Exploring General Practitioners' Motivation for Participating in Continuous Professional Development: A Malaysian Case Study

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ABSTRACT

Continuous professional development (CPD) activities are life-long learning engagements for medical practitioners. CPD activities can enhance the medical competencies of medical practitioners, hence upholding the safety, and quality of healthcare services to be delivered to patients. In 2017, the Malaysia Medical Council has announced the mandatory CPD point collection system, which becomes a compulsive requirement for medical practitioners in renewing their annual practising certificate. Literature reports that motivation drives learning among medical practitioners, but there are limited studies since CPD activities are made mandatory for Malaysian general practitioners. The present study explored motivation for participating in continuous professional development activities among general practitioners in Kuala Lumpur. A case study design was used, and the case consisted of three private general practitioners. Semi-structured interviews were conducted. The data were analysed to generate themes and codes. Four themes were reported: freedom of choice (choosing preferred learning style, flexible timing ease learning, need-driven learning), connection of knowledge (relevance of new knowledge, socialising and networking, internalised value drives learning), improvement in competence (seek continuous improvement in competency, problem-solving at the workplace), and perception of mandatory CPD point collection system (positive reinforcement, external motivation, measurement of competence indicators). Although the motivation to participate in CPD activities is positive, future studies could consider researching into a meaningful measurement of CPD activities to overcome current concerns on using attendance as the only measurement.

Keywords: General practitioners; Continuous professional development; Motivation

Article Info:
Received 1 May 2022
Accepted 31 May 2022
Published 31 May 2022

INTRODUCTION

In accordance with the Medical (Amendment) Act 2012 and the Medical Regulations 2017 (Regulation 28), a medical practitioner must be registered with the Malaysian Medical Council (MMC) to practice medicine in Malaysia. In 2017, MMC announced the mandatory continuous professional development (CPD) point collection system, which is a compulsive requirement to enable the renewal and issuance of the Annual Practising Certificate (APC) (Kandasami et al., 2018). Learning for medical practitioners is perceived to be life-long (Anshu & Singh, 2017; Filipe et al., 2014; World Federation for Medical Education, 2015). CPD activities refer to a range of ongoing education and training activities that enable medical practitioners to acquire, develop and/or maintain their knowledge, skills and attitude to practice safe and appropriate medicine (Kandasami et al., 2018). CPD activities also encompass personal development and professionalism, including ethics in medicine, communication skills and patient relationships, management, and leadership (Chan, 2002; Filipe et al., 2014; World Federation for Medical Education, 2015).

The benefits of CPD activities for medical practitioners can be illustrated in the context of three basic psychological needs of humans (Niemiec & Ryan, 2009; Ryan & Deci, 2000). In terms of competence, completion of CPD activities would improve knowledge and skills in clinical practices such as diseases management and risk

assessment (Azraii et al., 2018; Kuhne-Eversmann & Fischer, 2013; Kumar et al., 2015; Lam et al., 2018; Lim et al., 2020). Next, autonomy and relatedness are oriented toward affection. Autonomy refers to the degree of control managed by an individual. Medical practitioners could choose CPD activities based on their preferences. Autonomy could lead to enhanced satisfaction in a career (Eddy et al., 2015). Meanwhile, relatedness is feeling certain, safe, and demanding towards their medical practices. The need has been satisfied with an improved attitude and self-confidence level (Lam et al., 2018; Lim et al., 2020). Some CPD activities target strengthening the soft skills of medical practitioners. Upon completion of CPD activities, there are self-perceived improvements in their professional behaviours (Kuhne-Eversmann & Fischer, 2013). CPD activities develop a sense of need to serve (able to contribute) and are ready to serve (Kumar et al., 2015), and result in a sense of belongingness (Lim et al., 2020).

Promoting active participation in CPD activities among medical practitioners is ultimately aimed to enhance and improve the wholesomeness in terms of safety and quality of the healthcare service to be delivered (Lee, 2019). These efforts would improve the quality and satisfaction of the healthcare services, for both the providers and users (Hisham et al., 2016; Sherman & Chappell, 2018). There are Malaysian studies exploring motivation and barriers to engaging in CPD activities among nurses (Chong et al., 2014; Chong et al., 2011) and pharmacists (Aziz et al., 2013). However, studies among general practitioners (GPs) are limited (Abdul Samad et al., 2014; Loh et al., 2007; Shahabudin & Edariah, 1991). In addition, there is a scarcity of studies since the commencement of the mandatory CPD point collection system (Hamid & Affendy, 2018; Ngoh, 2021). Therefore, this study aims to investigate and discover the motivation for participating in CPD activities among selected GPs in Kuala Lumpur, Malaysia.

BACKGROUND OF STUDY

General Practitioners (GPs) in The Primary Healthcare Setting

General practitioners (GPs) are the medical doctors who are treating all common medical conditions, including preventing and managing common diseases, in the primary care setting. GPs are ultimately aimed to provide healthcare and medical services at the community level and improve their quality of life (Australian Medical Association, 2017). GPs can be serving in both the public sector (e.g., Klinik Kesihatan) or the private sector (e.g., private primary care clinic). GPs are playing a key role as the gatekeeper of patients entering the healthcare system, before referring them to a specialist for highly specialised diagnosis and treatment. However, with the "dynamic" approach, together with paying an additional fee, a patient could bypass the primary care stage and enter directly into a specialist, particularly in the private sector (Jaafar et al., 2013).

Motivation among GPs Towards Participating in CPD Activities

The most common motivation of CPD is the upholding of cognitive improvement over time. GPs are motivated to participate in CPD activities due to their desire in updating their practice and keep themselves aligned with the current practice (Abdul Samad et al., 2014), enhance their skill in evidence-informed practice (Younes et al., 2019), upgrading on specific skill, knowledge and or competence (Cook et al., 2017; Hareem et al., 2018; Kjaer et al., 2014). Besides, medical practitioners also enrolled in courses when they don't have the confidence or have encountered unresolved medical-attentive incompetence in their workplace (Aziz et al., 2013; Chong et al., 2011; Kjaer et al., 2014).

Concerns have been identified over the quality of teaching content and delivery in these CPD activities. A more localised and contextualised curriculum design is preferred. For instance, the application of knowledge and skills should be shifted to the primary care setting, instead of emphasizing on hospital approach (Cook et al., 2017; Loh et al., 2007; Zhu et al., 2018). The focus is on the feasibility of knowledge application which directly impacts their workplace competency. This factor is further pleased by activities conducted by reputable speakers and local experts (Loh et al., 2007).

While a great portion of focus is placed on knowledge, GPs are motivated to participate in CPD activities based on the socialising concern (Abdul Samad et al., 2014). They are maintaining their professional networking and are able to meet peers and colleagues during training or conferences. It provides them with a "social gathering" which allows them to take a break from work as well as prevents burnout (Hareem et al., 2018; Kjaer et al., 2014). On top of that, regularly signing up for skills and competence upgrading is viewed as part of career progression

inspiration (Chong et al., 2014; Younes et al., 2019). Although experiences are expected in increasing along with the number of years of practising, a certified qualification would stand as objective evidence.

Besides the intentional motivations listed above, some medical practitioners reported personal interests and curiosities to learn more (Younes et al., 2019). This motivation is commonly found among medical practitioners who possess higher qualifications, and/or are registered members of professional bodies and affiliated organisations (Shahabudin & Edariah, 1991; Wong et al., 2017). This group of learners is more self-directed and self-motivated.

Barriers among GPs Towards Participating in CPD Activities

Time constraints and funding are well-reported barriers among GPs in engaging with CPD activities. Within the GPs, particularly in the private sector, there may be a lack of manpower (one-man show) in the clinics. Therefore, the GPs are tied to long working hours and heavy workloads (Aziz et al., 2013; Hareem et al., 2018; Younes et al., 2019). Issues on funding are such an allocation of money for sourcing locum in shift replacement, and using money from own pocket to attend training courses (Aziz et al., 2013; Younes et al., 2019). Depending on the venue and organiser, training courses may cost thousands of Malaysian ringgit. There are also other issues such as accessibility and logistics problems, where travelling time and cost to the training venue are incurred (Abdul Samad et al., 2014; Shahabudin & Edariah, 1991).

Transformation to digital delivery using the technology and internet is aimed to mitigate barriers to participating in CPD activities (Cook et al., 2018). However, there are difficulties in the engaging online learning platform, such as a lack of self-initiatives, a shortage of supportive infrastructure, and a lack of computer literacy among medical practitioners (Zhu et al., 2018). Also, there is a preference for live face-to-face interaction over digital engagement (Kumar et al., 2019; Maloney et al., 2017). There is also an episode where medical practitioners who have never attended CPD activities because they are not well-informed of the benefits (Hareem et al., 2018).

There are possible mismatches between expectations and outcomes after attending training courses. Unsatisfactory experiences include there are commercials agenda from the organisers during the CPD activities, with an emphasis on the products or services (Abdul Samad et al., 2014; Zhu et al., 2018). A bad experience could also attribute to content delivery. During the training courses, information that is inaccurate, invalid, and contradictory further worsens the participants' experiences and satisfaction. Trainers' credibility and qualifications are considerations made before medical practitioners sign up for CPD activities (Abdul Samad et al., 2014; Cook et al., 2017).

A Malaysian study conducted among medical practitioners has shown that dissatisfaction with the CPD system also hinders their participation. There is no proper check and balance on the CPD system by MMC (Abdul Samad et al., 2014). CPD points are awarded based on the attendance of participants, instead of meaningful engagement. There is also no assessment in some CPD activities that are accountable to the content taught and delivered. The credentials of some CPD activities remain questionable. Yet, the concerns are unattended and further discourage the participation of GPs in CPD activities.

METHOD

In this section, the methods for investigating the motivation for participating in CPD activities among selected GPs in Kuala Lumpur, Malaysia are described. The present study was guided by the research question "What motivates the selected GPs to participate in CPD activities?

Research Site

The present study was conducted in Kuala Lumpur, Malaysia. Under the movement restriction of the Movement Control Order (MCO), virtual interviews instead of physical events were utilised.

Participants

The present study was an explanatory case study. An explanatory case study aims to provide the answers in order to explain the causal links and pathways of an intervention within the real-life application (Baxter & Jack, 2008; Yin, 2003). In the context of the present study, the introduction of CPD points for the renewal of APC may be interpreted as an intervention to promote CPD engagements among general practitioners.

Purposive sampling was applied to recruit participants. The case was confined to private practice general practitioners who are working in the primary care setting in the Klang Valley. They have worked for at least 10 years, have collected CPD points and have renewed their Annual Practising Certificate (APC) for the year 2021. Participants were recruited through the National Cancer Society of Malaysia (NCSM), which is a certified CPD activity provider by the Malaysian Medical Association (MMA). The profiles of the participants are shown in Table 1. The sample size was determined following the saturation of information (Fusch & Ness, 2015). Data saturation referred to a point where there is no new theme generated from the data collected.

Table 1: Profiles of participants

Name	Age	Gender	Years of service as a general practitioner
GP1	39	Female	11
GP2	53	Female	14
GP3	37	Male	11

Ethical considerations

Ethical approval was obtained from Malaya Medical Centre Medical Research Ethics Committee (UMMC-MREC) before this study was conducted. The identified individuals were contacted via email and phone to obtain consent. For those who have agreed and are willing to volunteer their participation, the consent forms were signed and dated.

Data Collection

A set of semi-structured interview questions was developed, based on the literature review, and to trigger potential responses toward the research aim (Abdul Samad et al., 2014; Brown & Wassif, 2017; Cui et al., 2016). The interview guide is shown in Table 2.

Table 2: Interview guide

Sections	Sample questions / Information
Demographic information	i. What is your age? ii. How many years have you been practising as a general practitioner?
Introduction	i. The researcher explains objective of the study ii. The researcher defines CPD in the context of the study
Experience with different types of CPD activities	i. In the past one year, how many CPD activities have you participated? ii. How do you feel about participating in CPD?
Importance of CPD activities in their medical practices	i. Why do you think some medical practitioners participate in CPD?
Desired characteristic of CPD activities	i. If you were the organiser of a CPD activity, what would you do to encourage participation?
Implementation of mandatory CPD point collection system	i. What is your opinion about the amended medical act where it now requires CPD points to renew the APC for medical practice?

Semi-structured interviews allow researchers to ask initial questions, and upon on responses of the participants, the researchers could react and prompt further responses from the participants (DeJonckheere & Vaughn, 2019). The interviews were kept at a maximum of 120 minutes to avoid the fatigue of the participants. An audio recording was conducted upon receiving consent from participants.

DATA ANALYSIS

The data analysis process happened concurrently with data collection. Recorded interviews were transcribed verbatim to preserve the context provided by the participants. The transcripts were sent back to the participants for checking.

Each interview transcript was coded before moving to the next interview. Inductive thematical analysis was applied (Braun & Clarke, 2006). First, the first author read the data several times to gain familiarity. Next, excerpts were organised into codes that possibly explain the motivation of general practitioners. Codes that shared similar patterns formed a theme. Each theme was checked if it matched the excerpts. Last, each theme was defined and given a name. No new code was identified after the third interview, and it was deemed to reach data saturation. The second author reviewed the coding results. However, the present study had limitations. The findings were not peer-reviewed. However, transferability was addressed through a thick description of the study and its participants; dependability through the interview guide and qualitative data structure (audit trail for coding). Moreover, the use of excerpts from the interviews contributes to the persuasiveness of the text. In sum, these address the trustworthiness of this study (Korstjens & Moser, 2018).

RESULTS

Themes and Codes

Four themes emerged from the data. Figure 1 shows the qualitative data structure for the themes and codes.

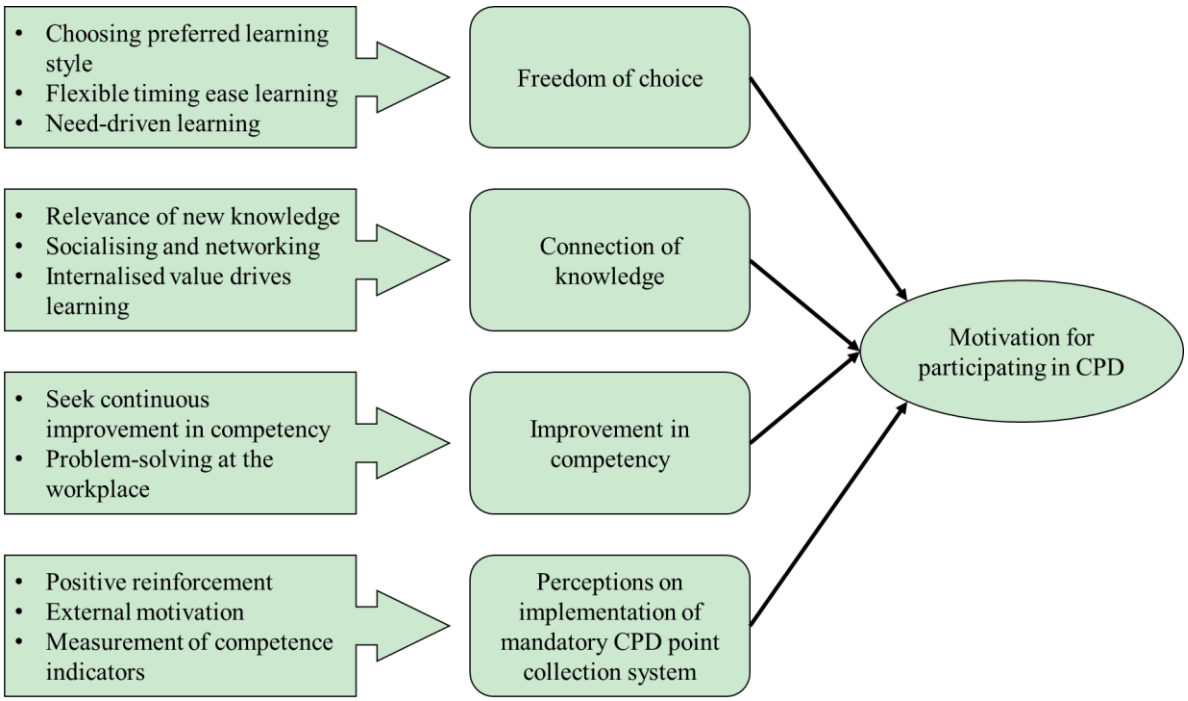

Figure 1: Qualitative data structure for motivation of general practitioners participating in CPD

Freedom of Choice

The first theme, freedom of choice is referring to how the GPs were free to choose CPD activities. Three codes are highlighted in the theme.

Choosing Preferred Learning Style

Since the COVID-19 pandemic, physical CPD activities transformed to digitalised and virtual delivery. All participants found that the pandemic brought changes in choosing the CPD activities. GP1 commented that the

digitalisation of these CPD activities motivated her participation in CPD activities. She mentioned how online modules and mobile applications available were convenient for her to engage in CPD activities. GP1 said that:

> *"And then, of course, there is online module where I can do it at my own pace like you said, you know. So, I like, I really like that feature basically. Right now, because I think one of the good things that come out from this pandemic is* everything going virtual. *And then, the other type that I always do is, I have signed up myself in an App called Docquity. So, they have continuous short modules on different topics that you can get one CPD point, and if you have watched. And they have like a long workshop or online modules that you can attend, and you can collect, like 10 CPD points, that kind of thing. That App is very useful for me."*

Whereas for GP2, she preferred the recording feature offered via the virtual online webinar. The online webinar was recorded and made available after the session. It allowed her to revise the webinar again if needed. GP2 said that:

> "*But after MCO, it's also a good thing that we have the Zoom, you know, the webinar." "In fact, it helps a lot because of the … we can also listen to the … CME, and we can relisten to it again because it is usually recorded. So, I find that it is more convenient as well." [Continuing medical education (CME) is used interchangeably with CPD in the context of the present study]*

For GP3, he had engaged in a different type of online CPD activities. He mentioned that it was a type of interactive assessment, where the learners needed to answer questions correctly after reading learning materials. He also highlighted that incorporating a video element in the reading materials is a preferred learning style. GP3 said that:

> *"So, the actual talk is that I have attended, I think I have attended about seven this year. But the rest of all my points are basically from all the online CMEs where you read the sessions, where you see a short video, and then you answer some MCQ based on that. I prefer when there is a short video involved, which is not too boring. So those that's has a short video is a bit more, I would say interactive in a way. Cause just reading the text and answering the questions is just like taking for exam, which is super boring. So, anything with the slight interactive session just makes it more doable instead."*

Flexible Timing Ease Learning

The timing of CPD activities being slotted and conducted was considered an important element that motivated the GPs to participate. The consensus was found among all three participants in the interviews, that the time flexibility feature would be an important factor that affects their participation in CPD activities. GP3 said that:

> *"Okay. So, one issue could be just because lack of time. So, they have been practising very busy that's the reason why they are not participating.".*

GP1 felt that the timing of virtual CPD activities was well-manageable within her working schedule. She also stressed that the time flexibility of these CPD activities being offered had also mitigated logistics issues. GP1 said that:

> *"I can just sign up, and most of the time is usually after office hours or during break time. So, like conferences, the latest international conference that I have attended was on Saturday and Sunday. Yes, very much easier. So, there is no more conflict of like, oh, if you go then there is nobody will take care of the clinic, you know. So currently because everybody has gone online. In the past, of course like you said, you have to inform, and you have to get placement, because not everybody can attend the course, because it is in a physical place, and your service is needed. But now, with the event of everybody going online, I don't have that problem anymore."*

For GP2, she felt that weekend could be a better option. Also, with the virtual option made available, it was more accessible as they can do it in their clinics without being physically present at the venue. GP2 said that:

> *"I could see the difference especially meeting our elderly GPs. Like, they wanted to know more, it's just that they don't have time. And another thing that they don't have anyone to cover for their clinic when they go out to these CMEs."So that is why I would strongly suggest CME to be done in ... during the weekends so that they have time to go.* "*And the timing should be very flexible so that they can, even if they have clinics on Saturday and Sunday, they can just put it aside first. and they go out just for the CMEs."*

GP3 felt that virtual delivery of the CPD activities was an advantage in terms of timing. GP3 personally thought that weekdays after office hours would be a more viable option. GP3 said that:

> *"The only advantage of virtual is you can do it whenever you want, especially the online CMEs. If it was going to be an online, live session, like the zoom sessions, I think the most important thing must be the timing. So, some people insist on doing it on weekend. But, for most GPs, Sunday is the only day that they are free. If you going to chart two hours there, listening to someone talk, people will be like, don't want to be stuck. Then there is another group of people who tried to do it in the evenings. So, I think the best time would be in the evenings on a weekday. So at least the weekends they are not disturbed."*

Despite the opinions differing, the consensus remained that the GPs were free to choose the time that suited their working schedule at their preference.

Need-Driven Learning

The GPs were able to determine their needs for themselves to engage in CPD activities, to fulfil their needs. The needs were subjective and different among individuals, as reflected by the participants. One of the needs was the need for medical practitioners to keep abreast with the medical updates, which impacted their patient care and management plan. It contributed to practising evidence-based care and management among these GPs.

During the pandemic, GP3 identified the need to engage in a CPD activity that was relevant to COVID-19. He needed to learn how to manage COVID patients at his clinic. GP3 said that:

> *"Okay, like the latest one I joined was pertaining to the home quarantine concept where COVID is concerned. So how did that helped me in this instance is because I am seeing a lot of patients who do not need to go to quarantine centre, or they have to quarantine at home."*

GP2 also identified that there was a need to participate in CPD activities so that she can be a better doctor in terms of patient care management. GP2 said that:

> *"And I find that these CMEs are very educative. And it was very knowledgeable and it's good for us to get update on the current situation. On the medical updates. And saying that, of course with all these CMEs, it makes you a better doctor … in terms of handling your patients."*

This statement was further supported by GP1. She emphasised that engagement in CPD activities to keep abreast with updated patient care would be crucial for patient care management. GP1 said that:

> *"I am very motivated to keep abreast. Cause I do want to give latest, the latest management possible. We have an international guideline called "GINA" (Global Initiative for Asthma). So, GINA always update their guidelines yearly. So, if you want to keep abreast with the latest information on management of asthma, then you definitely… you want to read that guideline, the latest guideline, or attend a respiratory workshop or CME based on the GINA guidelines. Because there is a significant change, there is a significant change in the guidelines in how we approach asthma."*

GP1 further pointed out that it was important to ensure the medical practice would be evidence-based to provide the best medical outcomes for patients, or the change the patient management plan as evidence gets an update from time to time. GP1 added that:

> *"Sometimes they might not need me to do anything except for advice. So, my advice is always evidence-based. That is my expectation. So, by me going, if I have not learned about this change, I would have just continued on with the old prescription method. You know, I would have advised, given an out-dated management. So eventually, maybe it might have increased my patients' risk of getting a cardiac event. But because I've attended, I've taken the trouble, it has impacted where I have changed my management. So, indirectly, there's a reduced my patients' risks of getting a cardiac event, with relation to bronchial asthma medication."*

Connection of Knowledge

The second theme is the connection of knowledge is drawing the connectivity between the knowledge learned from CPD learning activity with GPs' daily practice. This theme also discusses how these CPD activities is drawing the connection between the newly learned knowledge and the existing knowledge. Three codes are included in the theme.

Relevance of New Knowledge

The GPs commented that if the CPD activities were connected to their daily practices, it would motivate them to participate more actively. Similar opinions were observed among all participants. GP2 felt that discussing how the new knowledge learned during the CPD activities, together with a discussion session with their peers on their practice, had driven her motivation to further engage in CPD activities. GP2 said that:

> *"I think it was because, the topic I am not mistaken, it was very relevant and it was something to do with, I can't remember off hand. But it was something we do with our daily practices in our clinics. So, I find that we discussed a lot among our friends that day, during our practices, and then it stuck to your mind quickly about what it supposed to be done."*

GP3 reflected that it was important to attend CPD activities that were relevant and could be incorporated into their daily practices. GP3 said that:

> *"So whatever topic that I attend, something is I know for sure I am going to use that. So, I don't just attend random topics that are for the sake of getting the points."*

GP1 also highlighted that it was important to provide the context of how these CPD activities were relevant and related to their daily practice. She further illustrated that it can be drawing the connection of its impacts on the clinics' operations. GP1 said that:

> *"If you put it into the current monetary and social, politic, economic situation right, then I think the GPs can relate better. Cause sometimes I feel that the GPs themselves, like ourselves, it is a business, we do need to make money. But at the same time, when we make money we cannot endanger other people's lives, and we cannot take advantage of them right. So, if you can show that whatever you are practising will actually give you a better yield in terms of patient management and patient life expectancy, I think more people will be more motivated to come."*

In addition, the GPs perceived an increased self-confidence in patient management by participating in CPD activities. GP1 perceived that it was relatable for her by improving her confidence and raising her expectation. It would satisfy not only the practitioner who provided the services but also future patients who are going to receive the medical services. She said that:

> *"So, whenever I attend CPD activity, I ... my expectation is just this ... that it will reflect on my management on my patients. So, my patients would actually feel, and that they are getting the best, and most up-to-date treatment and management from me, or advice."*

Similarly, GP2 felt that participating in CPD activities boosted her confidence. GP2 said that:

> *"Because I find it very educative. You also feel good because you feel the confidence because*

you know that you have the knowledge in your head and can practise it on site."

GP1 further expressed her opinion. She said that it was crucial to localise the teaching context, together with its content. It would be more connecting and relating to their daily practice. GP1 said that:

"Of course, if you could tailor each guideline, and what not, to the Malaysian population would be best. Because right now, how medicine works is we take most of our guidelines from UK. We take most of our guidelines from UK that is the main source. Of course, we do read the American guideline and whatnot, but … and what we try to do here is we try to change it, and if we have enough manpower and resources, then we will carry out validation research. Then you apply whatever they have recommended to see whether it suited for our population and whether we yield, we get the same yield or not. But most of the time, medicine has always been, the Malaysian medicine has always been looking at the west."

Socialising and Networking

All participants shared the consensus by conceding that socialising was an indispensable element that motivated engagements among the GPs. GP1 said that it was interesting to interact with other participants in the CPD activities. At the same time, it was a valuable opportunity to learn about opinions and ideas through interactions with other colleagues, both locally and abroad. She said that:

"Since it was virtual, everybody could meet everybody from all over the country, and they could exchange their opinions, views, latest development. So, there were several people who had, several doctors who were GPs, who had come out with their own products for wound management. So, it was very interesting."

GP3 believed that socialising was one of the known motivations for CPD participation, especially among the elderly or more experienced GPs. GP3 said that:

"And previously before the outbreak, we used to attend external talk. And most of the older generation look forward to these conferences is because they can meet up with their friends. So here the talk is usually about one-two hours, with the nice food, nice coffee, nice tea, you meet your friends, people don't mind going. So now with the online thing, when all the "makan-makan" not there, the "lepak-lepak" not there, it is definitely will be more difficult to get the old timers to come onboard."

When the participants were asked to choose between the physical or virtual event of CPD activities, GP2 felt that the physical event would be more favourable for her preference. She thought that physical events would be more motivating, in the sense that it would encourage socialising and networking during and/or after the CPD activities. GP2 said that:

"Okay. For example, if you want to ask in the ideal situation, I would say of course the physical one. Physical is that we can meet the ones that been to … the speakers, and then you can ask more speakers the direct question after the session is over. And meet your other colleagues. You know, you are free to ask them, rather than, you known, of course, you have the meals provided."

Internalised Value Drives Learning

All participants felt that it was crucial to have internalised value in the learning activities. It would motivate and drive participation in the CPD activities. Self-interest was recognised by the participants that it was an important determinant in motivating the attendance of these learning activities.

GP1 felt that external factors that affect the decision on CPD participation can be managed and resolved accordingly. However, the key remains one's personal interest in learning. GP1 said that:

"External factor, previously the external factor was there. Meaning you have to go to one place,

> *you know. You might not have to, you might not have the transport. "You might not have the money. You might not have the time. You know you have to close off the clinic and whatnot. So then, that just leaves you with your interest, whether you really want to attend all these or not."*

This statement was further supported by GP3. He mentioned that it was important that the topic was attracting. Therefore, he had been participating in CPD activities regularly, even before the participation was made mandatory by law enforcement. GP3 said that:

> *"But I have regularly been attending even prior it became a necessity. The only difference is I choose to attend what I want to attend. So certain topic which interests me, so that's when I will join it."*

For GP2, it was important to be responsible, internalise the oath taken in upholding the medical ethics and providing the best care always. She thought that it was the responsibility of GPs to gain more knowledge. It prepared the GPs to serve and contribute to the community, in particular by saving lives. GP2 said that:

> *"So how can we save life is through education and although we are lacking some of things that you need to know. But you know that through education, learning, we can improve ourselves." And, at the end of the day, I mean if we follow the oath of the Hippocratic, the Hippocratic oath, is that you need to save lives. So, if you do not have the knowledge, and then how do you save the lives? I would say that to encourage them."*

GP1 felt that internal motivation was one of the biggest motivators that encouraged GPs participation in CPD activities. She believed that the GPs without internal motivation would look for excuses to refuse participation. GP1 said that:

> *"So, in my opinion for people who can't, or their intrinsic behaviour that does not allow them to easily adapt to change, are those people you will find that, you know, they will find excuses not to attend these CMEs. No time, no need, I know already."*

This statement was further resonated by GP3. GP3 highlighted that if he was interested in the topic, he would be able to find the time to participate. For him, interest decided participation. GP3 said that:

> *"If I am already really interested in the topic, then there is much more reason to sell it. So, if it's something that I don't bother at all, then it would be more difficult. I honestly don't think that will be a real reason. If someone is interested with the topic, whether it's a webinar or anything, they will definitely find the time to do it."*

Improvement in Competency

The third theme is about the improvement in competency through CPD activities among the private GPs. This theme is divided into two codes.

Seek Continuous Improvement in Competency

All participants acknowledged that participation in CPD activities was a well-informed decision. They were all self-aware that competency improvement was one of the known motivations for active participation in CPD activities.

GP1 felt that it was important to recognise the need to update her self-competencies. She also said that upgrading her competencies through learning new knowledge and skills, would be beneficial and sustainable for her medical practice and career progression. GP1 said that:

> *"I am very motivated to learn about, to keep myself current. I don't want to be called a dinosaur doctor. If I feel that I do need, that money is going to be well spent, in increasing my knowledge and skill, for both my exams and my current practise. Then yes, I will gladly pay. So, I got no issue."*

GP2 said that it was important to be aware of your areas of improvement and be open about them. She also pointed out that these improvements can be achieved by attending selected CPD activities that match the competency needs. She said that:

> *"Second because there was no motivational factor that push you, unless when you realised that you have lack in all these current issues. You know, when you talking to your other colleague, that you feel that you need to know more. So, there is when you will go for all these CME."*

GP3 believed that medical practice should never stop learning. The constant upgrade and improvement over time was a self-recognised choice. GP3 said that:

> *"So, I would say, it's a personal choice, whether you want to improve yourself or not. So, it's up to them. But that's the thing, medicine is not static, so you need to, you know, continue improving yourself, if not no point. I mean medicine has changed so much, so people who graduated 20 or 30 years ago, can't assume whatever they have learnt back then is still relevant or not. If you want to continue practising, then you have to continue upgrading yourself."*

Problem-Solving at The Workplace

For GP1, CPD activities that encouraged the application of knowledge, and immediately incorporate it into your daily practice were valuable and motivating. Besides, she also felt that problem-solving-oriented CPD activities, especially those that guided participants on the immediate application would be more welcomed among the GPs. GP1 said that:

> *"They also want you to give examples, or no, or a patient log. That means you have to pick patients, about two or three patients, and you follow them up by applying what they have taught, and then see the patients' progress. So, they want to see your patients' log. So, I think for a working professional, all these they already know. What they want to know is, okay, if you were to see a patient A with this this this this comorbid, how would you manage. So, I think an active participation from the ... it will helpful if like, you know, if GPs come and say, okay, I got this patient, what would you do with this patient with this current guideline."*

GP2 shared an experience that enabled her to apply what she had learned from a webinar at her clinic. It was a webinar to learn about managing covid-19 in the primary care settings. She said that:

> *"The second one I remember was that international webinar that we had during, for COVID-19, more information on China counterpart. Professors and the expertise from China also about COVID-19. There's where I have learned to use the ultraviolet lamp that you can use it in your clinic and all that."*

A similar experience was shared by GP3, who mentioned that learning the home quarantine concept had enabled him to immediately use the knowledge to provide medical advice. He said that,

> *"So, whatever I learnt from there, I can actually use it when I advise these patients what to do, when they experienced or start home quarantine."*

Perceptions on implementation of mandatory CPD point collection system

The fourth theme is about the implementation of a mandatory CPD point collection system. This theme specifically addresses the perceptions of the private GPs on the enforcement of the Medical (Amendment) Act 2012 and the Medical Regulations 2017 (Regulation 28). This theme is further divided into three codes.

Positive Reinforcement

Positive reinforcement refers to the introduction of a desirable stimulus (input) that will be followed by the desired behaviour (output). The desirable stimulus is said to be reinforcing the behaviour. This stimulus encourages

repetition of the desired behaviour, hence the occurrence of desired behaviour would be more often (Skinner, 1938; Woolfolk, 2016). In the context of this study, the desirable stimulus is the rewarding of renewal of APC for their medical practice. The desirable behaviour is active participation in CPD learning activities among the GPs.

When asked about their perception of the mandatory CPD point collection system, all participants gave a positive response. They expressed that this law enforcement had made the GPs more actively participate in CPD activities, especially those who were in their comfort zone with their existing knowledge.

GP1 felt that change was not an easy move. However, change was much needed, and this law brought good changes. GP1 said that:

> *"I have seen that this CME has brought about good change. Although slowly, but there is still change. But I think certain people just feel like, just, I am so old, it's okay, I am more comfortable with I already known rather than to change. Cause as you know; change is not easy. Like I said earlier, I was already motivated to go. But I think by enforcing this Act, it will push those people who are not intrinsically motivated to change, to adapt to change. They will be forced at least to listen to something to acquire that those 20 points."*

GP2 expressed that the mandatory CPD point collection system led to the likelihood of attending CPD activities. She also felt that without this official regulation in place, the CPD participation among GPs would be lesser, in comparison. GP2:

> *"Because some of the GPs, sometimes they hardly go into the CPD was usually be given everything just by the Government. Because some of them are really, I meant they are taking their cool time to just look at the CPD. I find that in the private centres, the CME and CPD is much lesser. Unless you yourself are proactive to search for it. If not, if there is no regulation that you must reach certain 20 or 30 points for you to get your annual practising certificate, then I don't think any of us, GP, are really going all out to get these CME or CPD."*

GP3 also resonated with the positive change that this law brought into the current situation. He also pinpointed that mandatory participation was reinforcing GPs to improve themselves, especially those who were in their comfort zone. He said that:

> *"Most likely they are just comfortable in that situation that they are in. And mostly likely they don't see a need to learn something, because they might just be seeing same type of patient, so don't really ... How to come ... didn't push to learn something."*

External Motivation

Extrinsic motivation is referring the motivating factor that responds toward external regulators hence affecting the display of the desired behaviours. This motivation is powered by doing a task to avoid bad consequences. In the context of this study, the GPs were attending to the CPD activities to avoid disqualification in renewing their APC.

GP1 commented that this mandatory participation had impacted the GPs to reassess their practice and even impacted their patient care and management. GP1 said that:

> *"And in the hopes, and that what the government hopes, the Ministry of Health hopes is that, even if you were just to press, and you were in the passing were to listen to something, we hope that something has sticked to your brain. And that will encourage you to put it into practise. Or maybe, if you can't put it into practise, it encourages you question what you been doing, and whether you can make it better or not. Yes. So, I do see that because they are forced to listen to something, forced to attend something right, I do see some changes in their management, which is exciting, and I am glad also as well. Because some of the older ways of treating patient is really ... new evidence has found it be damaging and frightening also for patients."*

GP2 thought that the law that made CPD participation compulsory had increased participation rates among the GPs. GP2 said that:

> *"But before that, before it become mandatory, I could say very less. Yes, I do feel so. I mean I agree that, you know, unless until they make it regulatory, then other GPs will come to go for these CMEs."*

GP3 illustrated that the regulation was acting like a stick in the "carrot-and-stick" that worked in increasing the participation rates among the GPs. It made it a required task for GPs to gain new medical knowledge. GP3 said that:

> *"Okay, now CPD is more of a must, so to renew your license you have to get certain number of points. You can get the points by attending all the different CPDs. It looks like they have, they were forced their hands to do this. To get people to continue. Because initially people were saying that a lot of the old timers not improving themselves, and not learning themselves, not trying to gain new knowledge and all that. So that is one of the reasons where they started this. But to be fair, to them is not really the old timers, just people in general, the carrot doesn't work. The stick works. So, that's why they had to do this."*

Measurement of Competence Indicators

Before the mandatory CPD point collection system, there was no standardised practise on CPD delivery requirements. Besides, there were also no active measures on the effectiveness of these CPD activities towards cognition, psychomotor and affection domains post-learning. The importance of assessing the competence indicators after CPD participation was highlighted by the GPs in the interviews.

GP1 expressed that the current CPD system can be improved by incorporating the measurement of competence indicators after the CPD participation. GP1 said that:

> *"So, everybody just on, and then just let it go, they go do some activities, then at the end of the day they got the CPD points today. So, whether they learn from it is, it's a different issue all together. The effectiveness so far in private sector, there is no real, how to say, a scale or a questionnaire or a survey to say that, okay, you have attended this, how has this benefited your practise, how does it improve your management. So, there is no like visible or tangible evidence that, you know. So, I think those areas can be improved on."*

GP3 raised the same concern on how to validate this compulsive participation can be translated into positive impacts. The question was unanswered by the policymakers pertaining to this CPD system. GP3 said that:

> *"But the question still remains whether they are doing it because they have to do it, or because they want to. Basically, they are joining just for the sake of joining, to get the points. Not everyone is having the same opinion like me. So, they are doing it because they need the 20 points. That's all."*

DISCUSSION

This present study investigates the motivation for participating in CPD activities among selected general practitioners. About the first theme – freedom of choice, one interesting consensus from all participants is that the COVID-19 pandemic has impacted the CPD activities by activating the digital transformation. With this transformation, virtual CPD activities have allowed the GPs to study based on their preferences. This motivation is supported by the self-directed learning assumption under andragogy (Knowles, 1980). These GPs are empowered to have the freedom in making learning decisions based on their rationale and self-preference (Palis & Quiros, 2014). Next, time constraints and logistics-related challenges that have been pointed out by the participants of the present study are found in the literature. General practitioners are busy, and it is difficult to coordinate manpower in their clinics (Aziz et al., 2013; Hareem et al., 2018; Younes et al., 2019). Digital transformations of CPD activities might overcome this barrier (Cook et al., 2018).

Therefore, these GPs are motivated to join the CPD activities as they are free to schedule the time for learning (Kaufman & Mann, 2014), in order to fit into their busy working schedule. Last, the GPs in the present study expressed that they have identified their needs to drive the motivation towards participating in CPD activities.

One of the needs is to keep themselves well-informed of the updated medical evidence. Similar findings are found in a study conducted in Malaysia among the private GPs (Abdul Samad et al., 2014). Also, the participants have reflected that there is a need to cultivate evidence-based management in their daily practice (Younes et al., 2019). One of them has highlighted that this is a crucial step in the journey of career progression (Chong et al., 2014; Younes et al., 2019).

The second theme synthesized is the connection of knowledge. As pointed out by the participants in the present study, they are looking forward to finding the relatedness of these knowledge transfers in the CPD activities. They are motivated when the knowledge and skills gained are directly impacting their daily practice, including medical-related decisions as well as business-related decisions, especially in their primary care setting (Cook et al., 2017; Loh et al., 2007; Zhu et al., 2018). Like past findings, the participants of the present study highlight that engagement in these CPD activities have enhanced their self-confidence and raised self-expectation as well as job satisfaction (Aziz et al., 2013; Chong et al., 2011; Kjaer et al., 2014). Next, participants in the present study have agreed that socialisation is an imperative motivation for them to engage in CPD activities. The present findings are supported by previous studies (Abdul Samad et al., 2014; Hareem et al., 2018; Kjaer et al., 2014). It is important to encourage mutual respect and a supportive learning environment (Kaufman & Mann, 2014; Knowles, 1980; Palis & Quiros, 2014).

Lastly, participants in the study recognized the importance of personal interest and curiosity. They perceived that this internalised value has motivated them to participate in CPD activities, even before it becomes mandatory by law. Younes et al. (2019) have pointed out that internalised motivation is a driver for active learning engagement behaviour. Past studies have found that this self-motivation is more commonly found among GPs with higher qualifications (Shahabudin & Edariah, 1991; Wong et al., 2017). Intrinsic motivations promote the enjoyment of learning (Kim, 2015).

The third theme that emerges from the findings is about improvement in competency. Based on Knowles (1980), GPs need to know why there is a need to learn. The GPs need to be informed about the importance of recognizing their areas of improvement to enhance their competencies (Cook et al., 2017; Hareem et al., 2018; Kjaer et al., 2014). These GPs believe that medical practice should never stop learning. Therefore, it is important to encourage self-reflection among GPs to help them discover their motivations and inspiration for active CPD engagement (Horii, 2007). Next, the GPs are more motivated to learn activities when they observe the feasibility of the immediate application of learned knowledge into their daily practice. Similar findings from past studies have highlighted that knowledge application and practicality are the keys to further driving motivations among GPs toward learning engagement (Cook et al., 2017; Eddy et al., 2015; Kjaer et al., 2015; Zhu et al., 2018).

The fourth theme is about the perception of the mandatory CPD point collection system. All participants have favoured this act of making the CPD learning activities compulsory among GPs. They have observed good changes being cultivated among their peers by pushing them beyond their comfort zone of existing knowledge and skill. They believe that this mandate will act as positive reinforcement, by rewarding them with their renewal of annual practising license, it would further motivate their CPD participation (Skinner, 1938; Woolfolk, 2016). Next, to avoid disqualification of APC renewal, the GPs are now more actively participating in CPD activities to collect sufficient CPD points. The change may be attributed to external motivation (Deci & Ryan, 2008; Ryan & Deci, 2000). Next, it is about the measurement of competence indicators.

A Malaysian study on GPs conducted by Abdul Samad et al. (2014) has reported that without a proper CPD point system, it would hinder CPD participation amongst GPs. This study is conducted before the mandate comes into effect. Participants in the present study think that there should be an active measure of the effectiveness of CPD activities. These effectiveness indicators can be measured in cognition, psychomotor or affective domains, based on the learning objectives of the planned CPD activities. Participants in the study feel that awarding CPD points based on attendance instead of real interactions is an area of concerns. This viewpoint is aligned with Guidelines on CPD for Medical Practitioners in Malaysia (Kandasami et al., 2018) as well as a study reported on the global perspective on CPD activities (Sherman & Chappell, 2018).

CONCLUSION AND RECOMMENDATION

The study was a case study exploring motivation for participating in continuous professional development activities among general practitioners in Kuala Lumpur. The findings show that general practitioners were motivated to participate in CPD activities. Future studies could consider researching into a meaningful measurement of CPD activities to overcome current concerns about using attendance as the only measurement. Future studies may also consider extending the investigation to general practitioners outside Kuala Lumpur in order to consolidate a national understanding of general practitioners toward CPD activities.

DECLARATION STATEMENT

The lead author* affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

ACKNOWLEDGEMENT

The authors thank participants for their willingness to participate in the present study. The authors also thank the National Cancer Society of Malaysia (NCSM) and the university for their support.

CONFLICT OF INTEREST

The authors declare no self-interest in the study conducted.

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