmes with dedicated site supervisors, and regular formative and valid summative assessments.

Strengths and limitations

The purpose of the study was to provide further enlightenment on the trends of perceptions of public PHCPs on FMSs from the three selected healthcare facilities. The fact that the study had nationwide coverage with almost equal participation of PHCPs from the three different public healthcare facilities was its main strength. In addition, the survey item on general impression has strength as it was short and simple, which was further supplemented by another language used in the study. This provides confidence that the written comments were describing the respondents' general thoughts and feelings most accurately. The reporting of written impressions organised using a qualitative approach is the first important step to understanding and knowing what PCHPs feel about FMSs. As the number of respondents was small, there were fewer representatives at the state level with regard to the equal number of contributions received from the three different healthcare facilities. Therefore, the representativeness and generalisability of the findings to any of the states should be viewed with caution. It is suggested that studies should be carried out at state or district level, or audits should be conducted at healthcare facility level, to verify the results of this study. Further stratification of the data, such as focusing on certain states or categories of respondent, in the analyses was not performed because this would inevitably breach the personal particulars of the respondents.

Recognising the sensitivity of the study with regard to the FMSs and their potential influence at health clinics, non-inclusion of FMSs in the data collection process was adopted and emphasised in the site coordinator information sheet. Despite these measures, it was noticed that there were two health clinics in which FMSs had taken up the site coordinator role. However, the responses were not excessively favourable towards FMSs.

Instead, they were more negative in one of the health clinics and rather average in the other. Thus, it would appear that there had been no FMS influence on the responses. Similarly, the FMS investigators and authors of this study treated the findings with self-reflection and stayed objective throughout the reporting process.

Personal experience of the participants could produce bias and be insubstantially weighted on the side of negative impressions. Similarly, the positive impressions may be just courteous remarks in keeping with Asian cultures. However, findings were also triangulated with different methods and sources, 13 14 including existing literature. With voluntary participation and confidential responses assured in this study, the comments were considered to be completely honest and sincere and thus believable. Future work could further verify and explore more deeply the meaning of the reported impressions of the negative attributes of FMSs among PHCPs at health clinics and the clinical performance of FMSs as perceived by hospital PHCPs. It is important to carry out more work that will reflect patients' assessment of the quality and competence of the care provided to them and the effectiveness of the current clinic's healthcare system where they receive their regular medical care from FMSs. It is believed that these negative impressions may not be confined to the family medicine specialty/ specialists; therefore, other medical specialties are encouraged to embark on a similar study to gauge their own practice performance and acceptance as perceived by other healthcare professionals and patients.

CONCLUSIONS

The study revealed the prevalent positive impression of FMSs by PHCPs. In general, FMSs impressed other PHCPs that they were capable primary care physicians and gatekeepers of this country's healthcare systems. As a group, FMSs were perceived to be practising in a challenging medical discipline and yet were able to provide effective and safe treatment to their patients in line with the standards of medical care and ethical and professional values. While most of the studied domains were perceived to be outstanding, some results showed areas of deficiency and concern, especially in clinical performance, personal attributes and professionalism. This study provides important information to FMSs, the FMSA, BPKK, and universities and training colleges for them to produce appropriate self-improvement initiatives to better equip FMSs to meet the current work demands and future market expectations.

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