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## CONTINUING PROFESSIONAL DEVELOPMENT: VIEWS AND BARRIERS TOWARD PARTICIPATION AMONG MALAYSIAN PHARMACISTS

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### Abstract

Continuing professional development (CPD) is a lifelong learning approach to maintain and enhance professional competencies. This cross-sectional study aimed to examine the pharmacists' preferred CPD activities and barriers to CPD participation. A survey instrument was distributed to all government pharmacists (N=3876) in Malaysia. The response rate was 29.2%. The majority of the pharmacists (92%) believed that engaging in CPD would improve their performances in their current role. Almost 90% of the respondents preferred to participate in CPD activities associated with continuing education such as workshops and conferences attendance. Barriers to CPD participation were current job constraints, lack of time, and accessibility in terms of travel and cost. It is important to address these issues before the implementation of mandatory CPD for pharmacists in Malaysia.

*Keywords:* Survey, questionnaire, continuing education, opinions, lifelong learning

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## **1. Introduction**

Practitioners of various professions have always strived to maintain or enhance their competences and skills in order to provide the best quality of service as demanded of them by their clients. To fulfil this need, they have to keep on learning throughout their working life. In order to maintain the practitioner's competence as well as ensuring the delivery of quality care, professional associations and authorities have began to develop a formal system of lifelong learning. One such approach is the introduction of Continuing Professional Development (CPD) as it has been acknowledged that the previous concept of continuing education (CE) has become inadequate to face the challenge of having to professionally update and upgrade oneself.

CPD is a concept which has evolved from the need to find a better platform for professionals to face the challenge of keeping themselves up-to-date with new knowledge, discoveries and skills in order to perform better in their professions. CPD can be considered as a process in which individual practitioners identify their own learning needs, makes plan to meet those objectives, executes those plans, and finally evaluates the effectiveness of the plan in relation to their practices (Driesen, Verbeke, Simoens, & Laekeman, 2007; Rouse, 2004). In the pharmacy profession, CE and CPD have its own definition. The Accreditation Council for Pharmacy Education (2003) defined CE is as "a structured process of education designed or intended to support the continuous development of pharmacists to maintain and enhance their professional competence. CE should promote problem-solving and critical thinking and be applicable to the practice of pharmacy." Meanwhile, CPD has been defined as "responsibility of individual pharmacists for systematic maintenance, development and broadening of knowledge, skills and attitudes to ensure continuing competence as a professional throughout their careers" (International Pharmaceutical Federation, 2002).

The major advantage of CPD over CE is that for CPD, learning can be linked to the workplace as it is intended to be more experiential and informal. Many of the daily activities such as analysing critical incidents at work and structured reading can constitute as CPD if recorded correctly (Austin, Marini, Glover, & Croteau, 2005). Thus, CPD encourages pharmacists to find their own learning needs and to find activities to fulfil those needs and to apply those skills in their workplace. On the other hand, in CE, learning are intended to meet the needs of a group of pharmacists as CE providers will not be able to identify and respond to individual needs (Rouse, 2004). CE providers determined the content of CE activities such as workshops, and courses, which will not fully meet the pharmacists' individual needs. CE can lead pharmacists to perceive that they need to have 'certificated' hours to meet their learning needs (Attewell, Blenkinsopp, & Black, 2005). Thus, CE encourages pharmacists to

collect points, certificates and attendances of courses or conferences (Farhan, 2001). With the evolution from CE to CPD, CE has become one of the CPD component in which pharmacists maintain their competency (Mottram, Rowe, Gangani, & Al-Khamis, 2002). It has been suggested that, the majority of pharmacists preferred traditional CE since it can provide specific structure and outcomes of learning like the fixed hour of CE whereas CPD concept is less structured without a clear process to assist individual in doing self assessing (Austin et al., 2005).

## **2. Problem Statement**

CPD is mandatory in countries like Great Britain and Canada and most of the pharmacists in these countries have positive opinions towards implementation of CPD (Austin et al., 2005; Mottram et al., 2002). In Malaysia even though mandatory CPD has still not been implemented, gradual introduction through voluntary CPD is already in place. However, little is known about the views on CPD among the pharmacists.

## **3. Research Questions**

The five research questions were (a) what was the proportions of respondents who could distinguish between CPD and CE (b) were there any significant differences with respects to demographic variables and the ability to distinguish between CPD and CE (c) what were the perceived benefits and advantages of CPD (d) what were the barriers to participation in CPD (e) what were the types of CPD activities the pharmacists were likely to participate in.

## **4. Purpose of the Study**

This study aimed to examine the pharmacists' views on CPD particularly on their preferred CPD activities and perceived barriers to successful CPD participation.

## **5. Research Methods**

### *5.1. Samples*

The definition of government pharmacist for the purpose of our study was a pharmacist registered with the Pharmacy Board, and working in the Ministry of Health, Malaysia. Structured questionnaires were distributed to government pharmacists with the help from a senior pharmacist from the Ministry. We chose this survey method as it saved time, preserved anonymity of participants and enabled a greater geographical region to be accessed. In order to increase the response rate, a courtesy call was also made to the chief pharmacist of the

participating states in Malaysia after one month the questionnaire were distributed to remind the pharmacists to return the completed forms.

### 5.2. Survey instrument

Based on literature reviews and several published questionnaires (Hull & Rutter, 2003; Power et al., 2008), a questionnaire was developed to examine the pharmacists' view towards CPD. The questionnaire comprised several themes; understanding of CPD and CE, perceived benefits and importance of CPD, barriers which impede participation in CPD and CPD activities that respondents were likely to participate. Most of the questions were statements which required a "yes" or "no" response. The questionnaire also collected information on the demographic data of the participants.

Pilot testing of the questionnaire was carried out on 40 government pharmacists attending a Pharmaceutical Conference in Kuala Lumpur in October 2009. Based on the findings from the pilot testing, minor modification especially with the wordings of the questionnaire was made. The data from pilot testing was not included in the final analysis.

### 5.3. Data analysis

All data from the returned questionnaire were recorded and entered into the statistical software package SPSS for windows standard version release 20.0. Descriptive statistics such as frequencies, percentages and means were used to describe the responses on the various variables. To explore differences of proportions between groups, the chi-square test for independence was used. All statistical tests were based on a significance level of  $p \leq 0.05$ .

## 6. Findings

Of the 3,876 questionnaires distributed, 1133 were returned. The overall response rate was 29.2%. Table 1 shows the majority of the respondents in the sample were female (77.3%). The mean age of the respondents was 28.6 (SD=6.2) and the average number of years in pharmacy practice was 4.9 (SD=5.6). More than 75% of the respondents were involved in traditional pharmacy services such as dispensing, counselling, purchasing, ward supply and enforcements. A small minority (5.4%) hold management position.

**Table 1.** Survey respondent demographics

Characteristics	No. of respondents (%)
<b>Sex</b>	
Female	876 (77.3)
<b>Race</b>	
Malay	518 (45.7)
Chinese	540 (47.7)
Indian	45 (4.0)
Others	30 (2.6)
<b>Postgraduate qualification (Yes)</b>	
Yes	60 (5.3)
<b>Length of time in practice (years)</b>	
5 or less	868 (76.6)
6-10	157 (13.9)
11-15	37 (3.3)
16-20	23 (2.0)
More than 20	489 (4.2)
<b>Current job responsibilities</b>	
Managerial	61 (5.4)
Counselling & dispensing	358 (31.6)
Manufacturing & ward supply	231 (20.4)
Purchasing, distribution & Store	115 (10.2)
Specialist Pharmacy service	110 (9.7)
Enforcement & licensing	157 (13.9)
Clinical Pharmacy	75 (6.6)
Drug Information	26 (2.3)

### 6.1. Distinction between CPD and CPE

Respondents were asked if they understood the difference between CPD and CPE. Only 355 (31.3%) responded “yes.” Of all the demographic variables tested, only the variable “postgraduate qualification” was shown to be statistically associated with the response on understanding the distinction between CPD and CE. The proportion of respondents with postgraduate qualifications who answered “yes” was 0.50 compared to 0.30 for those without postgraduate qualification. The difference in proportions was significant,  $\chi^2 (1, N = 1133) = 10.26, p = 0.001$ .

### 6.2. Perceived benefits and importance of CPD

Table 2 shows the responses of all participants concerning the perceived benefits and advantages of CPD. More than 90% of all participants agreed that CPD improved their

performances in their current role. Less than 1% of all participants did not see the benefits of CPD.

A chi-square test of independence performed to examine whether the demographic variables (sex, race, postgraduate qualifications and length of time in practice) influenced the responses on five statements concerning perceived benefits of CPD showed that only “the length of time in practice” showed significant influence. It influenced the responses on two statements. The pharmacists with longer length of practice (more than 5 years) were more likely to response “yes” to the statement “CPD enhances status of the profession with other healthcare professionals” (85 versus 72%,  $p= 0.001$ ) and “CPD enhances status of the profession with the public” (68 versus 55%,  $p=0.001$ ).

**Table 2.** Respondents’ agreement on the benefits and importance of participating in CPD

<b>Statements</b>	<b>n (%)</b>
Improves my performance in my current role	1043 (92.1)
Enhances status of the profession with other health care professionals	840 (74.1)
Enhance my career prospects	712 (62.8)
Enhances status of the profession with the public	650 (57.4)
I see no benefits from CPD	4 (0.3)

### 6.3. Barriers to participation in CPD

Table 3 shows that of all pharmacists surveyed, more than 80% agreed that their job constraints as well as CPD accessibility in terms of travel and cost were barriers to participation. Almost 71% agreed that lack of time was also a barrier, and almost 67% agreed that the cost of learning in CPD made it difficult to engage in CPD activities.

**Table 3.** Participants’ responses on the barriers to participation in CPD

	Agree (%)	Neither Agree nor Disagree (%)	Disagree (%)
Accessibility (location/distance) of group learning activities	82.2	15.2	2.7
Job constraints	80.8	15.7	3.5
Lack of time	70.9	28.2	1.9
Cost of participation	66.8	25.4	7.7
Lack of relevant learning opportunities	64.9	29.3	5.8
Uninteresting subjects or topics	60.8	28.2	11.0
Lack of quality learning activities	53.9	36.2	9.9

Lack of learning opportunities to match the learning style	44.7	41.4	13.8
Family constraints (e.g. spouse, children)	42.5	41.2	16.3
Professional burnout	40.6	49.2	10.1
Subjects/topics too specialised	39.0	44.8	15.2
Low personal priority of learning in relation to other activities	37.1	48.7	14.1

#### 6.4. Types of preferred CPD activities

The respondents were asked which CPD activities they were most likely to participate in. The CPD activities shown in Table 4 include structured learning such as workshops, courses and seminars and un-structured CPD activities such as reading journal articles, participating in research work and presentation at scientific meetings. More than 80% of the total respondents were likely to participate in structured activities such as workshops, courses, seminars, and in-house training. However, CPD activities receiving rather high ‘neutral’ responses and more than 20% ‘unlikely’ responses were activities usually considered as un-structured activities such as participation in research and presenting research work, reading and publication of journal articles.

**Table 4.** Participants’ responses on the types of CPD activities they were likely to participate

Activities	Likely (%)	Neutral (%)	Unlikely (%)
Seminars; congress; scientific meeting; conference	92.2	7.2	0.7
Courses; hands-on practical courses; in-house training	91.8	6.6	1.4
Workshops	83.1	13.5	3.5
Discussions with other healthcare providers	69.1	25.5	5.3
Postgraduate programme	52.6	36.1	11.3
Self directed learning e.g. reading journal articles, distance learning	49.1	38.6	12.3
Journal clubs; self-study group; organised group discussions under accredited co-ordinator	44.3	38.5	17.2
Presenter at accredited meeting or conference	32.2	45.5	22.3
Participating in research work; publication of journal articles, reports or book chapters.	31.3	44.8	23.8

## 7. Discussion

The response rate for this survey was rather low. However, it is higher than that of other CPD studies (Bellanger & Shank, 2010; Power et al., 2008). We could have increased response rate by using strategies shown to be effective by Edward et al. (2002) such as monetary

incentives and personalised questionnaires and letters. However, some of these strategies would require additional resources and administrative time.

Overall, about one third of the total respondents indicated that they understood the difference between CPD and CE concepts. The percentage is low compared with 61.2% from Mottram et al., (2002) and 57.2% from Bell et al., (2001). This is probably because most of the respondents as suggested by Attewell et al. (2005), do not understand the concept of CPD as it is a concept they have not encountered before. According to Swainson and Silcock (2004), most pharmacists focused on the action stage of CPD cycle. Thus, they tend to perceive CPD as an action rather than the whole process of identification, planning, action and evaluation of learning needs. Thus, there is an obvious need to explain the concept of CPD to pharmacists in Malaysia before the introduction of mandatory CPD in the country.

Concerning the perceived benefits of CPD more than 90% of our total respondents agreed that CPD improved and updated their professional knowledge and thus helped improved performances in their current role. This result is in agreement with the findings from several studies (Attewell et al., 2005; Bell et al., 2001; Hull & Rutter, 2003; Mottram et al., 2002; Swainson & Silcock, 2004). Based on these results, overall, respondents in our study are aware of the importance of engaging in CPD as a way to maintain professional competency. This is an encouraging result and shows that even without CPD being mandatory, pharmacists value the need of CPD to maintain their professional competencies. However, it is disheartening to note that a small number of the respondents did not see the benefit of CPD. This attitude needs to change in the light of the importance of CPD to maintain professional competency. Their views perhaps reflect the fact that they did not understand the concept of CPD.

The majority of our respondents indicated that their job constraints and time were barriers to participation. This finding, not surprisingly, re-iterates findings in previous work (Attewell et al., 2005; Bell et al., 2001; Mottram et al., 2002) that showed that lack of time was the main factor impeding CPD activities since pharmacists usually have high workload. However, it has been argued that insufficient time can be overcome by developing distance-learning facilities (Driesen, Leemans, Baert, & Laekeman, 2005). Similar to other studies (Driesen et al., 2005; Mottram et al., 2002; Swainson & Silcock, 2004) other important barriers cited were accessibility to CPD activities and uninteresting subjects. Thus, consideration needs to be given to pharmacists working in remote areas, where access to courses may be difficult. Regarding the uninteresting subjects, this can be overcome by providing motivation, and courses on topics of interest. Similar to findings by Donyai et al. (2011), this study also found cost as barrier to participation in CPD. It is in the best interest of the pharmacy profession that



the governing body responsible for pharmacists' CPD in Malaysia develops strategy to address all these barriers. The efforts should focus on pharmacist' time constraints regardless whether these constraints are due to family, jobs responsibilities, or time required for CPD activities itself.

Most of the respondents preferred CPD activities traditionally associated with directed learning (CE) such as workshops and conference attendance. It would seem that the respondents still follow a CE approach instead of strictly following the system of CPD as practised in the UK. This is in line with results obtained by other researchers (Scott, Amonkar, & Madhavan, 2001; Swainson & Silcock, 2004), which showed that pharmacists undertook more directed learning than non-directed learning. The pharmacists will probably need a good understanding of what CPD is in order to follow the CPD principles and its stages of reflection, planning, action, and evaluation.

While this study has provided an overview of the perceptions of public sector pharmacists on CPD in Malaysia, there are limitations to the study. First, is the low reponse rate. Thus, important views of public sector pharmacists who did not response were not captured by this specific research methodology. It is likely that a response bias exists towards pharmacists who had an interest in CPD.

### *7.1. Limitations and recommendations*

There are several limitations. First, the findings were based on low response rate of 29% and limited to only government pharmacists. Thus, the findings may not be a good representation of the pharmacist population in Malaysia. Second, it is likely that a response bias exists towards pharmacists who had an interest in CPD and thus responded to this questionnaire. We were unable to identify the reasons for non-response because we were limited by the study methodology. Third, at the time of this study, CPD provision to pharmacists was predominantly in the form of attendance of short courses and workshops delivered on a regional or national basis throughout Malaysia. The findings of the study thus should perhaps be interpreted as and evaluation of CE rather than CPD.

The importance of CPD is likely to increase in view of the mandatory CPD for the pharmacy profession in Malaysia. From the literature it is clear that different pharmacy sectors have different views and opinions towards CPD. Therefore, there is an obvious need for more data on the pharmacist's views, attitudes and barriers to CPD from other pharmacy sectors. After the implementation of mandatory CPD, longitudinal research is also required to examine its effects on the quality of services provided.

## 8. Conclusions

The results of this study revealed that overall even without CPD being mandatory; pharmacists appreciate the need of CPD to maintain their professional competencies. The findings also confirm previous research findings that many pharmacists preferred more directed learning traditionally associated with CE. Job constraints, time, accessibility and uninteresting subjects were the most frequently cited barriers to CPD participation. For CPD to succeed, the concept of CPD need to be explained and pharmacists' views and perceived barriers must be addressed.

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