11th Asia Pacific Medical Education Conference

Optimising Collaboration in Medical Education: Building Bridges, Connecting Minds

Trends · Issues · Priorities · Strategies

15th – 19th January 2014, Singapore

NUS National University of Singapore

Yong Loo Lin School of Medicine

Organised by:
Medical Education Unit (MEU)
NUS Yong Loo Lin School of Medicine
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SUNDAY 19 JANUARY 2014

Dear Colleagues and Friends,

The Organising Committee of APMEC 2014 and the Medical Education Unit (MEU), Yong Loo Lin School of Medicine, National University of Singapore, National University Health System, warmly welcome you to the 11th Asia Pacific Medical Education Conference (APMEC) from 15th to 19th January 2014 at the National University of Singapore, Singapore.

We have specially chosen our theme as **"Optimising Collaboration in Medical Education - Building Bridges, Connecting Minds - Trends, Issues, Priorities, Strategies (TIPS)".**

The aim of the conference is to share our experiences as educators, and learn from experts in medical and healthcare professional education some of the latest ideas, and best practices adopted internationally. For 2014, we are happy to announce that we have a wide array of pre-conference workshops covering medical and healthcare professional education as well as pre-conference training programs conducted in collaboration with the European Association of Standardised Patient Educators (ASPE), Association for Medical Education in Europe (AMEE) and Association for the Study of Medical Education (ASME).

The Asia Pacific Medical Education Conference has grown and strengthened over the years. It is now in its 11th year attracting participants, not only from the Asia-Pacific region, but also from around the globe. As with previous APMECs, we have invited distinguished medical and health professional educators to share their experiences, expertise and wisdom.

We look forward to your participation and to welcoming you to the 11th APMEC in January 2014.

With best wishes,

Associate Professor Goh Poh Sun
Chairman, Organising Committee
11th APMEC 2014

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Day 2: Saturday 18th January 2014

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	Extreme Global Scores Will Change the Passing Standard Derived by Borderline Regression Method in the High-Stakes Objective Structured Clinical Examination (OSCE) *Chen Cheng-Yu, Taiwan*	
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11.30am	**Free Communications (FC)**	
	FC 5 – Interprofessional Education **Where Do I Fit?: Interprofessional Education and its Utility in Defining the Role of the Advanced Practice Nurse** *Derek Soon, Singapore* **Unique Challenges in Inter-Professional Education in the Asian Context: The Residents' Perspective** *Manjari Lahiri, Singapore* **"Are We Ready to Learn Together?" Attitudes Towards Inter Professional Learning among Sri Lankan Health Professional Students** *Angage Dilani Priyashanthi Perera, Sri Lanka* **An Assessment of Attitudes Regarding the Interprofessional Education among Medical, Nursing and Physiotherapy Students in a Tertiary Care Centre in Sri Lanka** *Chamila Lakmal, Sri Lanka* **"Doing the Professionalism Robot." "Wearing the Superman Cape." Perceptions of Professionalism in Medical Students at Two Different Schools** *Wojciech Pawlina, USA* **Indonesian GPs Improving Access to Healthcare System: The Matter of Competence and Professionalism** *Nur Syah, Indonesia*	**FC 6 – Teaching and Learning II** **Combining Team-Based Learning with a Flipped Classroom Approach: Is this Possible?** *Lau Wee-Ming, Malaysia* **Sit-In Observation and Feedback Study (SOF): Trainers' Views on Precepting** *Nik Sherina Hanafi, Malaysia* **Trying Not to be a Roadblock: Problems Faced by Novices in Medicine and How to Foster a Learner-Centered Clinical Environment** *Chang Yan-Di, Taiwan* **Faculty Members' Perception on the Role of Clinical Teacher** *Yeh Hsiu-Chen, Taiwan* **Developing the Clinical Teacher within Trainee Doctors: Evaluation of a Repeated Seven Week Teaching Programme** *Frances Varian, United Kingdom* **Implementation and Evaluation of Web Supported Learning in Pharmacology for Medical Students** *Huang Zhanqin, PR China*

Day 2: Saturday 18th January 2014

FC 3	FC 4	
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FC 7 – General Education II **Impact of Simulation Training on Bronchoscopy Competence in Singapore** *Siow Wen Ting, Singapore* **Correlation between Intelligent Quotient and Academic Performance of Medical Students** *Hashanthi Cooray, Sri Lanka* **Developing and Implementing an Online Training Course on Medical Diagnosis Using ICD-10, for Medical Professionals in Sri Lanka** *Pramil C. Liyanage, Sri Lanka* **Patients' Perception on Doctors' Performance in Doctor-Patients Relationship** *Fika Ekayanti, Indonesia* **Using Workplace Supervision to Evaluate the Competencies of Medical Interns: A Validation Study** *Foong Chan Choong, Malaysia* **Do Medical Students Admitted through Multiple-Mini-Interview Perform Better in Problem-Based Learning?** *Paul Wimmers, USA*		FC 5 – Hall FC 6 – Theatre FC 7 – Function Room 1, L1

INDONESIAN GPS IMPROVING ACCESS TO HEALTHCARE SYSTEM: THE MATTER OF COMPETENCE AND PROFESSIONALISM

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Aims

Indonesia is a rapidly developing country with increasing international, social, economic and political influence. Yet relatively little has been published about the status of medical education, and the challenging environment in which healthcare professionals work. Widely held perceptions of GPs' role in Indonesia and implicit assumptions of GPs' clinical competencies and their professionalism has contributed to the community's lack of trust in GP services. Thus, it is argued that improving GPs' competence and professionalism could improve the community's trust in the services provided by GPs, which in turn could increase effectiveness of the GP roles in the healthcare system. However, there are few theoretically informed studies about the factors that contribute to the nature of GP's competence and professionalism. This study aims to explore factors that influence General Practitioners' competence and professionalism in West Sumatra Indonesia.

Methods

A qualitative research methodology was applied in this study, using grounded theory. Primary data was collected via interviews with 25 GPs in West Sumatra Indonesia. Secondary data was sought from related government and professional bodies' policy documents, online blogs, and social networks. The data was analysed in an iterative process, including inductive data analysis using the constant comparative method through the process of coding, memoing, and diagramming.

Results

There were four factors, from participants' accounts, that significantly contributed to the nature of GP's competence and professionalism. These included the undergraduate medical education system with a particular focus on the extent to which primary healthcare was taught, the availability of relevant Continuing Professional Development (CPD) programs, the roles of professional bodies, and the GP's personal motives to practice to medical standards. We identified that the quality of Indonesian undergraduate medical programs was the important determinant of the quality of GPs practicing in primary care, due to the absence of postgraduate specialist training for GPs. Participants believed that recent curricula changes and the expansion in private medical schools may have lowered the quality of GPs graduated from the medical programs. Participants commonly valued CPD activities to increase and maintain their performance of professional practice. However, they needed financial support for undertaking the activities, rural GPs in particular. Participants valued practiced-based CPD activities and hoped that related stakeholders could incorporate them into formal CPD programs. Moreover, participants reflected on the important roles of the Indonesian Medical Association (IDI) for advocating for the professional interest of its members and the healthcare needs of the community. Finally, in regards to the influence of GPs' personal motives on their professionalism, it was evident that promoting a culture of professionalism could lower the negative influence of economic motives on GPs' professional behaviours.

Conclusion

The findings indicated that there is a need to strengthen the learning and teaching of primary care at medical school, promote vocational training, and implement continuing professional development (CPD) programs. Indonesia, as a rapidly developing nation needs to develop an approach to General Practice training across the continuum of medical education in order to meet the health needs of its growing and diverse population.

Saturday 18th January 2014, 11.30am

Theatre, Level 1, University Cultural Centre

FREE COMMUNICATION 6 – TEACHING AND LEARNING II

Combining Team-Based Learning with a Flipped Classroom Approach: Is this Possible?
Lau Wee-Ming, Malaysia

Sit-In Observation and Feedback Study (SOF): Trainers' Views on Precepting
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Medical Education Unit

Congratulations!

Nur Afrainin Syah

for being a finalist in the Oral Communication Session

11th Asia Pacific Medical Education Conference (APMEC)

from

17 & 18 January 2014

A/Prof Goh Poh Sun
Chairman, Organising Committee
Yong Loo Lin School of Medicine
National University of Singapore
National University Health System

Indonesian GP's improving access to healthcare system: The matter of competence and professionalism

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Abstract

There are few theoretically informed studies about the factors that contribute to the nature of GP's competence and professionalism. This study aims to explore factors that influence General Practitioners' competence and professionalism in West Sumatra Indonesia. A qualitative research methodology was applied in this study, using grounded theory. Primary data was collected via interviews with 25 GPs in West Sumatra Indonesia. Secondary data was sought from related government and professional bodies' policy documents, online blogs, and social networks. There were four factors, from participants' accounts, that significantly contributed to the nature of GP's competence and professionalism. These included the undergraduate medical education system with a particular focus on the extent to which primary healthcare was taught, the availability of relevant Continuing Professional Development (CPD) programs, the roles of professional bodies, and the GP's personal motives to practice to medical standards. The findings indicated that there is a need to strengthen the learning and teaching of primary care at medical school, promote vocational training, and implement continuing professional development (CPD) programs. Indonesia, as a rapidly developing nation needs to develop an approach to General Practice training across the continuum of medical education in order to meet the health needs of its growing and diverse population.

Keywords: primary care, professional experience, professionalism, competence, health system

Introduction

Indonesia is a rapidly developing country with increasing international, social, economic and political influence. The universal coverage on health insurance system (BPJS-Kesehatan) that has been implementing since January 2014 would need competence General Practitioners (GPs) as the gatekeeper of the healthcare referral system. Yet relatively little has been published about the status of medical education, and the challenging environment in which GPs work. Widely held perceptions of the GPs' roles in Indonesia and implicit assumptions of GPs clinical competencies and their professionalism has contributed to the community's lack of trust in GP services (1). Thus, it is argued that improving GPs' competence and professionalism could improve the community's trust in the services provided by GPs, which in turn could increase effectiveness of the GP roles in the healthcare system (2-4).

Medical schools in Indonesia are undergraduate entry. A reform in Indonesian medical education system has been started in 2004 initiated by the Indonesian Health Workforce and the Services Project (HWS project) lasting from 2002 to 2007. The changes occurred in four major area: curriculum, teaching and learning strategies, the implementation of National Competency Examination (UKDI) and internship program, as described in table 1. Despite the reform, the specialist training program is remain absent for GPs in Indonesia. Thus, the quality of the undergraduate medical program largely determines the quality of GPs providing primary care services in Indonesia.

As a response to the implementation of BPJS-Kesehatan, the Faculty started to prepare its graduates for being able to work as primary care doctors orientated towards family medicine (5). However, the development of clinical years training is not as significant as the development of preclinical training system. The organisation of clinical/clerkship years remains static. Clinical rotations in teaching hospitals and several partner hospitals remains a major part of the clinical/clerkship years after the reform takes place. Students only spend 10 weeks in community health centres (Puskesmas).

They spend the rest of their time in hospitals doing clinical rotation, move from one clinical department to another clinical department. There is no clinical learning in GP or family doctor private clinics. Therefore, students' experiences in primary care setting is very limited.

The reform makes Continuing Professional Development (CPD) mandatory for professional re-accreditation (STR) and practice license (SIP) (6, 7). The aim of the CPD program, which is known as P2KB program is to encourage doctors to increase their competence and professionalism through a self-assessment program. Doctors have to do professional development activities and then score and record those activities within a logbook. Each activity is scored based on their scope, significant, quality, and quantity. In order to be re-accredited, doctors have to collect 250 points within the five years of their STR validity. Because the P2KB program is a self-assessment program, each activity is self-assessed and scored by each individual doctor. However, they need to provide evidence for their assessment score (6).

Whilst the improvement of GPs' clinical performance is an important objective of the medical education reform, it is still not clear how practicing GPs perceived educational factors that contribute to the nature of their clinical performance, and how they cope with the challenges occurred due to the reform. However, there are few theoretically informed studies about the factors that contribute to the nature of GP's competence and professionalism, especially in developing countries. This study aims to explore factors that influence General Practitioners' competence and professionalism in West Sumatra Indonesia.

Methods

This was a qualitative study using grounded theory analysis (12) on 25 semi-structured interviews of GPs practicing in West Sumatra in 2010. Semi structured

interviews allowed the participants to talk about sensitive issues about their training in helping them in maintaining standards of medical practice (see Box 1 for interview guide). The interviews ranged from 30 to 90 minutes were conducted in Bahasa Indonesia by the first author (NAS), were audio-taped with participant consent, transcribed, and de-identified. The transcripts were imported into NVivo Version 9 (QSR International Pty Ltd, Doncaster, Vic, Australia) for efficient data management and coding. The University of Sydney provided ethics approval for this study, and the Indonesian Medical Association (IDI) - West Sumatra branch wrote a support letter and helped with a list of GPs.

Data collection and analysis, and theoretical framework development were conducted simultaneously (12, 13). First author coded the transcripts of the first two participants and developed categories using a constant comparative method. The categories guided us to locate GPs for subsequent interviews. The first author continuously discussed the data collection and interpretation with the other authors. Some interview transcripts were translated into English to enable discussions among authors regarding data analysis and theoretical framework development. Emergent ideas and questions were recorded through memo-writing and diagramming activities. This open coding process stopped when data was saturated (13).

Transcripts were then selectively coded to ensure categories were adequately supported by data. Categories were then considered further to construct a theoretical framework (14). The first author asked participants in person and via phone if they agreed with the analysis and findings of this study to validate the researchers' interpretation of data.

Results

There were four factors, from participants' accounts, that contributed to the nature of GP's competence and professionalism, which in turn influenced the community's trust on GP's practice. These included the quality of undergraduate medical education system, Continuing Professional Development (CPD) program, the roles of professional bodies, and the GP's personal motives.

The Quality of Undergraduate Medical Education System

Participants, particularly from the older group, noted their observation on the decline in the quality of students accepted into medical schools due to the less competitive student selection system conducted by private medical schools.

> *"Mostly in private medical schools, the quality of student is questioned. Most of them can go to medical school because their parents have lots of money. I do not believe their quality, but they are accepted. The standards of entry should be improved." (Interviewee 3)*

Some participants also thought that the SNMPTN examination was not adequate for selecting medical school students. They argued that even though the SNMPTN was able to provide a high-stakes assessment process for governing entry into public medical schools, it could not measure the character of candidates, including their personal values and motives. The participants believed that to be a good doctor, candidates have to be not only smart but also have good character. Thus, participants discussed that *"a psycho test will be helpful" (Interviewee 18) or "interview might be necessary" (Interviewee 10)*, in addition to the SNMPTN examination in order to select smart students with good character.

Furthermore participants suggested that Indonesian undergraduate medical curricula did not demonstrate good constructive alignment in preparing high quality GPs. Current curricular content took students away from the underpinning principles of general practice, which is providing comprehensive and holistic care. They identified

financial constraints, distance, and lack of applicability. Additionally, participants argued that each GP had different learning needs and that these should be addressed through specific CPD activities that were relevant to their needs. Thus overall, participants valued practiced-based activities more than traditional teaching-based activities because they found that practiced-based activities were more relevant to their practice.

Participants indicated that since 2006 the government imposed a new regulation in medical practice. All doctors, including GPs had to do CPD activities in order to obtain a certificate of competence for professional re-accreditation. Participants acknowledged that meeting the re-accreditation requirement was the main prompt for them in undertaking CPD activities. However, participants commonly agreed that undertaking CPD activities was important to improve their practice performance and community perception on their professional services.

Participants found that GPs' work was hard and challenging. They argued that GPs needed to have knowledge and skills in all fields of medicine, because they should see patients with all kinds of diseases and health problems. Participants discussed that their work was even more challenging when they could not find any specific signs or symptom from their patients, as a clue for making an accurate diagnosis and developing a rational management plan. In fact, they reasoned that most of patients came to see them in a condition that was vague and unclear. Additionally, the GPs pointed out the holistic principle of the GP professional role, which made them have responsibility for all stages of patients' care, starting from preventive through to rehabilitative care.

> *"How can we recognize a case in our daily practice, for example this must be typhoid. Typhoid case does not always show a prolonged fever, which is higher in the afternoon or night. That is a classic typhoid. How about if the patients see us with unclear signs and symptom? Especially, if the patients have misused antibiotics, how do we recognize the typhoid on those patients? If they see us with clear and complete signs and symptoms of typhoid such as fever more than 5 days, especially in the afternoon, dirty or white tongue, everything, as stated in the books. That will be easy.*

But lots of patients were not seeing us with such clear clues. How do we respond to this situation? And recognize the diseases?" (Interviewee 15)

The Roles of Professional Bodies

Participants discussed the roles of the Indonesian Medical Association (IDI), which is the peak organisation of Indonesian medical doctors, in improving their experience of professional practice. Participants perceived that IDI was not optimal in advocating the professional interests of its members and the healthcare needs of the community. Participants reflected that the current function of IDI was merely to assist the government in doctors' CPD verification process and application for certificate of registration/accreditation (STR) and licence to practice (SIP).

"We pay for the membership. But IDI does not do any significant work more than it has to do. IDI is Just for renewing doctors' registration (STR)." (Interviewee 1)

Participants indicated that even though some IDI branches had routine member meetings or gatherings, the time was only used to discuss issues related to the management of IDI. This had made participants feel that the IDI did not have sufficient interest in their professional practice experience. The participants desired that the IDI gathering would also provide the opportunity for sounding out its members' experience in conducting their medical practice. Participants wanted all the problems faced by members in their medical practice to be discussed and solutions for them arrived at during the gathering.

"IDI branch has to hold member meetings every month to facilitate its members in solving their problems related to practice. And advocate for them if needed." (Interviewee 19)

Participants urged the IDI to implement its advocating function in ensuring the quality of healthcare services provided by Indonesian doctors in order to protect the wellbeing of the community. Unfortunately, participants reported that the IDI had not taken sufficient action when doctors, including GPs, were forced to deliver healthcare

services under ill-defined healthcare service regulation, where there was a lack of enforcement, as well as inadequate infrastructure healthcare facilities. This led to an increasing number of legal actions accusing doctors of committing malpractice. Participants lamented the lack of responsiveness of the IDI in responding to malpractice claims against its members. The Media was faster than the IDI in responding. Participants sensed that the media tended to broadcast disproportional reports, leading to the decrease of public confidence in healthcare services provided by healthcare professionals.

The Roles of GPs' Personal Motives

Participants indicated that their own personal motives had an influence on their experience of professional practice. Participants discussed several personal motives that controlled GP's behaviour and action including economic motives, external force, and value-based personal motives such as religiosity, humanity, and dedication.

> *"Sometimes, GPs provide incorrect information. For example, GPs deliberately do not inform their patients how to correctly take their medicines. These GPs hope for a delay in the recovery of their patients, so that they need further visits. Thus, they will get more benefit, won't they?" (Interviewee 10)*

These findings resonate with the finding of a quantitative study conducted by Iversen and Luras (46). They found that doctors who have low numbers of patients have a higher income than expected, by increasing the duration and number of consultations and sending more laboratory tests per listed patients than their colleagues who have adequate number of patients. A study conducted by Andersen (47) indicated that the roles of economic motives in influencing doctors' behaviours can be decreased by the implementation of enforceable professional standards. Lim (48) noted that based on the ethics of the medical profession, doctors have to prioritize the interests of patients above their own personal interests.

Participants reported that external forces, such as fulfilling the request of influential people, was another example of personal motives that affected GP's experience of professional practice.

> *"I actually do not have talent and am not interested to be a doctor. I just met the request of my dad. He wanted me to follow him. But now, my sisters and relatives are doctors. Thus, I do not need to be serious in this practice anymore." (Interviewee 22)*

The quote above indicates that personal motives obtained from outside were not strong to control GPs' behaviour and action and would be disappear if the external power withdraw.

Participants reported value-based personal motives, such as religiosity, humanity and dedication, as strong and positive personal motives that could promote GPs' professional behaviour, and more likely lead to GPs' positive professional practice experience. The findings showed that these value-based personal motives could lower the negative influence of economic motives. The literature has documented that value-based motives have significant influences on the behaviour of people, outside of medical education. For example, Allison, Okun (49) identified the roles of enjoyment, religiosity, and team building in stimulating people to do volunteer activities. Charlton, Soh (50) found lower internet addiction among higher religious female adolescents compared to less religious counterparts. Hamilton and Rubin (51) revealed that conservative religious groups perceived that watching TV was less essential for them. Hefti (52) found that incorporating religious components into psychotherapy for religious people can enhance the therapy outcome. However, to my knowledge, there is no published literature available explaining how these value-based motives influence doctors' professional behaviour and practice experience in an Indonesian like context.

Discussion

Participants reflected on the questionable quality of the training that they had had to become a GP, and how this ultimately resulted in the decrease of public confidence in them. The quality of students selected into medical school is an important issue due to the low drop-out rate in these courses (53). It is common in Indonesian undergraduate medical school that once selected most candidates graduate due to the unwillingness of medical teachers to upset their students and their families (54). Consequently, the quality of entrants significantly correlated to the quality of graduate GPs who will deliver primary health care for the community.

Psychology tests have been used widely by human resource management to evaluate the appropriateness of applicants for particular employment roles (55). There is limited evidence on the applicability of psychology tests in student selection systems. On the other hand, the discourse of utilizing interviews in student selection system represents a growing interest in medical education literature. Interviews and Multiple Mini Interviews (MMIs) have been utilised in several medical education centres to assess non-cognitive characteristics of candidates, which are related to reasoning skills in professionalism (53). The MMI was developed to minimize interviewer bias in a single interviewer or a panel session. It is proven that the validity and reliability of the MMIs is much higher than the reliability of single or panel interview (53, 56-59). Additionally, a qualitative study conducted by Kumar, Roberts (60) found that the MMI was commonly acceptable to both interviewer and interviewee, despite their different perceptions on the area the MMI is measuring.

The effect of the growth in private medical schools on the quality of medical education is debatable. Kommalage and Ponnamperuma (63) claim that the absence of private medical schools in Sri Lanka has contributed to its exceptional quality of medical education. They believed that the country's higher health indicators compared to their neighbourhood countries in South Asia is a direct result of the high quality of medical education in Sri Lanka. However, Amin, Burdick (64) have suggested that other factors

have possibly contributed to the country's higher health indicators and that it is naiive to suggest that government funded medical training in Sri Lanka is the only enabling factor to the increase of the country's health indicators. These authors have pointed out that the existence of private medical schools cannot be exclusively blamed for the poor quality of medical education. In an Indonesia context, the contribution of private medical schools is essential in order to meet the country's high demands for healthcare and for medical doctors. As has been discussed in chapter 2, the density of doctors in Indonesia is considerably low, with one doctor serving approximately 3,500 people. Thus, better and enforceable regulation for Indonesian private medical schools is needed in order to ensure a positive impact of these private medical programs on the community's health status. Since 2007, in order to be registered/accredited and allowed to practice, all graduates of Indonesian undergraduate medical program, both from private and public medical schools, have to sit an Indonesian Doctor Competency Examination (UKDI) (65). UKDI is one of the government's initiatives to ensure the quality of GP practice in the community.

This participants' perception questioned the implementation strategies of competence-based curricula (CBC) in Indonesia since 2006. Theoretically, the implementation of the CBC should ensure that the desired competencies posed by graduates are well accommodated within the curriculum because the curriculum is developed on the basis of these desired competences (66-69). Consequently, an evaluation of the implementation of CBC is needed if the curriculum is found not to align with the desired GPs' competencies.

Thus, it was evident that there were some problems encountered by Indonesian undergraduate medical programs resulting in the questionable quality of GPs who had graduated from the medical programs. In the absence of postgraduate specialist training for GPs, the quality of the undergraduate medical program had a significant influence on the quality of primary care services delivered by these GPs. The quality of primary care provided by GPs ultimately affected public confidence in and their approach to their

professional services. The findings showed that the lack of public confidence in GPs' professional services due to the GPs' lack of competence and professionalism impacted GPs' experience of professional practice negatively. As will be discussed in the next chapter, the community tended to by-pass primary care services provided by GPs (section 6.2.1). This community behaviour of leaving out the GPs' professional services had a negative impact on GPs' self-esteem.

Conclusion

There were four factors, from participants' accounts, that significantly contributed to the nature of GP's competence and professionalism. These included the undergraduate medical education system with a particular focus on the extent to which primary healthcare was taught, the availability of relevant Continuing Professional Development (CPD) programs, the roles of professional bodies, and the GP's personal motives to practice to medical standards. We identified that the quality of Indonesian undergraduate medical programs was the important determinant of the quality of GPs practicing in primary care, due to the absence of postgraduate specialist training for GPs. Participants believed that recent curricula changes and the expansion in private medical schools may have lowered the quality of GPs graduated from the medical programs. Participants commonly valued CPD activities to increase and maintain their performance of professional practice. However, they needed financial support for undertaking the activities, rural GPs in particular. Participants valued practiced-based CPD activities and hoped that related stakeholders could incorporate them into formal CPD programs. Moreover, participants reflected on the important roles of the Indonesian Medical Association (IDI) for advocating for the professional interest of its members and the healthcare needs of the community. Finally, in regards to the influence of GPs' personal motives on their professionalism, it was evident that promoting a culture of

professionalism could lower the negative influence of economic motives on GPs' professional behaviours.

The findings indicated that there is a need to strengthen the learning and teaching of primary care at medical school, promote vocational training, and implement continuing professional development (CPD) programs. . Indonesia, as a rapidly developing nation needs to develop an approach to General Practice training across the continuum of medical education in order to meet the health needs of its growing and diverse population

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Table 1: Indonesian Medical Education System before 2006, between 2006-2012, and after 2012

Phases of Medical Education		Medical Education Before 2006 (KIPDI I and II)	Medical Education between 2006-2012 (KIPDI III)	Medical Education After 2012 (Revision of KIPDI III)
Basic*	**Bachelor of Medicine** - *Preclinical Years*	8 semesters **discipline based** curriculum, **teacher centred**	7 semesters **integrated/ competence based** curriculum, **SPICES approach****	Idem to **2006-2012** system, but with new standard of competence
	Bachelor of Surgery - *Clinical/Clerkship*	**4 semesters** in hospital (clinical rotations) and small part in Puskesmas	**3 semesters** in hospital (clinical rotations) and small part in Puskesmas	**4 semesters** in hospital (clinical rotations) and small part in Puskesmas
Post graduate	**to be GPs** *practice in primary care*	**None**	One year **Internship***** • 8 months ***in hospital*** • 4 months ***in Puskesmas***	Idem to **2006-2012** system, but with new standard of competence
	to be specialist	**Specialist training**	➢ One year **Internship**, idem **with GP** ➢ **Specialist training**	Idem to **2006-2012** system, but with new standard of competence
CPD	**Both GPs and Specialists**	Not highly recommended	Required for **regular certification / registration****	Idem to **2006-2012** system, but with new standard of competence

* The decision of KKI No.20/KKI/KEP/IX/2006

** SPICES = *Student-centred, Problem-based, Integrated, Community-based, Elective/ Early clinical Exposure, Systematic*

*** The Health Ministry Regulation No.299 year 2010

**** The decision of KKI No.42/KKI/KEP/XII/2007

Box 1. Interview Guide

1. What does good practice mean to you? Or how do you conceptualize good practice in primary healthcare? Or what good doctors do? Or what does practice good doctor look like?
   a. What skills and attributes or characteristic does a good primary healthcare doctor possess?
   b. Please give me examples of good practice? What happened? Why good?
   c. Please give me examples of bad practice? What happened? Why bad?
   d. According to you what is your role and responsibility in primary healthcare? Tell me more why do you think those are your role and responsibility?
   e. Do you able to implement them in your practice? Why yes? And why not? What are the barriers and challenges?

2. Please tell me your experience in trying to develop and maintain good practice?
   a. What did you do to maintain and improve your practice? What are strategies?
   b. How did you choose those strategies?
   c. Are the strategies effective? What us the evidence of the effectiveness?
   d. What are the barriers and challenges in maintaining good practice?
   e. How did you cope with them?
   f. Where do you find support? Are they effective? Why?
   g. What is your opinion about IDI CPD program? Does it help you to achieve the standard and or maintain good practice? Why yes? And why not?
   h. Do you have idea on the educational treatment to make your practice better?

3. How do you know that you are undertaking good practice?
   a. Could you evaluate how far does your practice implement good practice?
   b. How did you measure it?
   c. Who can judge it?
   d. Who else?
   e. Why?
   f. What is the effectiveness of those strategies to measure your maintaining of good practice? Why?
   g. How those strategies could be improved?