

The Postgraduate Community Pharmacy Education System: Commentary on the Swiss System

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ABSTRACT

Postgraduate education is recognized to improve communication and clinical skills and to have a positive impact on pharmacists' professional activities and responsibilities. The purpose of this commentary is to present the Swiss postgraduate education model. In Switzerland, since 2018, an authorization to practice independently requires completion of a Federal Specialized Postgraduate Diploma (FSPD). A motivating factor for pharmacists to complete the FSPD is to be authorized to bear more professional responsibilities and to support their career development. The FSPD has contributed to value pharmacists through training to support their role within the healthcare system. These advances have been officially recognized, for example, federal laws were revised in 2019 to allow pharmacists prescribing a certain list of medicines and a scheme was proposed to integrate community pharmacists in the National Vaccination Strategy. Negative impacts related to the training are in relation to its costs that are mostly covered by the trainee pharmacists and/or through a reduction on his/her salary. The increase in the magnitude of participants in postgraduate education since 2018 shows that an external constraint (change in the legislation) acts as a major driver. The Swiss postgraduate model which also includes the linking of clinical practice and accredited trainings through a competency framework whilst meeting the needs of the trainee pharmacists and pharmacies, may serve as example to other countries. However, the impact on participating pharmacists and on the distribution of roles and responsibilities within the community pharmacies' teams should be evaluated.

Keywords: Community pharmacy, Postgraduate Education, Education Requirements, Competency-Based Education, Legislation, Pharmacy.

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INTRODUCTION

In Switzerland, to become a licensed pharmacist, it is necessary to complete three years of a Bachelor's degree followed by two years of a master's program. Afterwards, the majority of graduates will take the Federal Pharmacy Exam (FPE) which is mandatory to become licensed to practice as a community pharmacist.

The law in relation to health is governed by each of the 26 Swiss cantons (the terminology used to describe a state of the Swiss Confederation), except where federal law presides. Hence, following successful completion of the FPE, community pharmacists require authorization at a cantonal level to practice.

Until 2018, two years of practical experience under supervision allowed community pharmacists to ask for an authorization to practice independently (i.e. to be the responsible pharmacist). Since then, such an authorization requires completion of a Federal Specialized Postgraduate Diploma (FSPD) which is completed post-licensing. However, it is still possible to practice as a pharmacist without having completed the FSPD, but only under the supervision of a pharmacist holding this title and with limitations in the pharmacist's professional responsibilities. The purpose of this commentary is to present the Swiss postgraduate education model, its impact on pharmacists and its link with the evolution of the role of community pharmacists within the healthcare system.

Federal specialized postgraduate diploma in community pharmacy

The FSPD exists separately for community pharmacists and hospital pharmacists since the early 2000s. In community



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pharmacy, approximately 20 people per year registered to complete this training until 2018. By then, the FSPD was not recognized by the federal authorities and it was delivered by pharmaSuisse (National Pharmacy Association). In 2018, the FSPD was recognized and is now delivered by the Swiss Health Authority. The law regarding healthcare professionals changed in which a FSPD became mandatory for community pharmacists to practice independently. Since 2018, 1075 pharmacists have registered to complete the FSPD.¹ Consequently, more community pharmacists are completing the FSPD and earlier in their career. The International Pharmaceutical Federation (FIP) has created 21 development goals to help advance the pharmacy profession. These goals are a key resource in providing support and guidance to achieve this central objective.² The development of the FSPD is an illustration of the implementation of the “FIP Development Goal 2: Early career training strategy” that aims to provide training in the “early post-registration (post-licensing) years [...] as a basis for consolidating initial education and training and progressing the novice workforce towards advanced practice”³ Postgraduate education is recognized to improve communication and clinical skills and to have a positive impact on pharmacists’ professional activities and responsibilities.^{4,5} A motivating factor for Swiss community pharmacists to complete the FSPD is probably to be authorized to bear more professional responsibilities and to support their career development. However, this may not be sufficient motivation to invest time and money in such a training; the huge increase in the magnitude of participants in Switzerland shows that an external constraint (change in the legislation) acts as a major driver.

Similarly, the evolution in the role of the community pharmacists and increasing interest in postgraduate trainings can be seen in other countries such USA. In USA there has been a growth in community residency accredited programs and positions over the years. An estimated 218 accredited pharmacy residency programs postgraduate year 1 in 2019⁶ compared with 73 programs in 2010.⁷

Development and organization of the federal specialized postgraduate diploma in community pharmacy

In 2018, the Swiss postgraduate training program was revised in order to update its content and format to ensure the program responded to changes in the scope of practice and the evolution of the profession.⁸ This included the positioning of the community pharmacists as primary care providers within the healthcare team by developing their expertise. Table 1 includes the main characteristics related to the current FSPD program. One of these characteristics is that the Swiss FSPD is solely undertaken in community pharmacies, in contrast to other countries who also include postgraduate programs hospital outpatient pharmacies or qualified health care centers.⁶ In fact, any pharmacist can apply to the postgraduate training once the pharmacy and mentor meet the necessary requirements.

Before this revision, the FSPD consisted mainly of courses focused on theoretical knowledge integrated into a homogeneous but rigid curriculum. Nowadays, the FSPD is developed and organized outside academic institutions. Trainings are offered by a wide variety of providers, from private organizations to academic institutions and are accredited by an independent body who is responsible on behalf of the Federal Health Authority to ensure that trainings conform to the FSPD requirements. Currently, there is a greater focus on practical education and the program is achieved through a combination of professional activities while working in an accredited pharmacy (evaluated and accredited by a dedicated pharmacist mentor) and the completion of the required competences across seven different areas of expertise. These seven roles and key competencies for community pharmacists are: pharmaceutical expert, communicator, inter professional partner, scientist and teacher, manager, professional

Table 1: Program Characteristics of the Federal Specialized Postgraduate Diploma in Switzerland.⁸

Program Characteristics	Federal Specialized Postgraduate Diploma
Responsible body	FPH Officine ^a
Competency structure	Structured on 7 independently weighted roles (see Table 1), completion can be individualized to the trainees needs.
Application	Open to all licensed pharmacists provided mentor and training site requirements are fulfilled.
Cost (to the trainee) ^b	Fixed administrative fee: ~6,000-9,000 CHF (~ USD6,420-9,630) Direct training costs: 7,000-35,000 CHF ^c (~ USD7,490-37,450).
Site setting	Community pharmacy only.
Number of training sites	Single site only.
Duration	2-5 years.
Completion as a legal requirement to practice independently	Yes, since 2018.
Final exam	Yes
Additional specific training criteria	A minimum of 2 years full time practice Completion of 100 days of training activities, or equivalent, of which 40 can be autonomous learning. Defined required number of days to be completed for each role.

^aFPH represents the Latin abbreviation for *Foederatio Pharmaceutica Helvetiae* (Swiss pharmaceutical federation).^bEstimated costs in Swiss francs (CHF) provided in USD (United States Dollars) according to rate on the 09.12.2022 (1CHF=1.07USD).

Table 2: Description of key competencies required for the Federal Specialized Postgraduate Diploma (FSPD) in Switzerland.⁹

Area of expertise	Description of the competency.
Pharmaceutical expert	Expert on medicine to society (patients and other healthcare professionals): medicines supply, compounding, clinical pharmacy, etc.
Communicator	Ensures tact and empathy when communicating and transmits one's recommendations and assessments accurately and appropriately to the situation and to the recipient.
Inter-professional partner	Act as an inter-professional partner and actively collaborate, maintain and synergize with other healthcare professionals to deliver optimal patient care.
Scientist and teacher	Provide education and support to the pharmacy team, including continued development of one's own professional education.
Health Advisor	Ensure necessary measures for prevention, health promotion and improvement of therapeutic adherence. Promote patient health competence while providing, interpreting and objectifying health information.
Manager	Assume responsibility for the economic management of a pharmacy, management of a team and development of the pharmacy.
Professional Role Model	Reliable and trustworthy specialist. Takes responsibility for one's actions and is subject to the duty of care and professional secrecy. Advises and treats patients according to current scientific guidelines, pharmacy quality standards, and ethical and political principles and conventions.

role model and health advisor;⁹ its descriptions are included in Table 2. They are in line with a number of the FIP development goals (e.g., leadership development, working with others and medicines expertise).²

The coordination of the development of postgraduate education and professional policy is probably easier in small countries like Switzerland where a single independent body is responsible for the FSPD. In addition, it has been able to work closely with the national association since they share the same facilities. Furthermore, it is feasible to accommodate all prospective

trainees as minimum requirements for pharmacist mentor and accredited pharmacy are necessary to undertake the FSPD.

Influence on the role of community pharmacists in the health system

The transformation of the FSPD into a title delivered by the health authority and the increasing number of pharmacists undertaking this postgraduate training is an example of a FIP development mechanism "systematic use of professional recognition programs, systems and frameworks as markers for advancement and specialization across the workforce" described in the "FIP Development Goal 4: Advanced practice and specialization".² A previous similar strategy including the postgraduate training to advance and specialize community pharmacists was successfully applied in Switzerland (e.g., vaccination to support a proposed scheme that integrated community pharmacists in the National Vaccination Strategy).^{10,11}

The FSPD has contributed to value community pharmacists through training to support their role within the healthcare system, and in turn, these advances were officially recognized. In 2016, a federal report outlined what tasks pharmacists could undertake and their position in basic health care,¹² such as chronic patients follow up (e.g., research studies to increase adherence in diabetic patients) or pharmacists prescribing for minor ailments. In 2019, one year after the FSPD became a title delivered by the health authority, federal laws were revised to allow pharmacists prescribing and to improve patient access to therapeutic products through pharmacies.¹³ Pharmacists with an authorization to practice independently (e.g., holding an FSPD) could now prescribe certain medications for health problems such as migraine, urogenital disorders or diseases of the digestive tract. These developments are examples of the "FIP Development Goal 4" that aims to "ensure competency and capability of an advanced and expert pharmacist in all sectors for greater optimization of complex pharmaceutical patient care, including prescribing roles".²

Influence on the early career path of community pharmacists

The change in the legislation provided credibility for the FSPD and also helped to involve pharmacists in the evolution of their role within the healthcare team. In addition, there has been a big shift in the mindset of pharmacists without the FSPD to complete it due to career opportunities (for the new competencies acquire), competition for employment (some pharmacies, such as those with small teams, will only employ pharmacists who can work under their own responsibility) and the presence of certain limitations in the day-to-day responsibilities of the pharmacists (new clinical roles to be carried out, i.e. vaccination or prescribing). These limitations are determined by each canton, e.g., the pharmacists without an FSPD may not be allowed to work as a sole pharmacist in a community pharmacy.

Major negative impacts related to the training are in relation to its costs that are in the range of CHF 7,000 and CHF 35,000 (~USD 7,490-37,450). These costs cover for events or accompanied practical work, which are determined and charged by the postgraduate course organizers, adding fixed administrative fees (Table 1). These quantities can vary greatly since the specific trainings or learning events can be tailored to meet the trainees and pharmacies needs. Hence, trainee pharmacist can choose in terms of events, practical work and/or self-study to achieve the postgraduate objectives set. There is no obligation for the employers to provide or reimburse trainings, although, some will contribute to trainings they find valuable for the pharmacy and the participant in order to attract potential candidates. Employers can partly contribute to the training costs and/or compensate by offering time off. However, costs are mostly directly covered by the trainee pharmacist and/or through a salary reduction. Although, when the trainee pharmacist achieves the FSPD and become responsible pharmacist, his/her salary may increase approximately CHF 30,000 to CHF 40,000 (~USD 32,100-42,800) per year.

It always remains an option to practice under supervision of other pharmacists with the FSPD. However, this may not be a good option for employers, especially those with a small team. Completing the FSPD appears to be more relevant in recent years due the change in legislation, in fact, there is an increase in graduates trying to complete their FSPD earlier in their career. Some pharmacies (e.g., big pharmacy chains) are creating positions that offer more in terms of support and resources for a postgraduate trainee. However, this is usually coupled with special conditions added to the employment contract, such as a lower salary or conditional repayment clauses. The impact on the career path of Swiss pharmacists will need to be evaluated in the future. It will also be necessary to evaluate whether the credentialing process and elevated level of practice of community pharmacists would affect the usual business model of community pharmacies that mostly rely on dispensing medications. Indeed, the increased number of pharmacists doing advanced care may mean less pharmacists verifying and dispensing medicines. The current revision of the training and role of pharmacy technicians in Switzerland is seen as a way to overcome this.¹⁴

CONCLUSION

The change in legislation in 2018 had an important role in the increasing number of pharmacists holding and preparing a FSPD. This opens political opportunities for the future scope of practice for community pharmacists in Switzerland.¹⁵ The majority of the effort is carried out by the trainee pharmacists that are required to complete the FSPD in order to be allowed to practice independently and they are instrumental to the continued progression of the role of pharmacists. As these changes

are relatively recent, the full potential and influence on the development of the role and career of the community pharmacist within the healthcare team will need to be evaluated in the future.

The Swiss model that includes the changes in the legislation, the linking of clinical practice and accredited trainings through a competency framework whilst meeting the needs of the trainee pharmacists and pharmacies may serve as example to other countries. However, the impact, notably financial, on trainees and on the distribution of roles and responsibilities within the community pharmacies teams should be evaluated.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

ABBREVIATIONS

CHF: Swiss francs; **FIP:** International Pharmaceutical Federation; **FPE:** Federal pharmacy exam; **FPH:** Foederatio Pharmaceutica Helvetiae (Swiss pharmaceutical federation); **FSPD:** Federal Specialized Postgraduate Diploma; **USD:** United States Dollars.

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