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Can a long-term continuing education course in patient counselling promote a change in the practice of Finnish community pharmacists?

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Abstract

Objective To assess community pharmacists' perceptions of the impact of a long-term continuing education (CE) course on their patient counselling skills.

Methods Three focus groups were conducted with the course participants (n = 17) during the last module of the CE course. Data were analysed using computer software for qualitative analysis.

Key findings The focus groups revealed eight preliminary categories that were further categorised into four themes related to the learning process in patient counselling skills. The first theme related to achieving the learning objectives. The second related to personal development, understanding principles of two-way communication, and problems in their implementation in practice. The third theme related to actions taken by the participants in their work place, and the fourth involved the potential conflict between the new skills gained and the traditional communication culture in the participant's pharmacy.

Conclusion The CE course provided the community pharmacists with new skills and knowledge in patient counselling and collective in-house training. The findings show that the greatest challenge is to change the communication culture of the pharmacy. To achieve this, it may be necessary for more than one pharmacist from the same pharmacy to participate in the training process at the same time.

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Introduction

Pharmacists as health professionals can help the public to maintain good health, to avoid ill health and to make the best use of medicines.^{1–4} That is also what the public in Finland expect pharmacists to do.⁵ The expectations of the public are particularly focused on more open disclosure of drug information⁵ and better follow-up of treatment.⁶ To fulfil these tasks, pharmacists need a new kind of professional competency that is not provided by traditional basic studies in pharmacy schools.^{7,8} This will challenge organisations responsible for pharmaceutical continuing education (CE) and professional development to meet the needs of current pharmacy practice.^{9–11}

Pharmacists are trying to move away from a drug-focused, paternalistic approach in patient information to providing customised information according to patients' needs, with the aim of achieving better outcomes from drug therapies.^{12–17} This requires close co-operation between pharmacists and other health care professionals, especially physicians,³ and requires knowledge and skills extending beyond product knowledge about medicines.^{9–11} These changes are reflected in pharmacy practice in Finland. Dissemination of pharmaceutical information, support for self-management, and communication skills have been some of the most important training and development areas among Finnish community pharmacists in recent years.¹⁸

Traditionally, patient information provided by community pharmacists in Finland has focused on technical aspects of the use of medicines and on reimbursement rules.¹⁹ Pharmacists have not elicited or taken into account the information needs of their customers.¹⁹ Their communication with the customer has often been limited to a monologue, with repeated phrases and instructions, regardless of the customer's existing knowledge about their disease and its treatment.¹² Pharmacists' input could be characterised as a brief, non-individualised and paternalistic information transfer rather than

the more detailed discussion and guidance that can assist the patient with management of their medical condition and effective use of medication. Two-way interaction with empowerment of the patient could be termed patient counselling as it goes beyond simple information giving.¹³ Previous studies have shown that this level of competency in communication skills can be reached only through long-term training^{9,20-24} and by developing novel training methodology to shape the behaviour of pharmacists.^{10,11}

To reinforce the intended change in the culture of patient information-giving in Finnish community pharmacies, a national four-year project, TIPPA, was started in 2000.²⁵ TIPPA stands for "Customised information for the benefit of the patient from the pharmacy". The aim of the project is to conduct an extensive development process at the pharmacy level with a focus on leadership, attitudes and behaviour patterns, communication and professional skills. The programme's objectives are, through enhanced patient counselling by community pharmacists, to promote rational use of medicines, to decrease negative effects of inappropriate use of medicines (including self-medication) and to decrease costs. The project is jointly operated by key stakeholders in the prescribing and use of medicines: the Ministry of Social Affairs and Health, the National Agency for Medicines, the Social Insurance Institution, the Association of Finnish Pharmacies, the Finnish Pharmacists' Association, the Universities of Helsinki and Kuopio, the Finnish Pharmaceutical Learning Centre, and the Kuopio University Centre for Training and Development.

The TIPPA project has developed several resources to facilitate the intended changes, including a user-friendly computerised database to improve oral counselling on prescription medicines. A crucial component was training to enable pharmacists to acquire new skills and a new approach to patient information. The aim of the study reported here was to evaluate the impact of a new kind of

long-term continuing education course on patient counselling skills for pharmacy practitioners that was developed as a part of the TIPPA project.

Methods

Structure of the CE course

As a part of the TIPPA Project, the Pharmaceutical Learning Centre developed a long-term continuing education course focusing on patient counselling skills. The learning objectives of the course were to introduce the principles of two-way communication and self-evaluation of the pharmacist's own performance, to set goals for personal development, and to create a long-term development plan for the community pharmacy and its staff by applying principles of strategic planning. The CE course was initially provided for 25 participants in 2000 and was repeated in 2001 with 17 participants. The study reported here involved the second cohort of pharmacists.

The learning process was conducted over one year and consisted of four modules, each including a two-day meeting with related homework (Table 1). The participants were introduced to the principles of two-way communication and customer-oriented patient counselling. They were provided with practical tools for self-assessment of their counselling skills and for setting goals for their personal development. The course applied the principles of problem-based and experiential learning²⁶ that integrate practising of communication skills and increasing pharmacotherapeutic knowledge. The Medication Counseling Behavior Guidelines of the United States Pharmacopeia (USP) were used as a theoretical basis for understanding the principles of two-way communication and for self-assessment of performance.¹³ The course was not linked

Table 1 Outline of the continuing education course.

First module (February 2001)
Principles of constructive learning
Principles of two-way communication (USP medication counseling behavior guidelines)
Analysis of participants' strengths and weaknesses in patient counselling
Second module (March 2001)
Therapeutic guidelines (project work)
Practising two-way communication in small groups using role play technique
Practising self-evaluation and peer-evaluation of performance
Third module (May 2001)
Personal development plan on communication skills on the basis of analysis of the videotaped role plays (project work)
Co-operation with local health care providers in patient counselling (project work)
Introduction to the final project (project work)
Fourth module (September 2001)
Long-term development plan on patient counselling for the pharmacy (project work)
Presentations of the final projects
Ethics in patient counselling
Evaluation of the CE course

to a particular therapeutic group although assignments, for example on therapeutic guidelines, and role plays on patient counselling, were related to major therapeutic groups (both prescription and non-prescription). The main focus of the modules was decided in advance but the final programme took into account the learning needs and wishes of the participants. Home work assignments (see Table 1) were designed to be carried out in co-operation with colleagues at the pharmacist's workplace to facilitate the application of new ideas and methods into practice and to involve colleagues in the change process.

The Finnish qualification system of pharmacists is based on two pharmaceutical qualifications. The higher qualification is a Master in Pharmacy degree and takes five to six years to complete, including six months' practical training in a pharmacy. The degree can be obtained from the Universities of Helsinki and Kuopio. The owner of the pharmacy must have this qualification. In addition to the owner, there is usually at least one staff pharmacist with a Master's degree in each pharmacy. The other qualification is the Bachelor in Pharmacy degree, which takes three years to complete, including six-months' practical training in a pharmacy. It can also be obtained from the Universities of Helsinki and Kuopio, and from Åbo Akademi.

The workforce of an "average" Finnish community pharmacy consists of 10 people, of whom six to seven have degrees in pharmacy, mostly a BSc degree.

Participants

The participants ($n=17$) were practising pharmacists whose mean working experience in a community pharmacy was 15 years ($SD \pm 1.09$ years; range 1–36 years). The mean age of the participants was 39 years ($SD \pm 1.65$ years; range 26–59 years). Sixteen of the participants were women. Most (59 per cent) had a Bachelor's degree in pharmacy, and the rest had a Master's degree. In Finnish pharmacies, staff with a Bachelor's degree are mostly responsible for dispensing prescription and non-prescription medicines. Only those with a degree in pharmacy are allowed to serve customers.

Most of the participants had not received any previous education in communication skills and some had not had any education in pharmacotherapy during their basic studies, although pharmacists are expected to have these skills in their current work at the pharmacy. Pharmacology has been taught to pharmacy students since the 1970s. Most (71 per cent) of the participants attended the CE course on their own initiative, while 29 per cent attended because their employer requested it.

Focus groups

To assess the impact of the course on patient counselling skills, all the participants attended a focus group during the last module of their training in September 2001. They were divided into three groups of five to six people to ensure maximum discussion by each of the participants.²⁷

The three moderators, who had previous experience of focus groups, were instructed to facilitate the discussion in the same way, using a topic guide, so that the same issues were raised with each group. Thus, the focus groups were semi-structured.²⁸ They covered three main topics: (1) Feedback about the CE course and the learning objectives achieved; (2) personal development in patient counselling skills during the course; and (3) impact of the training on practice.

The key questions were how the participants perceived themselves as providers of drug information, how the CE course had helped them in promoting changes in patient counselling practice in their pharmacy, how they had developed their self-evaluation skills, and how they would further develop their skills after the course. The focus groups lasted between 30 and 60 minutes.

Data analysis

The focus group discussions were audio-taped and transcribed verbatim in Finnish by the first author. Each transcript was read and the tapes listened to in order to annotate the transcripts if necessary. The transcripts were then transferred to the qualitative data analysis software ATLAS.ti- The Knowledge Workbench-program version 4.1. A native translator, who is a pharmacist, translated the data into English. The analytical method used was grounded theory, which advocates an inductive approach with no preconceived hypothesis.²⁹ Both the paper transcripts and the tape-recorded data were used in the analyses. In total, some 42 pages of transcript were analysed. The software was used to develop and apply coding. Open codes were developed for the content of each discussion and preliminary categories were identified, which we termed the second level of the analysis.²⁹ Next, microanalyses were conducted within the preliminary categories that specifically related to the counselling process to yield what we termed the first level of the analysis.²⁷

From the themes that emerged, the analysis was conducted at two levels: the eight themes at the second level were concentrated into four main areas, which became the first level (see Figure 1). The main statement was formulated with the intention of summarising the essential messages from the material related to the research question: did the CE course help participants to promote counselling changes in their pharmacies and, if so, how? The results of the analysis at this first level are the focus of this article.

Ethical considerations

The principle of informed consent was applied in this study. The privacy of the participants was protected during the analysis. Where verbatim quotations from individual participants are shown, after each citation a code number is given in parentheses preceded by either a "b" (referring to a participant with a Bachelor's degree) or "m" (a participant with a Master's degree).

RESEARCH PHASE	CONTENT
Preparing the focus group	Researchers worked on questions for an interview guide for a month
Focus group (FG)	Three groups with 5-6 participants in each (n = 17) conducted by three different experienced moderators and three scribes. Each group discussion lasted from 30 minutes to one hour

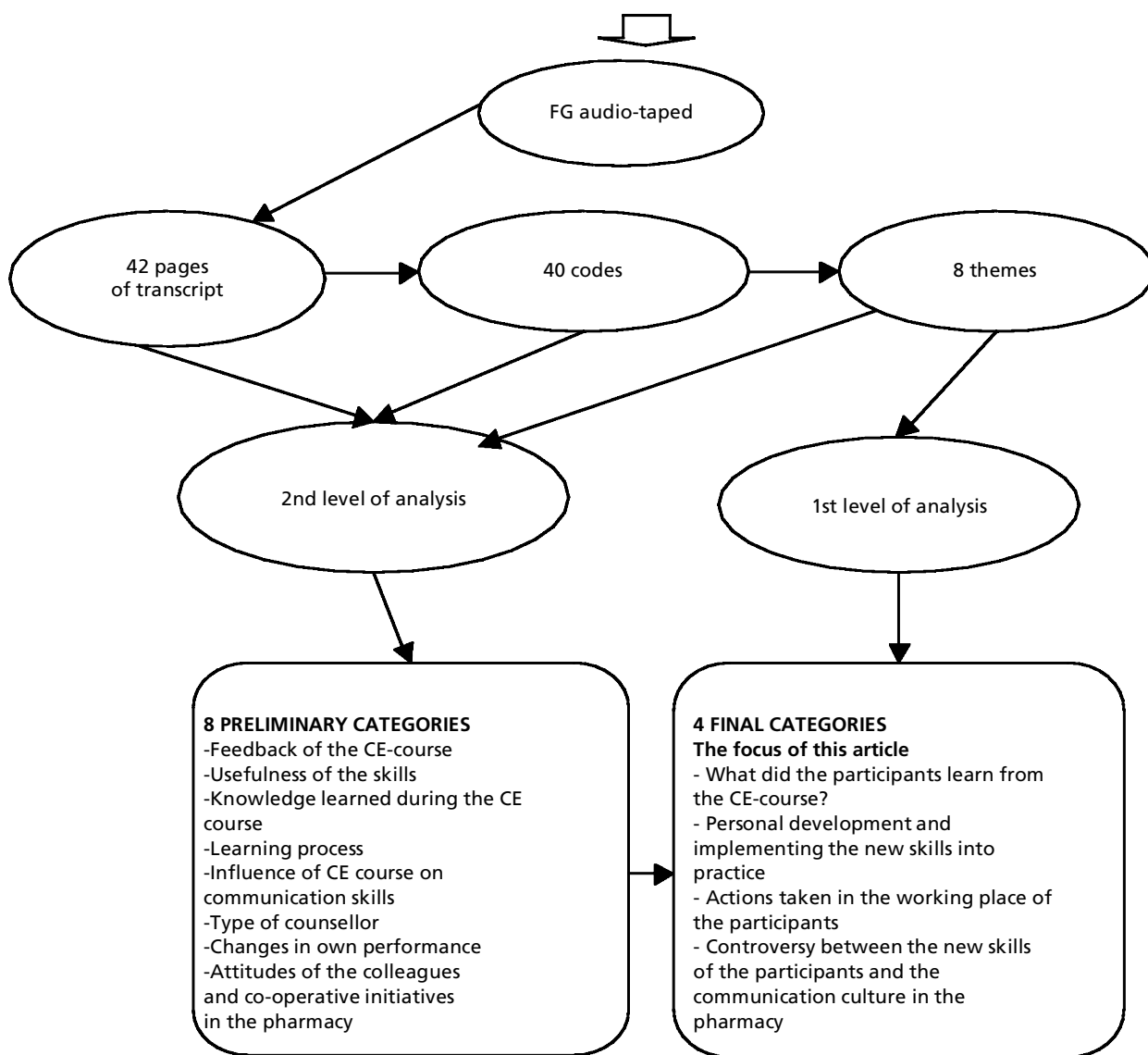


Figure 1 Analysis of the study data.

Results

This paper concentrates on the four final categories that related to the learning process during the CE course: (1) Achieving the learning objectives; (2) personal development, understanding principles of two-way communication, and problems in their implementation into practice; (3) actions taken in the participants' workplace; and (4) potential conflict between the new skills gained and the traditional communication culture in the pharmacy.

Category 1: What was learnt during the CE course?

The participants' accounts showed that the most important learning during the course related to the principles of patient counselling and how to analyse their own performance. They seemed to have internalised that they needed to offer counselling to all customers throughout the working day in the pharmacy, not only to selected patients.

"For me the most important [issue] was to realise how to recast my own ideas concerning patient counselling" (b2)

"concentrating on my own behaviour while counselling patients at the pharmacy" (b4)

"following how you counsel and analysing it" (m5)

"I realised that we need to counsel patients even if it is busy. It is an excuse for not counselling. We have to provide information to the customers even if the pharmacy is full of other customers" (b3)

Other important issues the pharmacists said they had learnt were therapeutic guidelines as a basis for understanding drug therapies, and the principles of making a long-term development plan for patient counselling at the pharmacy level. The participants reported having learnt to appreciate both their own and their colleagues' work.

Category 2: Personal development and implementing the new skills

The second category concerned personal development in patient counselling and the effect of the course on the performance of individual pharmacists. Some pharmacists said that their counselling skills had improved but most seemed uncertain about their skills.

"In my case I am just taking my first steps in counselling" (m5)

"Knowledge about my own skills increases my pain. . . . I don't want to give a chance to the patient to ask about the medicines because I am afraid that I don't know enough" (m4)

"I need to improve my counselling a lot" (b2)

"My counselling is so full of routine" (b3)

One of the participants was confident about her own counselling skills and the course had reinforced her self-esteem.

"I don't think I am lousy in counselling at all, even though I need to know more about prescription drugs, but I do say that I am almost a champion in counselling about non-prescription medicines, thanks to this course" (m3)

The course appeared to have encouraged the pharmacists to assess and evaluate their own and their colleagues' performance. They said that they had previously dispensed medicines without paying attention to communication skills. Some reported telling patients everything they knew about the medicine without taking into account their information needs. After the course, pharmacists reported that they had started to use open questions such as "What did the doctor tell you about these medicines?" and "How has the medicine worked for you?" to encourage customers to take part in the conversation and to customise the information. They said that they had also learnt more about non-verbal communication, and the importance of facial expressions, eye contact, and tone of voice, body posture and movement.

Category 3: Actions taken in the pharmacy

Some of the participants had never heard about therapeutic guidelines before the CE course. The second module contained assignments that introduced the participants to the Finnish national therapeutic guidelines and their application in pharmacy practice. The participants reported that they found therapeutic guidelines useful in patient counselling. Some of them reported applying an idea from the CE course where each pharmacist in their work place took one therapeutic guideline to study in detail, and then summarised the main points to colleagues. Some participants said they had suggested to their pharmacy owner that they could review and rearrange the stock of self-medication products based on therapeutic guidelines to support evidence-based practice.

"We had a great idea at the pharmacy, thanks to this CE course, every other month our chief pharmacist will teach us about pharmacology of prescription medicines, aetiology, and prescription medicines according to therapeutic groups. That is quite a lot because we did not have any in-house training before" (b4)

One of the most important and successful issues during the course was that each participant made a long-term development plan on patient counselling for their own workplace. The participants learnt how to apply principles of strategic planning to put the plan into practice. They were given assignments during the course that helped them to proceed with the plan step by step with their colleagues in the pharmacy. They started by identifying strengths and weaknesses in patient counselling using a SWOT (strengths, weaknesses, opportunities and threats) analysis. The SWOT framework helps people to focus their activities on areas where they are strong, and where the greatest opportunities lie.³⁰

It seemed that it was important to get all of the pharmacy staff involved in processing the development plan. Pharmacists with either a Bachelor's or Master's degree

appeared to succeed in co-ordinating the process in their workplace.

“We are involved [in making sure] that certain operations concerning our development plan are carried throughout” (m5)

Category 4: Implementing change in the pharmacy

Participants reported that their attitude towards patient counselling had changed in a positive way and that they were more “patient focused” than before. They perceived that they could now understand patients as individuals, rather than as people presenting prescriptions in a system of reimbursement restrictions.

“I have been concentrating more on the patients. I think much more of the patients and how to make them participate in the conversations. I have learnt to assess patients’ information needs and to concentrate on the most important facts accordingly” (m2)

Participants’ accounts showed that they had started to train their colleagues in the pharmacy. The changes that were most easily adopted in practice were use of therapeutic guidelines and producing the development plans. Teaching communication skills, verbal- and non-verbal, was found to be difficult. Some pharmacists felt that they did not have sufficient skills to develop others’ counselling skills.

Pharmacists reported that they had become more self-confident in their performance:

“it really has intensified” (m1)

Participants described how, by observing colleagues, they could learn more. Even though teaching communication skills to their colleagues was found to be difficult, some of them had noticed that other staff had started to imitate their new practice in the counselling process. Evidence for this was that staff were using open questions and non-verbal communication.

The attitudes of other pharmacy staff to patient counselling had changed in some pharmacies in that it was seen as more important. Even in some pharmacies where staff did not support the change, the CE course appeared to have led to changes in practice. Counselling on prescription drugs had progressed and there was more active use of the computerised database. The participants reported that pharmacy owners had noticed that their staff were counselling more patients.

“It all began from the development plan. When we started to work on the plan, counselling rolled on” (m4)

Participants reported that the negative points of the course were completing the home assignments without peer support, lack of time and the amount of homework. Another issue was that colleagues in the pharmacy were not fully involved in the CE course, even if they wanted to promote changes in the counselling process.

All the pharmacists complained that they had insufficient “concrete” support in the workplace, especially from

their boss. Those with a Bachelor’s degree were more afraid to try to lead change. The main problem seemed to be that the pharmacy owners expected that things would change without their active involvement. Another negative aspect was that the owners did not realise that counselling was required even at busy times.

“I really should have support from the chief pharmacist and the owner. I just can’t go and give orders to other pharmacists that from now on you will change your counselling style” (b3)

“My boss does not understand nor accept that information about medicines should be given even if there are lot of customers in the pharmacy” (b2)

“The boss thinks that the most important indicator of customer service is speed. Patient counselling is not the way” (b1)

Discussion

Our findings confirm those from previous studies that long-term continuing education courses are needed when the aim is to develop the patient counselling skills of practitioners with several years of working experience.^{9,17} It is not easy to change established behaviour patterns, social interactions and working routines. Change requires a person to reflect on and evaluate their own interactions and practical exercises to practise and develop new styles.^{10,11} Practitioners who have been qualified for several years are not familiar with new learning and teaching methods, and it may be new for them to learn that teaching is now not simply transmitting knowledge but also involves helping students to construct knowledge by assigning them tasks that enhance this process. Learning now needs to incorporate assignments in which students reflect on, and use, information that is given to them. In our long-term course, teaching methods included cognitive, problem based and interactive methods. Social environment, anxiety and emotions, responsibility and relevance, and teamwork were all important parts of the learning. Recent research on learning emphasises the importance of being aware of the way that people think and behave.³¹

The open approach of this study made it possible to explore the experiences of the pharmacists on a long-term CE course in more depth than more structured methods. The results of the study reflect the subjective experiences of the participants at the end of the course, and cannot be generalised more widely. The findings cannot measure any long-term impact of the course on patient counselling practices of the participants or their peers in the pharmacy. It would have been useful to repeat the study among the participants after a further year to find out whether it led to permanent change. Furthermore, in order to assess and understand the factors promoting and inhibiting the learning process, data collection during the whole intervention period would be needed.

A limitation of our research is that the findings are based on pharmacists' self-reports rather than independent observation. However, in the focus groups the pharmacists gave examples to illustrate their accounts. Problems and barriers were discussed as openly as positive experiences. Based on our experience we believe that greater emphasis is needed in future training on concordance and the role of the patient as an expert in his own disease and its treatment.^{8,13,14}

We noticed that although many participants learnt to use more open questions while counselling patients, they still tended to make decisions on behalf of the patients about the quantity and content of information provided. Thus, the pharmacists learnt ways to encourage patients to discuss their medicines but were not ready to conduct a conversation of "equals". An earlier Finnish study showed that pharmacists' attitudes towards counselling were still more paternalistic than based on respecting the patients' autonomy.³² Another recent study showed that the counselling behaviour of pharmacists is determined more by their perceptions and beliefs than on eliciting and understanding the information needs of their customers.³³

Our findings have shown the importance of involving all pharmacy staff in the course assignments. Even though the course participants' peers were positively oriented towards being involved, it was difficult to implement change in the communication culture of the pharmacy through only one participating member. Thus, in the future, it will be important to use innovative training methods that require involvement of all staff. The Australian training model based on "pseudo customers" with immediate feedback seems to be promising in this respect.^{10,11} A similar training process that has been developed in Finland as a part of the TIPPA project uses external auditing, in-house training and feedback from "pseudo customers" in long-term development of patient counselling practices. So far, about 35 out of the 590 pharmacies in Finland have completed this two-year process.

The long-term educational intervention reported in this study successfully introduced community pharmacists to basic principles of patient counselling and analysing their own performance. Pharmacists seemed to learn to pay attention to their own and their colleagues' verbal and non-verbal communication. Furthermore they learnt that personal understanding and internalising principles of patient-focused counselling are prerequisites for a new practice. When the pharmacists understood and became aware of their own performance, they also started to assess the performance of their colleagues and their colleagues learnt from observing them. This promoted a change in the communication culture of the pharmacy. However, even though the course appeared to succeed in promoting change at the personal level, it was difficult to spread that change throughout the pharmacy. We observed that the results were better where the employers encouraged their pharmacists to exploit their new knowledge and skills in the pharmacy with other colleagues. Commitment and support from senior managers is known to be an important part of achieving organisational change.

The goal of future continuing education should be to facilitate a permanent change in practice. Previous studies have shown that each pharmacy has an individual organisational culture that will determine, for example, the quality of pharmacist–customer interaction.³⁴ Without educational interventions, behaviour patterns and interactions with patients may be based on perceptions, beliefs and paternalistic attitudes.^{8,32,33} More studies are needed to understand the factors related to managing change in professional community pharmacy practice and influencing the change process by training and developing new management skills.

The TIPPA project in Finland has shown that if community pharmacists want to implement new professional services they need to develop and sustain their professional competence.²⁴ This concerns patient counselling services, and also other high level services promoted under the philosophy of pharmaceutical care.¹ Although undergraduate pharmacy education is of high quality in Finland and there is a well-organised national continuing education system with specialisation studies in community pharmacy, it has been demonstrated that community pharmacists need to update their knowledge.²⁴ This challenges providers of continuing education to meet the needs of practitioners in terms of content of training and the teaching methods applied. Our experience suggests that courses like the one reported here are needed, and should be incorporated into the continuing professional development of practising pharmacists.

Conclusion

The CE course described in this paper provided community pharmacists with new skills and knowledge in patient counselling and collective in-house training. The findings show that the greatest challenge is to change the communication culture of the pharmacy. To achieve this, it may be necessary for more than one pharmacist from the same pharmacy to participate in the training process at the same time.

References

- 1 Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. *Am J Hosp Pharm* 1990;47:533–43.
- 2 Närhi U. Implementing the philosophy of pharmaceutical care into community pharmacy services — Experiences with asthma patients in Finland [dissertation]. *Pharmaceutical Sciences* 54. University of Kuopio; 2001.
- 3 Bond C. Pharmacists and the multi-disciplinary health care team. In: Taylor KMG, Harding G, editors. *Pharmacy practice*. London: Taylor & Francis; 2001. p249–69.
- 4 Anderson S. The state of the world's pharmacy: a portrait of the pharmacy profession. *J Interprofess Care* 2002; 16:391–404.
- 5 Airaksinen M. Customer feedback as a tool for improving pharmacy services in Finland [dissertation]. *Pharmaceutical Sciences* 25. University of Kuopio; 1996.
- 6 Jokisalo E, Kumpusalo E, Enlund H, Takala J. Patients' perceived problems with hypertension and attitudes towards medical treatment. *J Hum Hypertens* 2001;15:755–61.

- 7 The European Pharmaceutical Students' Association and the International Pharmaceutical Students' Federation. Pharmacy Education — A vision of the Future. A comprehensive collaborative study by pharmacy students world-wide of essential developments in pharmacy education. <http://come.to/Pharmacy-Education/>, accessed April 14, 2003.
- 8 Raynor DK, Thistlethwaite JE, Hart K, Knapp P. Are health professionals ready for the new philosophy of concordance in medicine taking? *Int J Pharm Pract* 2001;9:81–4.
- 9 Lilja J, Larsson S, Hamilton D, Issakainen J. Empathy as a communication strategy in the pharmacy — study based on cognitive and behavioural analysis. *Int J Pharm Pract* 2000;8:176–87.
- 10 De Almeida Neto A, Kelly F, Benrimoj SI. Shaping practice behaviour: novel training methodology. *Int J Pharm Pract* 2001;9:203–10.
- 11 De Almeida Neto A, Benrimoj SI, Kavanagh DJ, Boakes RA. Novel educational training program for community pharmacists. *Am J Pharm Educ* 2000;64:302–7.
- 12 Vainio KK, Korhonen MJH, Hirvonen AM, Enlund KH. The perceived role and skills of pharmacists in asthma management after in-house training. *Pharm World Sci* 2001; 23:6–12.
- 13 United States Pharmacopeia. Medication Counseling Behavior Guidelines. <http://www.usp.org>, accessed June 2002.
- 14 From compliance to concordance. Achieving shared goals in medicine taking. London: Royal Pharmaceutical Society and Merck Sharp & Dohme; 1997.
- 15 De Young M. Reflections on guidelines and theories for pharmacist-patient interactions. *J Pharm Teaching* 1996; 5:59–81.
- 16 Morrow N, Hargie O. Effective communication. In: Taylor KMG, Harding G, editors. Pharmacy practice. London: Taylor & Francis; 2001. p226–47.
- 17 Horne R. Compliance, adherence and concordance. In: Taylor KMG, Harding G, editors. Pharmacy practice. London: Taylor & Francis; 2001. p165–83.
- 18 Ethical guidelines for community pharmacy. <http://www.farmasialiitto.fi/pdf.eettiset.pdf>. Accessed: 06/2002.
- 19 Airaksinen M, Vainio K, Koistinen J, Ahonen R, Wallenius S, Enlund H. Do the public and pharmacists share opinions about drug information. *Int Pharm J* 1994; 8:168–71.
- 20 Airaksinen M, Ahonen R, Enlund H. The “Questions to ask about your medicines” campaign — An evaluation of pharmacists and the public's response. *Med Care* 1998;36:422–7.
- 21 Dickson D, Hargie O, Morrow N. Communication skills training for health professionals. 2nd ed. London: Chapman and Hall; 1997.
- 22 Hattie J, Biggs J, Purdie N. Effects of learning skills interventions on student learning: a meta-analysis. *Rev Educ Res* 1996;66:99–136.
- 23 Hargie O, Morrow N, Woodman C. Pharmacists' evaluation of key communication skills in practice. *Patient Educ Couns* 2000;39:61–70.
- 24 Savela E. Professional competence in community pharmacies. Continuing education among Finnish pharmacists applying the Norm theory as a theoretical framework [dissertation]. Pharmaceutical Sciences 62. University of Kuopio; 2003.
- 25 Apteekki potilaan parhaaksi, Tippa väliraportti 2000–2001 [“Pharmacy for customers.” Half-time report of the TIPPA project. In Finnish with English summary.] <http://www.tippa.net>, accessed June 2003.
- 26 Aspergen K. BEME Guide No 2: Teaching and learning communication skills in medicine — a review with quality grading of articles. *Med Teacher* 1999;21:563–70.
- 27 Silvermann D. Interpreting qualitative data, methods for analysing talk, text and interaction. London: Sage Publications; 1993.
- 28 Kvale S. Interviews an introduction to qualitative research interviewing. London: Sage Publications; 1993.
- 29 Glaser BG, Strauss AL. The discovery of grounded theory: strategies of qualitative research. San Francisco, University of California: Adeline Publishing Co; 1967.
- 30 Sanders TI. Strategic thinking and new science: Planning in the minds of chaos, complexity and change. New York: Simon & Schuster; 1998.
- 31 Warr P, Allan C. Predicting three levels of training outcome. *J Occup Organ Psychol* 1999;72:351–75.
- 32 Itkonen J. Autonomy and paternalism in the information giving by community pharmacists [dissertation]. Department of Social Pharmacy, University of Kuopio; 2000. [In Finnish with English summary.]
- 33 Katajavuori N, Valtonen S, Pietilä K, Pekkonen O, Lindblom-Yläne S, Airaksinen M. Myths behind patient counselling: a patient counselling study of non-prescription medicines in Finland. *J Soc Admin Pharm* 2002;19:129–36.
- 34 Vainio K, Airaksinen M, Hyykky T, Enlund H. Effect of therapeutic class on counselling in community pharmacies. *Ann Pharmacother* 2002;36:781–5.