

Perceptions of Community Pharmacists towards Continuing Pharmacy Education Conducted in South India: A Survey

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Abstract

Continuing pharmacy education (CPE) is a structured educational activity intended to support the continuing development of pharmacists to maintain and enhance their competence in profession. The concept of continuing pharmacy education was conceived by the Department of Pharmacy Practice. It was planned as a prospective survey based study with self designed and developed questionnaires. The study was divided into three consecutive periods to collect the data from the respective community pharmacists in two locations of northern Karnataka region – Belgaum and Nipani. The aim of the study was to upgrade the knowledge and skills of community pharmacists thus making them aware of pharmaceutical services like patient education /counseling, various health screening services (BP, Weight, Blood sugar level), new drug administration devices /techniques, biotech products and business management, which enable them to grow and develop their business with ultimate benefit to the community. Further to the consultation of community pharmacists, 9 topics were finalized. The questionnaire comprised of 7 multiple type questions including demographic details of the community pharmacists and their convenient time to attend the CPE program. This survey suggested that the concept of CPE was appreciated by the community pharmacists. They encouraged conducting such programs that would keep them abreast of the latest upcoming trends in pharmacy profession. They also emphasized that such programs would encourage the role of community pharmacist and their responsibilities towards patient care development and improve the knowledge, skills and attitudes to ensure competence as a health care professional in order to maintain high professional standards related to his/ her sphere of activity.

Key words: Community, Pharmacist, Education, Attitude

INTRODUCTION

Continuing pharmacy education for the profession of pharmacy is a structured educational activity designed or intended to support the continuing development of pharmacists and/or pharmacy technicians to maintain and enhance their competence. Continuing pharmacy education (CPE) should promote problem-solving and critical thinking and be applicable to the practice of pharmacy.¹

Major challenges for pharmacist include keeping knowledge and skills upto date and addressing new concepts in the delivery of pharmaceutical services. Over the past 40 years pharmacists have responded to these challenges with some degree of success.²

Pharmacists are health care professionals whose professional responsibilities include ensuring to the people about maximum therapeutic benefit from their treatments with medicines. This requires them to keep abreast of developments in pharmacy practice and the

pharmaceutical sciences, professional standards requirements, the laws governing pharmacy and medicines and advances in knowledge and technology relating to use of medicines.

The regulatory bodies for pharmacists in some countries already made mandatory regulations to participate in continuing professional development (CPD), as a pre-requisite for the revalidation of the right to practice. This is likely to become a general pattern worldwide, where the patients can be confident with the health care professionals particularly community pharmacist to remain competent throughout their working lives. They will expect governments, accreditation agencies and other pharmacy bodies with a legitimate interest, to seek assurances that regulatory bodies are taking the necessary action to achieve this goal.³

Pharmacists are clearly assuming a leadership position in health care today. With unconventional therapies rising in popularity each year, community pharmacist must be further educated in other health care modalities in order to responsibly fulfill the demands of modern day patient care

Major health insurance plans are already covering alternative therapies and some even require physician referral for reimbursement. In the future, pharmacists will need to be the information providers for more than just conventional pharmaceuticals and medical devices. Those pharmacists that do not continue to move forward and keep up, particularly in herbal medicine and especially in combination with conventional medications could put their patients in danger and the reputation of their profession at risk.⁴

Healthcare is provided in India at primary, secondary & tertiary healthcare levels and at each level most patients receive medication as part of their treatment. Due to the heavy patient load, many prescribers have little time to explain the proper use of medication to their patients. Most pharmacists in hospital and community settings have not been educated or trained for this role and have largely remained as prescription fillers or as dispensers. As a result many patients do not get enough information about use of their medication including how and when to take the medication, how long to take it, what to do if side effects occur or if a dose is missed. Lack of such information may lead to a patient not taking the medication in a way that was intended, which in turn may result in therapeutic failure, adverse effects, additional expenditure on investigations and treatment or even hospitalization. Inappropriate use of antibiotics by individual patients may contribute to antibiotic resistance within the community in general. Many drug use problems and their consequences can be addressed by patient education⁵

Pharmacists may also need to review or learn about protein chemistry and those characteristics that affect therapeutic activity, product storage and routes of administration of these drugs as well as patient education.⁶

The International Pharmaceutical Federation (FIP) has adopted the continuing pharmacy development concept in 2002 as the "responsibility of individual pharmacists for systematic maintenance, development and broadening of knowledge, skills and attitudes, to ensure competence as a professional, throughout their careers."⁷ Hence, the present study was planned to uplift the professional standards of community pharmacists towards continuing pharmacy education.

OBJECTIVE

To explore the perceptions and attitude of community pharmacists towards continuing pharmacy education (CPE).

METHODOLOGY

Study setting

The study was conducted at two places of Karnataka (South India) i.e. Belgaum and Nipani.

Study period

The study was conducted for a period of 10 months from August 2007 to June 2008.

Study design

It was a prospective survey study with self designed and developed questionnaires.

Study procedure

The study was divided into three consecutive periods to collect the data from the respective community pharmacists in two locations of northern Karnataka region. The students of post graduate in pharmacy practice were divided into two groups and allotted schedule for data collection from two locations over a period of ten months.

Study approval

The study obtained approval from Jawaharlal Nehru Medical College -Institutional Ethics Committee on Human Subjects Research, Nehru Nagar, Belgaum

Analysis of data

The data thus collected using questionnaire tools was further analyzed and expressed in percentages.

Study material

Well designed survey based questionnaire on continuing pharmacy education (CPE) was developed by the students and staff of department of pharmacy practice, KLES's college of pharmacy, Belgaum. The questionnaire was prepared using suitable references in consultation with community pharmacists with due respect to their topics of interest. Further to the consultation of community pharmacists, 9 topics were finalized.

The questionnaire comprised of 7 multiple type questions including demographic details of the community pharmacists and their convenient time to attend the CPE program.

RESULTS

A total of 166 community pharmacists were surveyed for participation in continuing education program in two places of northern region of Karnataka. Out of 166 community pharmacists, only 119 expressed interest to participate. During survey procedure community pharmacist were assessed for knowledge and attitudes towards continuing pharmacy education in the form of pharmaceutical services like patient education/ counseling, various health screening services (BP, Weight, Blood sugar level), new drug administration devices /techniques, biotech products and business management.

Table No1. Demographic details

Gender	Number of community pharmacists	Percentage (%)
Male	153	92.16%
Female	13	7.83%
Total	166	100%

Table No 2. Interest of participation by community pharmacists (n = 166)

Participation consent	Number of community pharmacists	Percentage (%)
Community Pharmacist interested in CPE	119	71.68%
Community Pharmacist not interested in CPE	47	28.31%

Table No 3. Topics of interest of community pharmacists (n = 119)

Area of interests	Number of community pharmacists (more than one choice)	Percentage (%)
Regulatory requirement	46	27.71%
Biotech products	44	26.50%
Business management	80	48.19%
Computer application	48	28.91%
Patient education/counseling	50	30.12%
Managed care (BP, body weight, blood sugar level, Pulmonary function test)	44	26.50%
Dispensing for special population	41	24.69%
New drug administration devices/techniques	62	37.34%
Professional skills	65	39.15%

Table No 4. Details of convenient time for participation in CPE

Time	Number of community pharmacists	Percentage (%)
1 hour for 7days	64	38.55%
2 hours for 4 days	19	11.44%
4 hours at a stretch	36	21.68%

DISCUSSION

The concept of continuing pharmacy education CPE was conceived by department of pharmacy practice and the same was introduced and discussed with the post graduate students of pharmacy practice. It was found to be innovative, productive and beneficial, looking into the present scenario of a community pharmacist in India with an aim to upgrade their knowledge and skills, thus making them aware of pharmaceutical services like patient education /counseling, various health screening services (BP, Weight, BSL), new drug administration devices /techniques, biotech products and business management, which enable them to grow and develop their business with ultimate benefit to the community. This will also improve the standards of the community pharmacists.

A total of 166 pharmacies were surveyed in Belgaum and Nipani. The survey showed higher involvement of males (92.16 %) as compared to females (7.83%). Further, it also highlighted that 71.68% community pharmacists were interested in continuing pharmacy education (CPE) and remaining 28.31% showed lack of interest in the program. The latter group had reasons such as lack of time due to their business commitments, lack of interest in continuing learning and many more. However, it was found that the majority of respondents applauded the concept of continuing pharmacy education but their business and personal commitments, did not to allow them to participate in the program.

Out of 166 community pharmacists, thirty eight (22.89%) community pharmacists had no time to attend the CPE program, seven (4.21%) pharmacists did not pay importance to CPE program & the remaining two (1.20%) denied to participate as they felt that CPE program is not a part of regulatory fulfillment to run a community pharmacy. Finally, only 119 community pharmacists were involved in the study procedure.

After analyzing the questionnaires, it was found that, most of the community pharmacists were interested in business management (48.19%), followed by professional skills (39.15%), new drug administration devices/techniques (37.34%), patient counseling (30.12%) and dispensing for special population (24.69%).

Of the 119 community pharmacists who were interested in CPE, we found that 48.19% were interested in business management because that would help them to improve their business, which was the main purpose of any business activity to earn profit.

Some community pharmacists (39.15%) were interested

in professional skills because that would help them to learn the skills required for uplifting the standards of pharmacy profession. Also, it was found that 37.34% of community pharmacists were interested in new drug administration devices/techniques, because, dispensing the drugs is the prime responsibility of pharmacist. This also included different techniques of handling different devices like (Rota halers, insulin pens, spacers, inhalers). Better patient care can be achieved by patient counseling/education was felt by 30.12% of community pharmacists. This also encouraged understanding of diseases and the actions of medication in the treatment plan, medication adherence, effective drug treatment, incidence of adverse effects thus improving the quality of life of the patient with improved professional rapport between the patient & pharmacist.

Computer Application drew the interest of 28.91% of the community pharmacists as they felt that it would educate them about maintaining records or patient profiles on medication and treatment plan in their database.

Regulatory requirement was another interesting area expressed by few (27.71%) of community pharmacists. They expressed that it would expose them to various schedules pertaining to the practice of pharmacy and drugs. While 26.50% of the pharmacists revealed their interest in Biotech products & managed health care like (Blood Pressure, Weight measurement, Blood Sugar Level). They felt that it would enable them to know the different Biotech Products and technology, their storage temperatures & requirements, about their handling & dispensing such as Vaccines ,Insulin, Interferon's , Interleukins , monoclonal antibodies based pharmaceuticals – Trastuzumab , Abciximab & follicle stimulating hormone ,recombinant thrombolytic agents.

In Managed care, the pharmacists were made aware of the various health screening services like (BP recording, Weight measurements & Blood Sugar Level measurements with help of Glucometer) that could be provided within the premises of community pharmacy. These health screening services brings awareness to the patient population about diabetes, hypertension and other cardiovascular diseases. This further, educates them about the importance of regular check ups and thus maintaining their health standards.

Lastly, 24.69% of the Community Pharmacists showed interest towards dispensing for special population like pediatrics, geriatrics & pregnant women as this covers a larger section of community population. Dispensing of drugs to such population needs to be supplemented with

proper counseling.

Further analysis of questionnaires with respect to the convenient time of community pharmacists to attend the Continuing Pharmacy Education (CPE) was found as follows:

It was found that 64 (38.55%) community pharmacists showed interest to attend Continuing Pharmacy Education (CPE) program for seven days, followed by 19 pharmacists (11.44%) for 4 days and 36 pharmacists (21.68%) for only 4 hours at a stretch weekly. Majority of community pharmacists (38.55%) found that one hour for 7 days would be convenient time for attending CPE as they could spare atleast an hour out of their busy schedule towards updating their knowledge through continuing educational programs

CONCLUSION

There is a considerable variation in current levels of participation in continuing pharmacy education and significant differences in attitudes between sub-groups of pharmacists towards continuing pharmacy education.

This survey study suggested that the concept of CPE was appreciated by the community pharmacist, as such kind of program would keep them abreast of the latest upcoming trends in pharmacy profession. Such programs will encourage the role of community pharmacist and their responsibilities towards patient care development and improves the knowledge, skills and attitudes to ensure competence as a health care professional in order to maintain high professional standards related to his/ her sphere of activity.

ACKNOWLEDGEMENTS We are thankful to all community pharmacists and post-graduates in clinical pharmacy. We sincerely extend our thanks to Prof. F.V. Manvi and Prof. J.K.Saboji, Principals of KLES's College of Pharmacy, Belgaum and Nipani respectively, for their support and encouragement. We also thank Prof. A.D. Taranalli, Vice-Principal, KLES's College of Pharmacy, Belgaum for his encouragement.

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