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Preceptors' Need for Support in Tutoring Pharmacy Students in Finnish Community Pharmacies

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ABSTRACT

A pharmacy degree in Finland includes a six-month obligatory internship. The internship is integrated with theoretical studies and adds up to 30 European Credit Transfer and Accumulation System (ECTS) credits of the BSc (Pharm) degree. Learning is supported by reflective assignments from the university. The preceptors have an important role in organizing the internship and tutoring students successfully in community pharmacy settings.

Objective: to assess whether the preceptors of University of Helsinki's teaching pharmacies need pedagogic support in tutoring and if so, in which core pharmaceutical tasks or tutoring skills.

Methods: The survey was sent to all preceptors of University of Helsinki's teaching pharmacies (n=326) in 2011 (response rate 58%, n=190). The data was analyzed statistically using Excel (version 12.3.6). The open-ended questions were analyzed by qualitative content analysis.

Results: The majority of preceptors found their skills in tutoring the students mainly good. However, assessment of learning (27% of the respondents), giving feedback (23%) and organizing the learning situations supportive for learning (23%) were the areas in which the preceptors mostly indicated a need for support. Teaching current care guidelines and pharmaceutical care (36%) and multi-professional collaboration (28%) were the areas in which the preceptors expressed that they needed to update their skills.

Conclusions: The faculty should focus the support on the pedagogic skills of preceptors, particularly in improving their skills in assessment of learning and in reflective dialogue. In addition, their skills in teaching clinical and patient care aspects of pharmacy practice should be enhanced.

Keywords: preceptor, internship, teaching pharmacy

INTRODUCTION

Internships in community and hospital pharmacies play an important role in pharmacy education.¹⁻² Preceptors are in a key position to organize the internship and tutoring of students in community and hospital pharmacy settings. This role requires the preceptors to have excellent pharmaceutical competence and to assess their own work as pharmacists from a pedagogic perspective. Although they are placed in community or hospital pharmacies or hospital wards, the preceptors can be considered members of the university's teaching staff.

Learning during internship can be formal or informal.³⁻⁴ Prior to the internship, students have acquired formal knowledge at the university about pharmacy practices. During the internship, the tacit knowledge of the work community completes their knowledge and skills.⁵ At the same time, students can refresh the working community's knowledge in

teaching pharmacies, as learning during internships is designed to be an interactive process. The way the teaching is planned and executed during the internship is dependent on the skills of the preceptors. Preceptor ability is connected to the extent that students learn to apply theory to practice in vital tasks, such as medication counseling, medication review and pharmacy management. The pedagogic planning of the internship also has an effect on the degree to which the teaching pharmacies can utilize the students' knowledge and skills taught through the university.

Although internships are an important part of pharmacy education,² few studies have focused on the preceptors' skills in organizing learning during internships. To our knowledge, only two previous studies, conducted in United States⁶ and Qatar,⁷ have evaluated the preceptors' confidence in their own performance in being a preceptor. Both studies were surveys applying structured Likert-scale statements (3- or 5-point scale).⁶⁻⁷ Some studies have explored pharmacists' attitudes towards being a preceptor,⁸⁻⁹ and the preceptors' perceptions regarding a new undergraduate pharmacy degree.¹⁰ Tools that support preceptors' work, such as experiential guidelines,¹¹ the use of the social media by the pharmacy preceptors¹² and the optimal frequency of quality assurance visits in teaching pharmacies¹³ have also been studied previously. A study from Australia evaluated a preceptors' online education program showing its strengths.¹⁴

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Also, the students' perceptions¹⁵⁻¹⁶ and pharmacy schools' evaluations¹⁷ of preceptors' performance has been examined. Studies from Sweden⁴, Denmark¹⁸ and the United States¹⁹ have evaluated students' learning during internships, using Situated Learning theory⁵ as a theoretical framework. The Swedish study⁴ revealed that social factors, including formally educated tutors, are important for learning reflection, whereas individual characteristics are not so important. Other Scandinavian studies from Denmark dealt with: 1) pharmacy students' involvement in a research project on drug-related problems during their internship,²⁰ and 2) a cooperative project between the university and internship pharmacies.²¹ The aim of this study was to add to knowledge by determining whether the preceptors in teaching community pharmacies in Finland need academic support in tutoring and if so, in which core pharmaceutical tasks and tutoring skills.

Internships in Finland

Unlike other European Union (EU) countries, Finland has adopted a two tier training model for pharmacists consisting of B.Sc. and M.Sc. degrees, which is in line with the Bologna Declaration harmonizing structures of the European university degrees.²²⁻²³ The Bachelor's degree consists of 180 European Credit Transfer and Accumulation System (ECTS) credits and it takes three years to complete. The Master's degree takes an additional two years to complete (total 300 ECTS credits).²⁴ Learning objectives of both degrees take into account that the majority of B.Sc. level pharmacists work in community pharmacies, being responsible for dispensing, customer service and patient counseling. M.Sc. level pharmacists mostly work as managers or leaders and in positions requiring advanced pharmaceutical expertise. The B.Sc.(Pharm.) curriculum is organized as strands at the University of Helsinki²⁵ and the curriculum emphasizes more social, behavioral and administrative sciences compared to curricula in Denmark, United States or India, from which comparative data is available.²⁶ Finnish programs also have a higher proportion of electives than the curricula in the above mentioned countries.

As required by the EU Directive 2005/36/EC, the pharmacy degree in Finland includes a six-month obligatory internship (30 ECTS credits), which is integrated with theoretical studies.²⁷ The internship can be taken in a community pharmacy (minimum 3 months/15 ECTS credits), or in a hospital under the supervision of that hospital's pharmaceutical department (maximum 3 months/15 credits).¹ In other EU countries, the internship is typically scheduled at the end of the M.Sc. studies (4th or 5th year of the studies). However, in Finland the internship is divided into two 3-month periods, one at the end of the second year and one during the spring semester of the third year. Core content and learning objectives have been set for both of the

internship periods and the requirements are the same for bachelor and master's degree students. The internship is based on a personal learning plan that the student creates with the preceptor at the beginning of the internship period. It also includes feedback conversations in the middle and at the end of the internship. The recruitment of students is voluntary and no compensation is paid to the teaching pharmacies or the individual preceptors. Teaching pharmacies pay a salary to the students during the internship (about 1 000 Euro per month).²⁷

According to the University's requirements, each teaching pharmacy must have one master level pharmacist named as the responsible preceptor. Other members of the personnel are highly recommended to participate in tutoring the students.²⁸ Work as a preceptor requires pedagogic skills. Preceptors are expected to take the instructor's role in carrying out the internship and assuring that the learning objectives are reached. The University of Helsinki provides several tools for preceptors to support their work in teaching pharmacies. Education (Orientation day and Consultation day) is arranged annually in collaboration with other pharmacy schools in Finland. In addition University of Helsinki provides consultation and written materials, such as The internship workbooks²⁹, The Handbook for Preceptors²³ and Faculty's website²⁵. The internship workbooks²⁹ contain reflective assignments of key pharmaceutical areas and they are updated annually. They have been designed to support students' learning, but they also give the preceptors information on the pharmaceutical tasks and general skills that students should be introduced during the internship. Many of the learning assignments are reviewed in the teaching pharmacy, though some are reviewed at the university. Students' feedback of the internship is collected systematically every year in the interactive feedback sessions at the university and also by using a web-based survey (e-Lomake by Eduix Oy, Tampere, Finland).

METHODS

Study Design

The study was conducted as a cross-sectional survey with a structured instrument, including space for open comments to elaborate responses (See Additional Files). The survey instrument was originally in Finnish (See Additional Files) and was based on the internship workbooks (core pharmaceutical tasks to be included in the internship periods)²⁹ and the Handbook for Preceptors.²⁸ The Handbook for Preceptors is published by the National Pharmacy Internship Coordination group and it contains learning objectives and practical instructions to assist in organizing the internship in a pharmacy. In addition to these materials, two Finnish pharmacy internship experts were interviewed for survey instrument development. The experts were pharmacy professionals, who had extensive experience in organizing

and coordinating internship periods and tutoring pharmacy students in community pharmacy. The experts had an understanding of experiential learning and theoretical frameworks. One of them had a university perspective and the other had a community pharmacy perspective.

The survey instrument was pilot tested for face-validity³⁰ with a convenience sample (n=6) of pharmacists or pharmacy owners who had a long experience as preceptors or in developing the pharmacy internship. The pilot test revealed that a few of the questions needed minor modification to be understood correctly and a few of the questions were excluded to reduce the number of questions. However, none of the essential questions regarding the study objects, content of the internship, organizing the internship and tutoring the students in community pharmacy setting were omitted. The pilot responses were not included in the survey data.

The final survey instrument included 13 multiple choice and 10 open-ended questions (See Additional Files). The principal themes of the survey instrument were: working as a preceptor, teaching pharmacy students and tools that support the internship. After each multiple choice question there was space for additional comments. The estimated time to complete the survey was 15–35 minutes.

Data Collection

The survey was first sent by email (e-Lomake by Eduix Oy, Tampere, Finland) in November 2010 to all preceptors who were tutoring University of Helsinki's pharmacy students, i.e., had recent tutoring experience (n=135). Hospital pharmacies were excluded because hospital pharmacy internships have separate learning objectives and assignments and the results would not be applicable to this study.

In order to increase the response rate and the coverage of the study, the survey was resent in April 2011 by mail to all preceptors of University of Helsinki's teaching community pharmacies (n=326). In the cover letter the preceptors were asked to ignore the mail survey, if they already had responded to the web-based survey.

One follow-up reminder with a copy of the survey was sent one week after the deadline for response to the mail survey. Participation in the survey was voluntary, anonymous and no compensation was given.

There is no need for ethical review from Finnish Advisory Board on Research Integrity because the risk for negative effects is minimal in studies like this survey.³¹ It was stated in the survey cover letter that research results would be

reported in such a way that the identity of the respondents could not be established.

Analysis of Data

The study contained both quantitative and qualitative data. The quantitative data were analyzed statistically using Microsoft Excel (version 12.3.6). Missing responses were combined with "I do not need any support" –responses because the aim of this study was to determine the areas in which academic support was clearly indicated to be needed. In order to assess generalizability of the results, characteristics of the responding preceptors were compared to those of all preceptors of the University of Helsinki's teaching community pharmacies in terms of region of location and size of the pharmacy (i.e. annual prescription volume).

For the qualitative analysis, two researchers analyzed the open-ended questions and comments (See: Additional Files; questions 8 and 9) separately by using inductive qualitative content analysis. First, all the responses to open-ended questions were repeatedly read by the two researchers. Then a set of key themes were established and the number of instances that fall into each key theme were counted.³² The results of the two researchers' analyses were compared and differences in interpretation were resolved through discussion. The comments (n=20) were analyzed with a focus on the content related to the development of the internship program (See: Additional Files; questions 8 and 9). The most common themes from responses to the open-ended questions concerning need for university support for tutoring and teaching pharmaceutical competency areas are reported in Tables 2 and 3.

RESULTS

One hundred and ninety preceptors responded (overall response rate 58%). More than half (56%) of the respondents had at least five years' experience as a preceptor and 64% of respondents indicated that the number of supervised students per preceptor was less than five (Table 1). Almost two-thirds (62%) of the respondents had been precepting students during the year of the survey or year immediately before it. Most of the respondents (84%) worked in Southern or Western Finland, which is similar to the overall geographical location of University of Helsinki's teaching community pharmacies.

Over 60% of respondents in all categories answered that they did not need additional support from the university (Figure 1). However, assessment of learning (27%), giving feedback (23%), organizing the learning situations (23%) and environment (22%) and setting the internship goals (21%) were the areas in which more respondents indicated a need for support.

Teaching current care guidelines and pharmaceutical care (36%) and multi-professional collaboration arrangements (28%) were the areas in which the respondents reported that they needed to update their skills most in teaching the core content of the pharmaceutical tasks during the internship (Figure 2).

Almost one-fourth (23%) of the respondents who had answered an open-ended question concerning current care guidelines and pharmaceutical care and indicated a need for updating their own skills (Table 2). The majority of respondent who had commented multi-professional collaboration desired examples and ideas from their colleagues.

The majority (38%) of the respondents who answered the open-ended question concerning the assessment of learning (n=29) wanted to receive more accurate tutoring instructions and concrete guidelines (Table 3).

Giving feedback was also one of the most important areas where support was needed (Table 3). The majority of the respondents (39%) who answered the open-ended question (n=22) wrote in their answers that in particular, giving constructive feedback was difficult but they did not suggest any way to improve in this area (Table 3).

Almost all (94%) of the responding preceptors had developed their own skills through work (Figure 3). The majority (85%) of them had also familiarized themselves with the Handbook for Preceptors.²⁸ Almost a fifth (18%) of the respondents mentioned that they had developed their skills in other ways. These included, for example, updating professional competence through long-term continuing education (comprehensive medication review³³), pharmacy specialization studies PD (professional development) and a special qualification in management and leadership (JET [Johtamisen erikoisammattitutkinto] arranged by Institute of Marketing).

The survey contained an open-ended question regarding tools that support the internship. The responses contained many concrete ideas of how to make pharmacy internships easier to manage for the preceptors, including more accurate instructions and assignments for: setting goals for the internship period, following up on reaching the goals and making a personal study plan (Table 4). Almost a fifth of the respondents (19%) hoped that the internship workbook would be made more structured with tables or teaching outlines.

DISCUSSION

Although a number of the respondents indicated confidence in their ability to work as a preceptor, areas for action were

also identified. The results indicated a need for additional support for teaching multi-professional collaboration and applied knowledge of current care guidelines. Results also indicated the desire for more support in pedagogic skills, such as assessment of learning, giving feedback and organizing learning situations supportive for learning. These aspects were emphasized both in structured responses and open comments, reinforcing their importance in teaching community pharmacies.

These results are in line with the findings of previous studies on community pharmacy internships assessing preceptors' skills and the need for further preparation for the teaching tasks.⁶⁻⁷ Particularly valuable is Wallman's doctoral dissertation⁴ from Sweden, which discussed the importance of preceptors' additional education and suggested introducing some kind of certification for preceptors/tutors, making the introductory tutor training mandatory. A number of our respondents expressed the desire for mandatory training for becoming a preceptor.

The results also indicated a need for additional support for teaching multi-professional collaboration and applied knowledge of current care guidelines. Patient care oriented services are not yet routinely provided in Finnish community pharmacies, which makes it demanding for preceptors to teach them to students. Pharmacy practice is expected to extend towards clinical services, such as clinical medication reviews, follow up of long-term drug therapies and monitoring expected outcomes.³³⁻³⁸ Internships play a major role in developing the competences needed. The university could support these skills, for example, by adding more assignments related to these subjects into students' workbooks.²⁴

Further research should be focused on this area to determine methods for teaching competencies related to clinical and patient care services in community pharmacies during internship and preparation of preceptors to take on that teaching responsibility. In Finland, initial work is underway. Our faculty has changed the learning objectives of the internship towards patient-oriented care. The reformed internship program is currently in the pilot phase with about 160 students and feedback will be available by the end of this year to guide further development.

The data also indicate that multi-professional collaboration may still have a marginal role and importance in daily practice in many teaching community pharmacies, although it is one of the most important medicine policy goals in Finland and its significance is increasing.^{33, 39-40} It also seems that the term multi-professional collaboration was understood in many different ways. Some responses indicated that the term covers only comprehensive medication review,³³ which is not

provided by all of the teaching pharmacies, while some responses indicated that it also covers daily routines (e.g., collaboration with home medical care and renewing of prescriptions).

Using the respondents' feedback, it might be useful to focus the pharmacy school's support on increasing preceptors' pedagogical skills. No pedagogical studies are included in the basic pharmacy curriculum in most of the pharmacy schools, including the University of Helsinki. Even though many pharmacy schools currently apply a constructivist learning approach and active learning methods, at the time of the studies of many of the respondents, active learning were rarely used and learning was merely based on a behavioristic approach. In addition to teaching students, understanding principles of a constructivist approach would be useful in pharmacy management, in-house training and development of patient-oriented services based on empowerment. The workbooks are essential pedagogic tools in the pharmacy internship. In further studies, it would be important to assess how well their pedagogic importance has been understood in teaching pharmacies and to what extent workbooks are utilized as a teaching aid.

Not nearly all of the tools provided by the faculty of pharmacy have yet to be utilized fully by the preceptors. For example, not even half of the respondents had participated in the teaching pharmacies' orientation and consultation days arranged annually by the university. One reason for the low participation is that some of the preceptors had been working as a preceptor for less than a year. In addition, the geographical location and distance of the pharmacy from the university complicates the participation of many of the preceptors. Related to this, some respondents indicated that online training should be provided for the preceptors and that the materials and handouts of the consultation days should be made available, e.g., via the Internet. Some reports in the international literature describe experiences of web-based training (e.g. Dalton¹⁴). These reports can provide useful insights for enhancing web-based networking and training of preceptors.

STUDY LIMITATIONS

Overall, the response rate of this survey was 58%, which is adequate for mail surveys and good for email surveys⁴¹ The respondents represented the University's teaching pharmacies in terms of geographic location and size of the pharmacy. Almost two-thirds (62%) of the respondents had been precepting recently (i.e., year of the survey or the immediate year before it) and 37% had experience in precepting at least five students. Thus, these respondents had a good understanding on the content and learning objectives of the internship program and had a recent personal experience of carrying out the program in their own

workplace. This increases their ability to reflect and provide feedback. However, all of the teaching pharmacies do not have students in internships every year. This may have influenced the response rate and the results of the study, if the pharmacy had not been actively involved in teaching students during the time of the survey or just prior to it. It is also possible that some of the preceptors considered the survey instrument too time-consuming and decided not to complete it.

Responses were based on self-estimation, which may lead the respondents to under- or overestimate their skills and competences as preceptors. According to the Kruger-Dunning Effect,⁴²⁻⁴³ the persons that do not master their work have a tendency to overestimate their skills. These limitations in self-estimation were at least partly compensated by combining qualitative and quantitative approaches in this study. Qualitative responses to open-ended questions gave more comprehensive understanding of the respondents' perceptions, experiences, expectations and development ideas, increasing the reliability of the findings.

CONCLUSION

Even though many of the preceptors of University of Helsinki's teaching pharmacies had strong confidence in their skills in tutoring pharmacy students, the faculty should focus additional support on pedagogic skills of preceptors, particularly improving their skills in assessment of learning and in reflective dialogue. Furthermore, preceptors' skills in teaching clinical and patient care aspects of pharmacy practice should be enhanced. Further research should be focused on this area to determine methods for teaching competencies related to clinical and patient care services in community pharmacies and also preparation of preceptors to take on that teaching responsibility.

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Table 1. Characteristics of the Respondents (n=190)

Variable	n	%
Years of experience as a preceptor		
<1 year	17	9
1-4 years	67	35
≥5 years	106	56
Experience in precepting		
<5 students	109	64
5-10 students	37	22
>10 students	25	15
Precepting in 2010 or 2011 (i.e., year of the survey or immediate year before it)		
Yes	118	62
No	72	38
Region*		
Southern Finland	99	52 (49)
Western Finland	60	32 (35)
Eastern Finland	13	7 (6)
Oulu region	12	6 (7)
Lapland	5	3 (2)
Åland	0	0 (<1)
Size of the pharmacy in 2010 (prescriptions per year)*		
<30 000	7	4 (5)
30 001-60 000	35	19 (19)
60 001-100 000	84	44 (37)
>100 000	62	33 (36)
data not available	0	0 (3)
Age of the respondent		
< 30 years	26	14
30-39 years	76	41
40-49 years	46	25
> 50 years	38	20
Gender of the respondent		
Female	162	86
Male	27	14

* In parentheses the percentage of all University of Helsinki's teaching pharmacies in 2014 (n=296) for comparison (data not available for 2011)

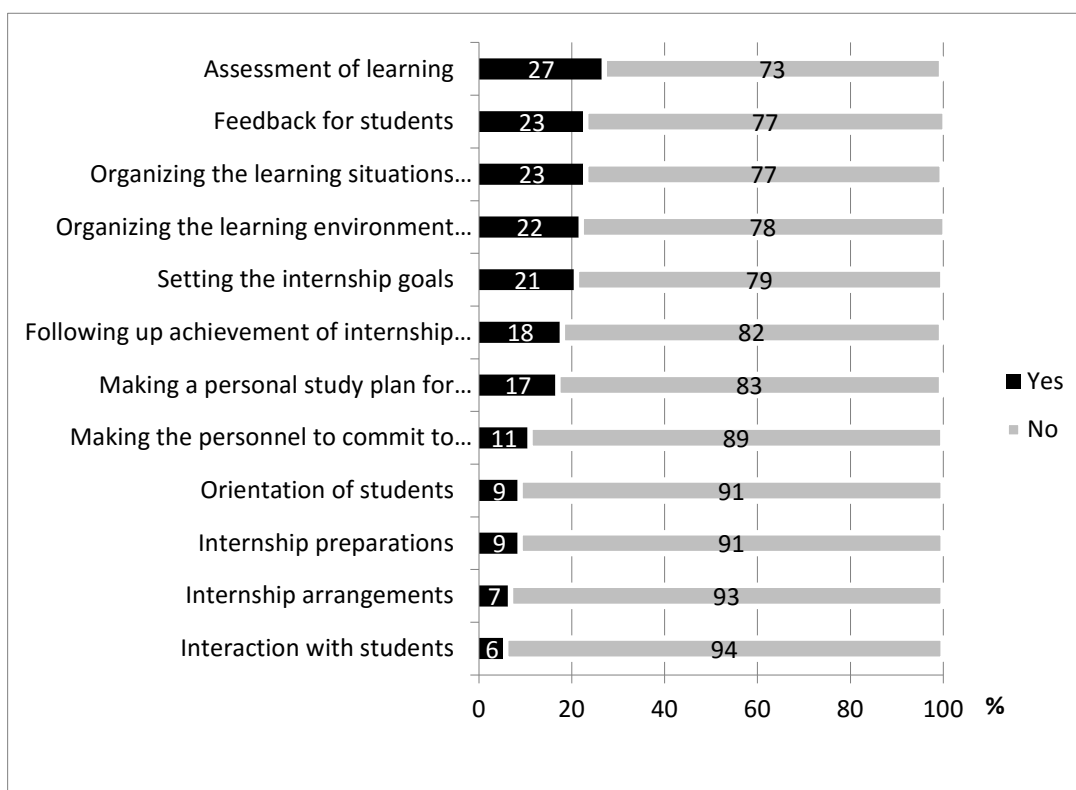
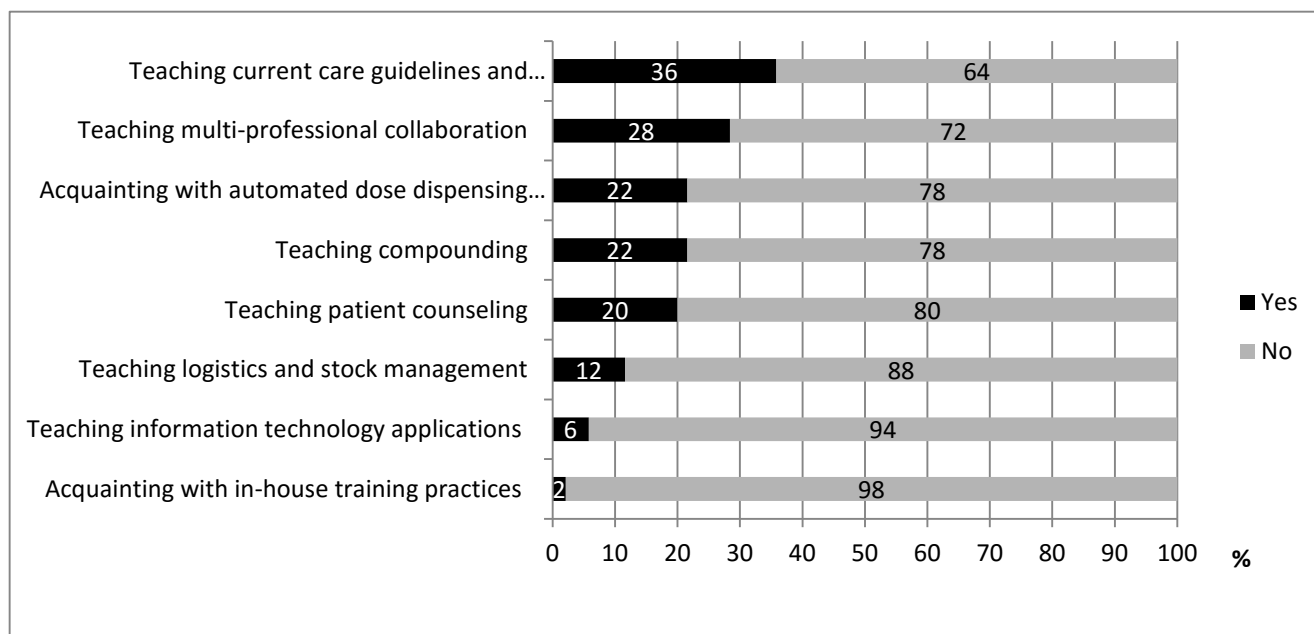
Figure 1. The preceptors' need of pedagogic support in tutoring pharmacy students (percent of the respondents, n=191)**Figure 2.** The preceptors' need of academic support in teaching the core content of the internship to the pharmacy students (percent of the respondents, n=191)

Table 2. Most Common Themes from Responses Concerning Content Skills Where Support is Needed
(number of respondents to the open-ended questions n=43)

Themes	Quote	n	% of the respondents (n=43) ^a
Open-ended question: Teaching current care guidelines and pharmaceutical care			
Updating own knowledge	<i>"It would be nice to have updates in this subject also. The students will teach the new practices to pharmacy staff too!"</i>	10	23
Education or courses	<i>"(My knowledge of) current care guidelines is mostly poor (I would need) some systematic education as a unit."</i>	9	21
More accurate instructions	<i>"Information about the content of courses that the students have already completed in the faculty before their internship." "What the student is supposed to know and on what extent?"</i>	7	16
Lack of time and other resources	<i>"Lack of time is a limitation and it is not always clear what the newest guidelines are."</i>	4	9
Other comments		15	35
Open-ended question: Teaching multi-professional collaboration			
Experience, examples and ideas	<i>"I don't necessarily need support, but it would be interesting to hear experiences of innovative ways to organize this."</i>	11	41
Is seldom realized	<i>"In big communities there is no such course of action, so it's not possible to teach this subject to students."</i>	9	33
Lack of time	<i>"Yes and no. It's not a matter of lack of knowledge but lack of time and the possibility that the pharmacy owner's business idea is not supporting this."</i>	3	11
Other comments		5	19

^aOne respondent might have given several comments, which results in the total percentage being >100

Table 3. Most Common Themes of Responses Concerning Pedagogic Skills Where Support is Needed (n=43)

Theme	Quote	n	% of the respondents (n=43)
Open-ended question: Assessment of learning			
More accurate assessment criteria and instruction	<i>"We pharmacists are not familiar with assessment thus concrete instruction is needed."</i> <i>"A rubric in workbook would concretize the standards."</i>	11	38
More explicit assessment form	<i>"Current assessment form is unclear and perhaps too extensive as well."</i>	4	14
Lack of resource to monitor learning	<i>"It depends on the student. It is difficult to make a personal study plan or assess the learning if the student is very passive."</i>	4	14
More education in assessment of learning	<i>"How to raise one's own standard in assessment?"</i>	3	10
Other comments		7	24
Open ended question: Feedback for students			
Giving feedback is difficult	<i>"Giving feedback is always challenging when you don't know the student very well."</i>	9	39
Tools	<i>"Maybe I don't need support but more education would be nice."</i> <i>"Tips on giving constructive feedback."</i>	6	26
Training	<i>"Giving feedback correctly and constructively needs to be trained."</i>	3	13
Other comments		4	17
Open-ended question: Organizing the learning environment supportive for learning			
Tips/examples from real-life	<i>"New tips for refreshing our practices."</i>	9	30
Haste	<i>"It is normal in pharmacy that very soon after beginning to teach the student begins the rush and teaching must be interrupted..."</i>	7	23
Education	<i>"Web-based education for all work community. To ensure the whole personnel's ability to teach the students properly in all conditions the orientation material on the internet is needed."</i>	4	13
Difficulty in organizing learning situations	<i>"All demanded tasks don't necessarily come one's way during the internship, e.g. quality and purity tests."</i>	4	13
Written material	<i>"How and why to teach – written material for bachelor pharmacists and technical assistants who participate in teaching."</i>	3	10
Others		5	17

^aOne respondent might have given several comments, which results in the total percentage being >100

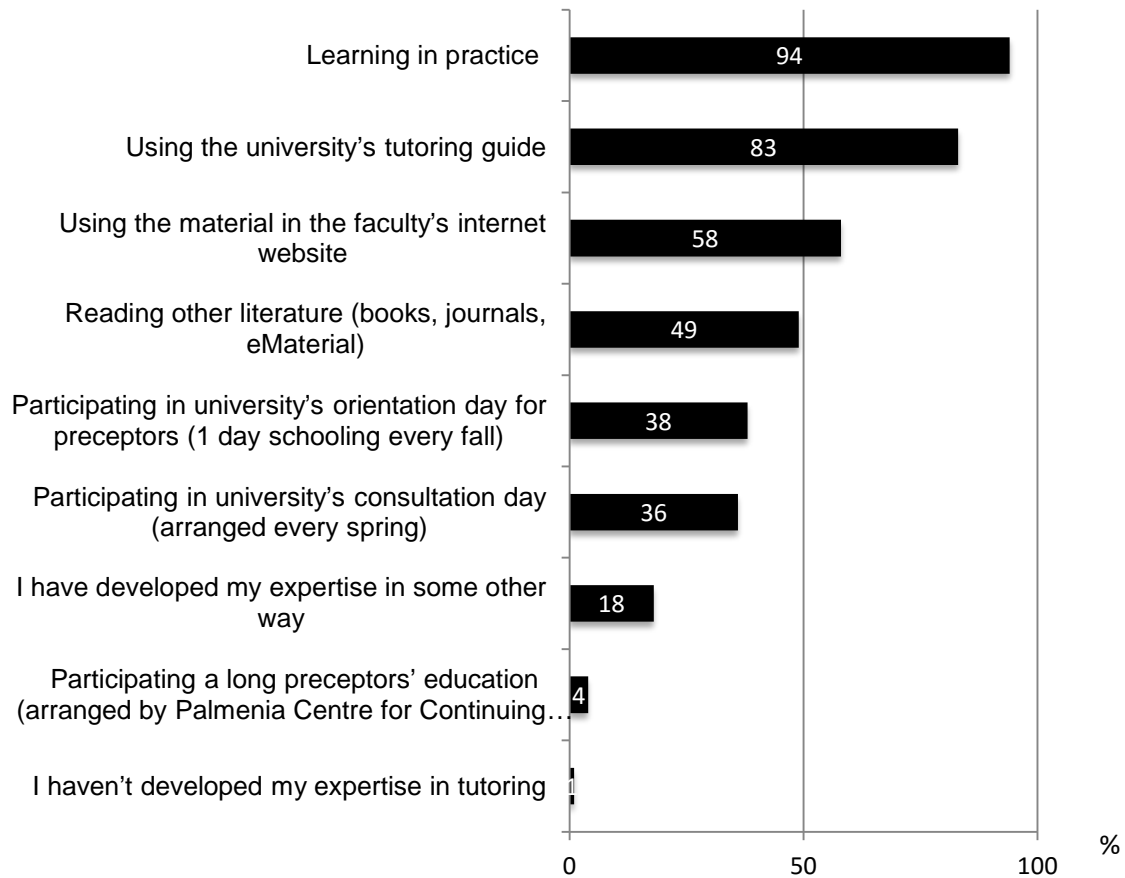
Figure 3. Methods used by Preceptors to Develop their Expertise in Tutoring (percent of the respondents, n=191)

Table 4. Suggested New Tools and Implementation Suggestions (n=70)

Themes	Implementation Suggestion	n	% of the respondents
More accurate assignments (especially for setting goals for the internship period, following up on reaching the goals and making a personal study plan)	<ul style="list-style-type: none"> • Framework for tutoring • Examples for scheduling the assignments • Check list for the assignments to be done during the internship 	13	19
Better instruction for preceptors (especially setting of internship goals, follow-up on the achievement of goals and making a personal study plan)	<ul style="list-style-type: none"> • Written instructions for preceptors • "Workbook for teachers/preceptors" • Examples for assessment of assignments • Framework for feed-back, consideration and assessment assignments • Updated instructions for preceptors 	9	13
Computer-based learning/conversation environment	<ul style="list-style-type: none"> • FAQ • Peer support • Fast contact to the internship coordinator at the faculty 	8	11
Improved information	<ul style="list-style-type: none"> • Summaries of the consultation days to faculty's website • Sharing good practices in other community pharmacies • Information of upcoming courses on time • Information about changes in workbook assignments • Information about students' competences before the beginning of the internship • Useful links 	8	11
More training for preceptors	<ul style="list-style-type: none"> • Web-based courses • "Qualification" for the preceptors • Patient counseling course for the entire pharmacy staff 	7	10
More concrete tutoring for students at the university before the internship	<ul style="list-style-type: none"> • Knowledge • Skills • Attitudes 	6	9
More contacts by the internship coordinator	<ul style="list-style-type: none"> • Visits to teaching pharmacies • Phone calls to preceptors during the internship periods "How is it going?" • E-mails 	5	7