



A Study On Continuing Education Program For Working Pharmacist In Improving Professionalism And Pharmaceutical Care.

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Abstract

Background: Patient oriented pharmaceutical care can be practiced by improved knowledge, skills and performance of the pharmacists. This can be accomplished by attending in Continuing Education programme. The present study focused on the assessment of the knowledge and attitude of the working pharmacists towards Continuing Education programme and to explore the possibility of conducting such programmes to enhance the professionalism.

Materials and Methods: A cross sectional study included 157 pharmacists. Various parameters used were quantified by using a validated questionnaire. The observations obtained were collected and summarized. All data analyses were conducted using SPSS for Windows standard version. Categorical data were presented as percentages of frequency or occurrence.

Result: The primary place of work was studied to assess the influence of the work place on attending the CEP programs. It was seen that 83(53%) of them were working in community pharmacy. Majority of them (94%) were aware of the programs are useful for the betterment of the practice of pharmacy. 80% of them pointed out that they have no facility in their working place to update their knowledge and skills. The most important barrier pointed out to attend the program were substitute not available in the workplace. But, many (84 %) expressed their interested to attend them in future.

Conclusion: The study assessed the awareness and attitude of the working pharmacists for Continuing Education program. In spite of their barriers and hurdles, most of them interested to attend them to update their knowledge and skill for improving pharmaceutical care.

Keywords: Continuing Education Program, CEP, Professionalism, Pharmaceutical Care.

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INTRODUCTION

Contemporary patient oriented pharmaceutical care requires sustained pharmacist competency through maintenance and improvement of knowledge, skills and performance^{1,2}. While pharmacists seek to accomplish this by attending in Continuing Education programme (CEP), these activities represent only one aspect of an individual's

responsibility for continuing professional development of pharmacists. The core elements of the professional practice include a pharmacist's self-directed, structured and outcomes oriented activities for practice-based learning³. This ongoing activity is accompanied by reflection, planning, action and evaluation^{4,5}. Existing professional development models reflect a wide spectrum of international

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approaches to lifelong learning. Most countries share features of mandatory demonstration of active participation in Continuing Education Programme (CEP). However, utility of enforced pharmacist continuing educational programme has been challenged by those who contend that it is at odds with principles of lifelong learning and emphasizes inputs instead of evaluating changes in patient care and outcomes⁶. Some regions and groups have shifted away from such credit or point systems in favor of professional or learning portfolios to emphasize purposeful reflective and planning components of CEP and thereby avert frenetic, indiscreet year-end 'collection' of continuing education units for annual licensure renewal. However, still very few countries identify themselves as having established CEP systems and many more acknowledge that no form of pharmacist CEP auditing exists as a surrogate measure of pharmacist maintenance of knowledge or skills⁷.

The pharmacists are working in hospitals, community pharmacy and primary health centres. Pursuit of activities to maintain or advance knowledge and skills is largely self-directed and voluntary as there exist few programs based on employer and few, if any, with external incentives^{8,9}.

The principal mandate is to prepare the pharmacists to provide optimal pharmaceutical care and advance healthcare outcomes, among its other overall goals is also to serve as a pharmacy resource for the working pharmacists. As part of the specific objective to contribute to the professional education of practitioners, a CEP is planning to be established in the near future.

This programme is committed to the continuing pharmacy professional development of all pharmacists regardless of practice site, and is aimed at supporting lifelong learning to ensure optimum patient care. The programme seeks to fill the void for development and delivery of continuing education for pharmacists while cultivating potential preceptors to serve as mentors to pharmacy students embarking upon structured practical experiences.

Just as the expectation of individual pharmacists is to assess their unique learning and development needs to plan and implement a structured learning programme, so it should

also be the initial step towards developing a national CEP to facilitate patient care and career development for the practicing pharmacists. The pharmacy industry is constantly adapting to accommodate patients' shifting requirements. The scope of practice change has been a significant and popular regulatory tool used globally to support practice evolution.¹⁰ The objective of this survey was to help determine CEP needs and preferences of pharmacists before implementing a strategic plan for CEP.

METHODOLOGY

Aims and Objectives

- ❖ To assess the knowledge and awareness of working pharmacists towards the continuing pharmacy education programme.
- ❖ To assess the attitude of working pharmacists towards the continuing education programme for professional development.
- ❖ To explore the possibility of conducting continuing education programme for the professional development of the working pharmacists.

Procedure

A systematic review of allied-health literature resources was conducted in the EMBASE, MEDLINE, CINAHL and International Pharmaceutical Abstract electronic databases. The key search terms 'pharmacist', 'continuing education', 'professional development', 'assessment', 'survey' and combinations were used to identify published experience with creation and administration of similar questionnaires.

Content from relevant papers was considered and adapted for our survey design. Questions were characterized into specific domains of interest including pharmacist demographics, access to internet resources, frequency and characteristics of past CEP activities, preferences for delivery and content, barriers to participation, and plans for future CE activities. Mixed format of open-and closed-ended questions. The survey may take approximately fifteen min to complete. The survey introduction clearly outlined that participation was voluntary and that responses would be anonymous.



All data analyses were conducted using SPSS for Windows standard version. Categorical data were presented as percentages of frequency or occurrence. Responses will be stratified according to gender, community or practice site, length of pharmacy practice and working experiences were also compared using Chi-square tests. All statistical tests were two-tailed and based on a significance level of a 0.05.

RESULTS

A total of 157 pharmacists working in various pharmacies were participated in the study. Out of them, 63 were males and 94 were female. Most of the participants belonged to the age group 31-35 (Table-1)

Table-1. Demographic characteristics

Demographic factors	Number (157)	Percentage %
Gender		
Male	63	40
Female	94	60
Age Group (in years)		
20-25	10	6
26-30	36	23
31-35	59	38
36-40	33	21
41-45	19	12

Qualifications of the pharmacists were assessed as the knowledge and attitude for better pharmaceutical care depends on the basic educational standards. It was noted that all types of qualified pharmacists now a days enter into the dispensing pharmacy practice. Among all, 90(57%) participants were Diploma in pharmacy qualified while 58(37%) were B. Pharm and 5 (3%) Post graduates and 4(3%) were having Pharm D qualification.

The primary place of work was studied to assess the influence of the work place on attending the CEP programs. It was seen that 83(53%) of them were working in community pharmacy, 63(40%) of the participants working in hospitals and 11(7%) were in primary health Centre.

Working pharmacists need updating their knowledge for better pharmaceutical care as the informations are updated day by day. Therefore, working experience is an important parameter to be considered while assessing the current knowledge and skills. Most of them (60%) were working for past 3-5 years while beginners were only 4%. (Table 2).

Table 2. Total number of years in practice.

Total number of years in practice	Number (157)	Percentage %
0-2	6	4
3-5	95	60
5-10	33	21
More than 10	23	15

Regarding the knowledge about CEP, majority of them are aware of such programme which can be considered as one of the requisites for the good pharmacy practice. Out of all the participants, 148 (94%) were aware of the programs for the betterment of the practice of pharmacy while 9 (6%) not aware of such resources.

It was noted 63% of them having the opinion that the CEP are useful for the practice of the profession while 13% said it is not useful. (Table 3, Figure 1).

Table 3: Opinion about CEP.

What is your opinion about CEP for practicing Pharmacist?	Number (157)	Percentage %
Useful	99	63
Not useful	21	13
Don't know	26	17
No comments	11	7

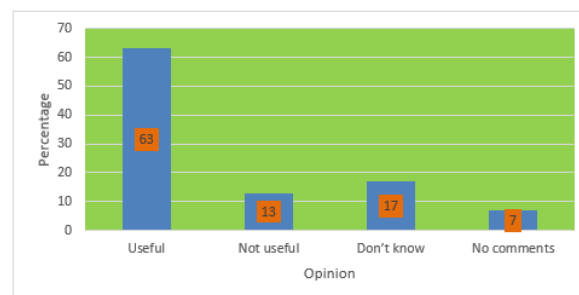


Figure 1: Opinion about CEP.

Organizing a CEP is of great concern for most of the pharmacies, particularly community pharmacy. Economic factors rather than professional factors are influencing them to a greater extent. In this study, 49% of the participants pointed that they have attended the CEP which was organized by Academic Institutions off their own or nearby and only 10% were able to attend it at their own organization. (Table 4).

Table 4: CEP organizing authority.

Who organize majority of CEP which you have attended?	Number (157)	Percentage %
Academic Institutions	77	49
Licensing Authority	65	41
Own Organisation	15	10
Others, specify	0	0

The CEP is now a days conducted in institutions very frequently as it is mandatory for accreditation purposes. But, attending them



during working hours is a hurdle for pharmacists particularly in community sector. Most of the participants (53%) revealed that they have attended only 0-1 CEP over the past 1-2 years and 2% attended 8-10 CEP in this period. (Table 5, Figure 2)

Table 5: Number of CEP attended.

How many CEP have you attended over the past 1-2 years?	Number (157)	Percentage%
0-1	83	53
2-5	48	31
5-8	22	14
8-10	4	2
More than 10	0	0

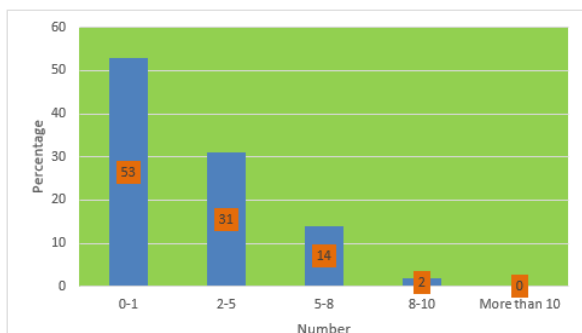


Figure 2: Number of CEP attended.

CEP can be arranged or conducted only if it is found beneficial for the pharmacists. It is benefited only if it is conducted in a good professional way. In this study, 31% of the participants rated the quality of CEP attended as Good, but 11 % rated it as Not satisfactory. (Table 6, Figure 3)

Table 6: Quality of CEP attended.

How will you rate the quality of the CEP you have attended?	Number (157)	Percentage %
Good	49	31
Average	44	28
Satisfactory	46	29
Not Satisfactory	18	11



Figure 3: Quality of CEP attended.

Facilities to update the knowledge at the working place is now mandatory as they have to be aware of the all latest information about the drugs and pharmaceuticals. Among all, 32(20%) only have agreed that they have facility to update their knowledge while

125(80%) them pointed out that they have no facility in their working place to update their knowledge and skills

CEP can be arranged in future only if they have interest to attend them. A very positive response was received in this factor. Among the participants, 132 (84 %) expressed their interested to attend CEP for Pharmacists in future, whereas 25(16%) said not interested as they find it hard to leave the working place during working hours. The barriers which prevent them to attend the CEP were studied. Most of them expressed the fact that the management did not encourage them. The non-availability of substitution for them in their own workplace is also a major factor. (Table 7, Figure 4).

Table 7: Barrier to attend CEP.

What is the barrier for you to attend CEP?	Number (157)	Percentage %
Cannot substitute in the workplace.	65	41
Management does not encourage	67	43
Not Interested	25	16

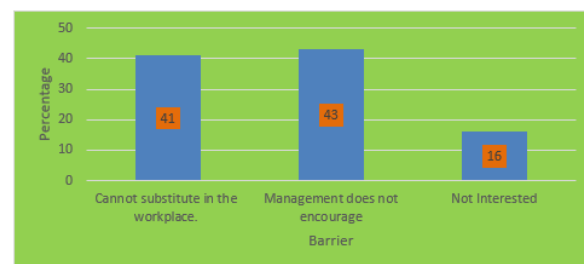


Figure 4: Barrier to attend CEP.

It is noted that the 49% of participants were willing to participate in CEP if it is conducted by online mode of study but 13% preferred both online and contact while 21% preferred through Handouts and questionnaires. (Table-8, Figure-5)

Table-8: Preferred mode of CEP study.

What is the preferred mode of CEP study?	Number (157)	Percentage %
Online	77	49
Contact	26	17
Both online and Contact	21	13
Handouts and Questionnaires	33	21



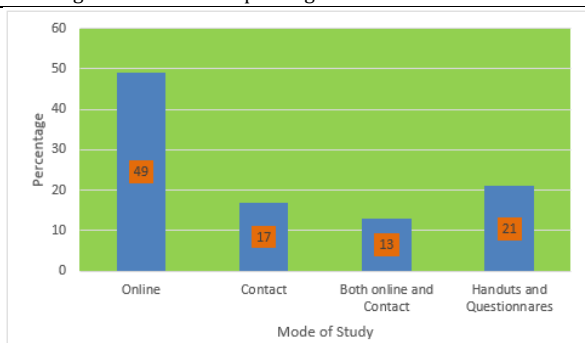


Figure 5: Preferred mode of CEP study.

Regarding the interval of attending the CEP, majority of them (76%) was interested to attend Once in six months (Table 9, Figure 6).

Table 9: Preference to attend CEP

What is the preference to attend CEP?	Number (157)	Percentage%
Monthly	7	5
Once in two months	6	4
Once in 3 months	24	15
Once in six months	120	76

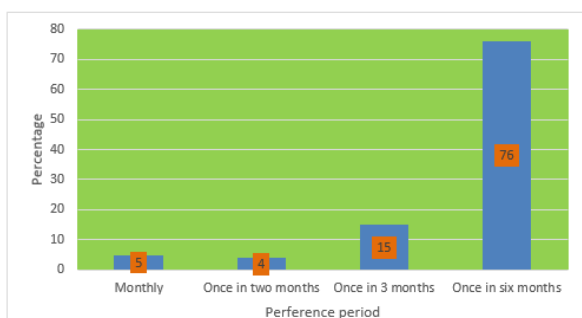


Figure 6: Preference to attend CEP.

The support and encouragement of the management is a key factor to attend CEP. This is very true in community pharmacies as the business mainly depend on the working pharmacist. Some of the participants (36%) pointed out that their management does not encourage much while 33% said that they are getting support even though they are not willing to conduct in their own organization (Table 10, Figure 7).

Table10: Support from Organization.

Support from organization to attend CEP	Number (157)	Percentage %
Yes	52	33
No	57	36
No comments	48	31

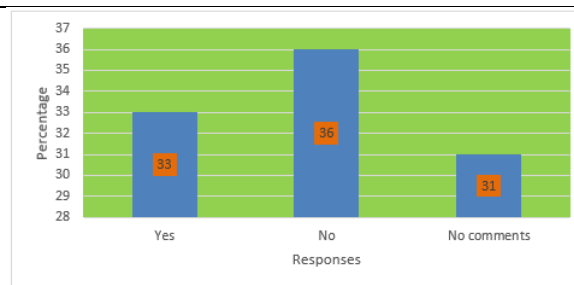


Figure 7: Support from Organization to attend CEP.

DISCUSSION

The study was conducted to assess the knowledge and awareness and attitude of practicing pharmacists towards the continuing pharmacy education programme (CEP) and to explore the possibility of conducting them for the professional development of the practicing pharmacists.

It was conducted in a rural district of Kerala by conducting personal interview and taking questionnaire filled. Most of the participants were females as in Kerala the opportunities to work in industry is very limited for them. Majority of them were found working in the Community pharmacy sector as there was more opportunity in these areas. Most of them were working in the pharmacies for years but their attendance in CEP were very poor. All the pharmacist admitted that they have very poor facilities in their working place to update their knowledge and skills. It was also pointed out that the managements are not very much interested to conduct such programs also. It may be due to the limited facilities available with the pharmacies and also shortage of funds to conduct in other places. But, it was observed that hospitals are providing such regular programs as it is mandatory for them for accreditation purposes. It was reported that most of the programs they have attended was those that organized by academic institutions where these co-curricular activities are mandatory for the budding pharmacists. Even though they are willing to attend the CEP, the main hurdles pointed out were that in most of the pharmacies, especially in community set up, there is no substitution available for the work. But those who work in hospitals did not find this problem as they have sufficient number of pharmacists employed in various shifts. All have agreed that attending CEP is mandatory to update their knowledge and skills.



Since they have many hurdles to attend regular contact classes, most of them preferred online CEP. After covid 19 scenario the online mode of contact have got more momentum. But it was pointed out that along with online classes providing hand outs and other materials are also found to encourage better learning.

It was unfortunate to note that the management is not much encouraging to attend the CEP. It may be mainly due to the anticipated disturbances in the business during working hours due to the absence of the pharmacists.

CONCLUSION

The study found that the most of the working pharmacist are in the community pharmacies where there is no much facilities to update their knowledge or skills in the practice of pharmacy. Some hospitals conduct such programme either as a part of their academics or for their own standardization and accreditation procedures. It was shown that conducting online CEP at least once in six months will add knowledge and develop skills to practice the profession of pharmacy. The study concluded that development of strategies to motivate and enroll more pharmacists in attending CEP resolving barriers and promoting preferences is absolutely necessary for the better pharmaceutical care.

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