CONTINUED PROFESSIONAL EDUCATION OF BULGARIAN PHARMACISTS: SECOND REGISTRATION PERIOD

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Summary. The continuing professional education prepares the pharmacists for the requirements of the changed role of pharmacists in the society. Different approaches to continuous professional education ranging from lectures to peer-mentoring work shops and web tools have been developed throughout the last 25 years. The goal of the current analysis is to systematize the trends in accredited education events for pharmacists by the Quality Committee of the BPhU during 2010-2013. This study is a retrospective database analysis. The information concerning the accredited forms of continuing education of pharmacists as well as other activities related to continuing education was extracted from the official protocols, issued by the Quality Commission of the Bulgarian Pharmaceutical Union (BPhU). The continuing postgraduate education of pharmacists in Bulgaria is developing with new elements which allow competence development through individual forms of self-development such as publication activities, delivering presentations, individual training, etc. In the educational programs accredited during the second registration period, still prevailed the short courses, with focus on the new medicinal products.

Key words: pharmacists, continued education, Bulgaria

INTRODUCTION

n the very dynamic world of pharmacy it is widely recognized that the continuing pharmacy education is necessary to update the pharmacist's knowledge on new pharmacological therapies, to enhance clinical performance and to improve the patient outcomes [1, 12].

The continuing professional education prepares the pharmacists for the requirements of the changed role of pharmacists in the society [1, 6, 8, 11, 15]. Besides the fact that the continuing professional education is needed for the pharmacist's professional growth, it is also obligatory for maintaining the licence in significant number of Eropean union (EU) countries. In 2002, the French government passed legislation to allow implementation of mandatory continuing education for the pharmacists [5]. France spent several years developing a system, including national and regional boards to oversee CE activities [3, 4, 7]. Germany has a voluntary system for continuing education of pharmacists. Pharmacists who complete the required credits every three years receive a certificate of completion [5].

Different approaches to continuous professional education ranging from lectures to peer-mentoring work shops and web tools have been developed throughout the last 25 years [2, 9, 14]. Eleven years after the adoption of a new regulation on medicinal products and pharmacies in human medicine in 1995, in 2006 a regulation on professional associations of pharmacists was endorsed [10] and Bulgarian Pharmaceutical Union (BPhU) was established. In June 2007, the BPhU gave its approval to the system for continuing education of pharmacists, created by the Quality Commission of the BPhU and the first registration period started the same month.

The goal of the current analysis is to systematize the trends in accredited education events for pharmacists by the Quality Committee of the BPhU during the second registration period – 2010-2013.

MATERIAL AND METHODS

This study is a retrospective database analysis. The information concerning the accredited forms of continuing education of pharmacists as well as other activities related to continuing education was extracted from the official protocols, issued by the Quality Commission of the BPhU. The retrospective analysis of the approved topics of educational events was performed during the observed period and systematized according to the type of event, geographic area of performance and topics covered. The studied period covered the second registration period between June 2010 and June 2013.

RESULTS AND COMMENTARY

In 2007, after the formation of the BPhU, the Quality Commission adopted rules for continuing education of pharmacists [13] as well as a uniform credit system for assessment of the short-term and long-term forms of continuing education (Table 1). A minimum of 90 continuing education credits (at least 20 credits/year) is required in each three-year registration period. Certificate for completion is issued for every educational event and it must be submitted by the pharmacists in their regional branch of the BPhU that allows the credits to be recorded.

Table 1. Types of accredited forms of continuing education of Bulgarian pharmacists

Category	Subcategory	Continuing education form	
Α	A1	Participation in seminars and qualification courses	
	A2	Participation in congresses and symposia	
	A3	Participation in the BPhU seminars	
В	B1	Publication in pharmaceutical press	
	B2	Publication in pharmaceutical scientific journals	
	B3	Case study presentation	
С	C1	Long term educational programs held at universities	
	C2	Long term specialisations according to Health law	
	C3	Master degree in the health or related fields	
	C4	PhD degree or completing it	
D	D1	Tutoring pharmacy students in pharmacy	

During the second three-year registration period, the Quality Commission started several new initiatives aimed to improve and upgrade the existing continuing education system, namely:

- conduction of methodical meetings with regional sub-commissions to achieve better co-ordination and to popularize the different forms of continuing education;
 - · laying the foundations for online learning program;
 - development and implementation of educational program for rural areas;
 - adoption of amendments to the rules for continuing education of pharmacists:
- development and implementation of regular program for continuing education involving Faculties of Pharmacy in Bulgaria.

The Commission has also started to establish standards for pharmaceutical services and first document adopted concerned the dispatch of prescription medicines and related consultation.

For the monitored period, the Quality Commission realized 220 meetings (including on-line meetings), most of them dedicated to discussion and accreditation of various continuing education programs. In total, 193 educational events were accredited and 1 module for the distance learning program was developed and launched. The type of accredited educational events during the second registration period is shown in Table 2.

Educational events accredited and monitored by the Quality Commission were mainly of 4 types, namely seminars and qualification courses; congresses and symposia; programs created by BPhU and pharmaceutical industry-inspired programs. All forms in category "A" need to be accredited by the Quality Commission of BPhU and include 3 subcategories: seminars and qualification courses (subcategory "A1"), participation in congresses and symposia (subcategory "A2") and seminars, organized by BPhU (subcategory "A3"). The largest category amongst the accredited forms during the second registration period was the educational events category, in response to the rules of BPhU program (Fig. 1).

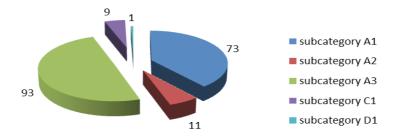


Fig. 1. Types of accredited continued education subcategories during June 2010-June 2013

During the period 73 (37.62%) seminars and qualification courses (subcategory A1) were accredited and monitored by the Commission (Table 2). Out of them, 52 (71.23%) were organized by a single marketing authorization holder and concerned Schuessler's salts therapy. This high percentage is due to launch of Schuessler's salts therapy in 2010 in Bulgaria and the need to create awareness about the new therapeutic approach. These events were visited by most of the pharmacists in Bulgaria throughout the whole country. Most of the subjects covered were related to regulatory issues such as marketing authorization; regulation of clinical trials; pharmacovigilance; patent protection of medicines; quality management; Good Manufacturing and Good Distribution Practice requirements; medical devices' legislation; health technology assessment, etc. or drug therapy issues (Table 2). Drug therapy was dedicated to over-the-counter venotonics and angioprotectors; allergy products; cognitive function enhancers; newly approved medicines; phytomedicines; vaccines, food supplements; orphan medicines; homeopathic medicines, etc.

Three types of subcategory "A1" educational events were organized together with the Faculty of Pharmacy, Medical University - Sofia. A unique continuing education program (marked as "FP*&BDA" in Table 2), a common project between the Faculty of Pharmacy, Medical University-Sofia and the Bulgarian Drug Agency started in 2010. The program focused on marketing authorization procedures, pharmacovigilance, patent protection of medicinal products, Good Manufacturing and Good Distribution Practices, quality management, medical devices, trends in Bulgarian pharmaceutical market etc. Unlike the Schuessler's salts therapy educational events, this program was designed for pharmacists employed in marketing authorization holders, pharmaceutical distributors, contract research organizations, etc., with responsibilities in the related areas. The program was very well accepted not only as a continuing education program but also as an opportunity for sharing best practices and common problems within the concerned areas. It was highly appreciated by the pharmacists engaged in the pharmaceutical industry and 350 participants were enrolled and finished the program. The lectures (24 lectures/12 modules) were held at the premises of Faculty of Pharmacy, Medical University-Sofia and the lecturers were both form the Faculty and the Bulgarian Drug Agency (2 lecturers/module).

Table 2. Types of accredited forms of continuing education for June 2010-June 2013

Types of continuing education	Total number of events	Organizers/number of events	Subjects covered
Seminars, qualification courses	73	marketing authorization holders/52	Drug therapy (homeopathy - Schuessler's salts)
		FP*&BDA-12	Regulatory issues (marketing authorization; regulation of clinical trials; pharmacovigilance; patent protection of medicines; quality management; Good Manufacturing and Good Distribution Practice requirements; medical devices' legislation; health technology assessment)
		regional BPhU branches/3	Drug therapy (homeopathy) and Regulatory issues (update on Bulgarian and EU pharmaceutical legislation)
		pharm. distributors/3	Drug therapy (OTC venotonics and angioprotectors) and Regulatory issues (pharmaceutical legislation updates)
		BPhU& FP/1	Drug therapy (phytotherapy in lung inflammation)
		BADI**&FP/1	Regulatory issues (Marketing authorization procedures)
		BPhU/1	Regulatory issues (protecting patient privacy)
Congresses, symposia	11	pharm.distributor/4	Communication skills; Pricing; Drug therapy (self-medication and phytomedicines).
		hospital pharmacists/3	Drug therapy (anticancer therapy) and EAHP*** annual congress.
		BPhU/3	Deontology (Code of ethics requirements); Regulatory issues; Homeopathic pharmaceutical market.
		BPhU& FP/1	5-ft National Congress of Pharmacy.
BPhU program	99	pharm. distributors/35	Drug therapy (vaccines, homeopathy, phytotherapy, food supplements; drug-drug interactions; weight-reduction); Marketing (pricing)
		regional BPhU branches&FP/26	Drug therapy (drug addiction, food supplements, antiallergy medicines); Regulatory issues (falsified medicines, update on Bulgarian and EU pharmaceutical legislation, Bulgarian and world pharmaceutical market trends), Patient management (increasing patient compliance techniques)
		FP&Pharmacy chain/15	Drug therapy (anti-flu; rhinitis, asthma, contraception, allergy, dermatitis, pregnancy etc.); Generic medicines
		pharm. manufacturers/3	Drug therapy (nonsteroidal anti-inflammatory drugs)
		BPhU&FP/10	Drug therapy (allergy, cognitive functions, newly approved medicines, phytomedicines, vaccines, food supplements); Regulatory issues (phytomedicines; orphan medicines; reimbursement update); Marketing (marketing services in pharmacy)
		Bulgarian Homeopathic Organization&BPhU/4	Drug therapy (homeopathy)
		Management Board of BPhU& regional BPhU branches/3	Marketing (opportunities and threats for Bulgarian pharmacies; food supplements)
		Hospital pharmacists' organization/3	Regulatory issues (update on newly marketed and renewed medicines in 2010; updates from EAHP; cardiovascular medicines)
Pharmaceutical industry programs	9	European School of Homeopathy and Center of Education and Development of Homeopathy	Drug therapy (multiple module homeopathy courses for pharmacists).
Coaching	1	Individual application	Coaching of students
Total	193		

^{*}FP-Faculty of Pharmacy, Medical University-Sofia; **BADI-Bulgarian Association for Drug Information; ***EAHP-European Association of Hospital Pharmacists

The regional branches of BPhU also took active part in the continued education of the pharmacists, mainly focusing their activities in the area of the updates of Bulgarian and EU pharmaceutical legislation and homeopathy remedies (Table 2).

Another category of the most accredited ones was subcategory "A2" – congresses and symposia. A total of 11 (5.70%) educational events of this subcategory were accredited during the second registration period. This category was dedicated mostly to deontology subjects, regulatory issues, homeopathics, phytomedicines and self-medication (Table 1). The accredited educational events in subcategory "A2" were organized by the BPhU, the Faculty of Pharmacy in Sofia, pharmaceutical distributors and the Association of Hospital Pharmacists. One educational course was organized by the Management Board of the BPhU in relation with the responsibilities of pharmacists with regard to the protection of private data of their patients.

The majority of pharmacists are employed in community pharmacy settings, followed by hospital, industry and academia/regulatory agencies, which corresponds and explains the main subjects chosen for continued education of Bulgarian pharmacists during the second registration period.

For the first time, two regional branches of the BPhU took proactive role in the organization of continuing education events for their members. There were 29 educational events dedicated to drug addiction; food supplements; antiallergy medicines; falsified medicines, update on Bulgarian and EU pharmaceutical legislation and patient management (increasing patient compliance techniques).

DISCUSSION

Our previous publication, which analyzed the educational events of Bulgarian pharmacists, accredited during 2007-2009, revealed that the most frequently chosen educational forms were short seminars and work-shops, performed mainly in bigger university cities. No on-line training was available during the first registration period, although the need for it was clearly recognized and discussed amongst the pharmaceutical society at that time [1]. The current analysis confirms the same tendency but also adds more evidences about the new activities and about the changing preferences of the BPhU.

There are no requirements for minimum credits from live-courses. The current system offers various possibilities for continued professional education. However, Bulgarian pharmacists still prefer live-courses (subcategories "A") and are not very active in other forms of continued education such as on-line courses, publication activities, long-term specializations, etc. Live-time courses are organized in collaboration with academia and local pharmaceutical organizations and follow more or less the marketing activities of pharmaceutical industry. However, the involvement of academia both in the organization and performance of the accredited educational events was significant. The most popular form of continued education during the studied period was educational meetings organized by the BPhU, followed by seminars and qualification courses. On-line educational platform was developed by the Quality Commission and academic staff from the Faculty of Pharmacy, MU-Sofia, but was not used by many pharmacists.

CONCLUSION

The continuing postgraduate education of pharmacists in Bulgaria continues to implement new elements in its program, which allows competence development through individual forms of self-development such as publication activities, delivering presentations, individual training, etc. Still the short courses prevailed in the educational programs accredited during the second registration period, with focus on the new medicinal products.

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