Practice Experiences and Preceptor Behaviours in Pharmacy Education

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Abstract

The aim of this study is to evaluate the significance of the training and mentoring of pharmacy students in order to improve these activities and to establish the adequate objectives in accordance with the changes concerning the concept of modern pharmacy. The study was conducted among pharmacist students enrolled in the introductory practice an online survey using Google Docs® - Create Form extension. The results were analysed, systemised and presented using Microsoft Excel®. The results show that students are aware of the usefulness of the practical stage and the majority appreciated that they were well integrated into pharmacy activity, this being due of preceptors' teaching behaviours. The students considered that the preceptors require specific knowledge (in therapeutic and communication areas), experience (at least three to five years), skills, attitudes and responsibility. Based on the students’ feedback, future actions will focus on the training programmes proposed for preceptors in order to provide them with an opportunity to recognise and assume their role as models for the students.

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1. Introduction

The university curriculum needs to prepare students for a specific work life but some of the specific skills and knowledge are not accounted for in the curricula. Generally, learning at a workplace is more efficient than in a higher education institution setting, due to the fact that the practical training increases students’ understanding of
theoretical knowledge and their motivation to study (Katajavuori, 2006). The significance of practical training as a part of the curriculum – generally, and especially for medicine – is well known and was evaluated (Eraut, 2007; Mamede, 2004; Karimi, 2010). Each faculty is unique in its mission in education but worldwide, as healthcare professionals, the pharmacy students should have high standards of practice. Therefore, the International Pharmaceutical Federation (2009) established a Global Pharmacy Education Task Force and an Action Plan in order to achieve the competencies required in pharmacy practice.

According to the Occupational Outlook Handbook (2012), in the United States, approximately one-fourth of educational time is dedicated to supervised practical training in different pharmacy settings (such as hospitals and retail pharmacies) and pharmacists require practical experience before licensure.

Most European countries require five to six years of study and furthermore, according to an EU directive (EC 2005/36), pharmacy curricula in Europe respects at least six months of practical experience in a community pharmacy. In this context, the concept of partnerships between the faculties of pharmacy and the community of working professionals are promoted due to the fact that the pharmacist students acquired extensive knowledge and abilities during their time at a practical site. Karimi (2010, 2011) described a strategy to implement a “Learning Bridge tool” to improve educational outcomes for pharmacy students as well as for preceptors and faculty members. The key issues to achieve the goal – the student success – should be getting access to workplace learning opportunities and finding dedicated mentors. But the preceptors also require knowledge, skills and experience in order to help students identify their learning needs and develop their competencies for practice. The pharmacist preceptors have the responsibility to create the appropriate environment for providing practical experiences and to develop strategies for engaging the students with real pharmacy activities.

Several papers review the role of the pharmacist preceptor in facilitating development of communication skills for students participating in community pharmacy practice experiences. Hammer (2006) defines professionalism in the context of contemporary pharmacy practice and suggests strategies for preceptors to facilitate the professionalism of the student by working with the individual student's background. Other authors provide strategies for incorporating communication and collaboration in patient care activities using the “see one, do one, teach one” method (McDonough and Bennett, 2006). The non-difference in learning opportunity outcomes but the significant difference in skills and attitudes acquired by students during their practical stage was reported (Kassam, 2008), together with factors that may affect the results: preceptor gender; age; type of practice site and; alumni status (Umland, 2002). The survey of pharmacy preceptors regarding experiential education (Skrabal, 2008) was completed by determining whether the differences relating to factors such as geographic region, practice setting and population density could affect experiential education (Skrabal, 2010). In the same area, Assemi (2011) surveyed the schools’ volunteer preceptors to identify their training needs and desires and proposed continuing professional development programmes.

Even if there are no published studies regarding the significance of internships in the professional development of student pharmacists in Romania and there is no national programme for preceptors’ accreditation, the interest in this curriculum area and the need for quality standards are present.

The aim of this study was to identify the significance of practical training for the pharmacist students and to evaluate the quality of the student placement programme in terms of the role modelling of their mentors.

2. Materials and method

The study was undertaken in two stages. The first stage involved analysing documents regarding the status of current pharmacy practice and the second stage focused on defining the profile of preceptors as models for future pharmacists based on students’ feedback. The survey was an online questionnaire, made and distributed via Google Docs® - Create Form extension and was structured on several levels: learning opportunities; learning climate; preceptor support and; preceptors’ skills and attitude. The questionnaire was completed by 534 students between September and October 2011, respectively 2012, following their introductory training experiences.
Student participation was voluntary and all were informed that the questionnaires were anonymous and that they would not affect their grades. All results were accumulated and computed using Microsoft Excel.

3. Results and discussion

The structured practice education programme at the faculties of pharmacy in Romania is based on a process that involves faculty members and pharmacy preceptors, although there is not a national programme to facilitate accreditation standards for preceptors.

Generally, the practical education programme at the faculties of pharmacy is based on the protocol signed by members of the Faculty and the Professional Association of the Romanian Pharmacists (at local level) and on existing communication between faculty members and preceptors. Although national or regional data concerning volunteer preceptors has not been published and their workloads have not been well established, the faculty makes efforts to assure the quality standards for student and preceptor development. The professional practical stage is organised as follows: the introductory pharmaceutical practice experience (IPPE) that takes place during the summer vacation (two weeks, for the first to third years); the orientation practical in industrial or laboratory settings (two weeks, for the fourth year) and; advanced pharmaceutical practice experience (APPE) that consists of spending six months at different community practice sites from university centre.

In the last decade, several requirements for the accreditation of preceptors had been proposed the and the pharmacists were receptive in participating in a special development programme. But the programme had two limits: it enrolled only the volunteer pharmacists from university centre and the programme had no resources for continuing in accordance with the pharmacists’ mobility and with the increasing number of students. That is why, at present, only a few pharmacists have preceptor certification. Moreover, for IPPE, students can perform this practice in their home villages (across the country) and the majority of pharmacist tutors volunteer and are accepted without specific training. The preceptors receive continuous pharmacy education credit free of charge for this activity but this is applicable only for the APPE preceptors from the university centers. Practice site visits (by academic staff), as an important aspect to ongoing preceptor development and to ensure the communication and the quality of practice experiences (Vos, 2012) are also applicable only for the pharmacies from the university centre.

![Fig.1. Effective participation of students in specific activities](image-url)
The second stage of the study investigates the role of pharmacist tutors in order to define the profile of preceptors and to identify the required standards. The study was conducted on 534 students (representing 62% of all students enrolled on the study years II, III and IV during 2010-2011 and 2011-2012. Twenty-five percent of the students carried out their practical stage in the university centre and 75% chose another location for their internship (of which 20% were in rural areas). Ninety-seven percent of the students performed internships in community pharmacies and only 3% in a hospital pharmacy. This distribution could be correlated with the opportunities available to students to interact the specific knowledge, skills and attitudes required in pharmaceutical practice. Thus, the students’ main responsibilities were different (Fig. 1): starting with reception, arrangement and storage of pharmaceutical products (for the students enrolled in their first internship), up to working with receipts and providing medicine and healthcare products.

These activities are in accordance with general learning objectives but not always with the appropriate curricula (corresponding to the year of study). Students, being trained especially in routine activities (62%) that do not involve great responsibility, indicate that the preceptors do not assume their mission of training. The students cannot improve their skills just by observing; they must participate and the mentors should encourage them to engage in the practice.

Most of the students appreciated that they were well integrated (Fig. 2a) and correlated this achievement not with their theoretical knowledge gained in the faculty until the graduation year (32%) but mainly with the pharmacists’ performance as tutors. Preceptors have different teaching-learning styles (Vos, 2012). Using a 5-point scale (5 = exceptional; 4 = above average; 3 = average; 2 = below average; 1 = not at all), students most appreciated the pharmacist’s interest in mentoring activities (‘exceptional’ for 37%) and their ability to transmit information (‘exceptional’ for 33%; ‘very good’ for 34%) (Fig. 2b).

The students also placed importance on the preceptor’s ability to provide appropriate and constructive feedback and the encouragement of students to evaluate their own performance. Generally, the students considered that the role of tutor requires three to five years of professional experience.
Based on the presented results, we intend to implement a new preceptor development programme (first as a regional pilot programme). Various educational methods, such as courses on a specific practice-based teaching skill, workshops, online modules and printed documents will be elaborated and will be used for the future development and training of preceptors.

4. Conclusions

The ability of the future pharmacists to develop and to adapt their competencies depends on the experience gained by students during the internship activity. The structured practice education programme at the Faculties of Pharmacy in Romania is based on a process involving faculty members and volunteer preceptors, although there is no national programme to facilitate accreditation standards for preceptors. Students’ feedback shows that the success of their practical experience depends, first of all, on preceptors’ teaching behaviours. Most students are satisfied with their preceptors’ teaching skills but future training programmes for preceptors are required in order for preceptors to recognise and assume their role as models for the students.

References


