GPHE 107490—8/3/2005——140045

Pharmacy Education, Month 2005; 00(0): 1–8

Practicing pharmacists' patient counseling skills in the context of reflectivity

Q1

HELI KANSANAHO[1], MARIA CORDINA[2], INKA PUUMALAINEN[3], & MARJA AIRAKSINEN[4]

[1]*Division of Social Pharmacy, University of Helsinki, Finland,* [2]*Department of Pharmacy, University of Malta, Malta,* [3]*Department of Social Pharmacy, University of Kuopio, Finland, and* [4]*Division of Social Pharmacy, University of Helsinki, Finland*

(Received 20 April 2004; revised 17 September 2004; accepted 30 November 2004)

Abstract

Background: Pharmacists are expected to develop and re-evaluate their expertise in order to succeed in their working life, thus fulfilling the demands of the society. One of the tasks that has become essential in modern pharmacy practice is "reflective communication about medicines" with patients.

Methods: The purpose of this study was to describe the levels of patient counseling skills of 40 Finnish community pharmacists in the context of reflectivity. The theoretical background of the study was based on United States Pharmacopeia (USP) Medication Counseling Stages and Mezirow's theoretical underpinning. The data consisted of essays written by 40 practicing pharmacists (M.Sc. and B.Sc. Pharm.) before starting the one-year patient counseling courses in 2000 ($n = 21$) and 2001 ($n = 19$). The data were analysed using categorization and thematic analysis.

Results: The results showed that only one pharmacist reached the level of critical consciousness. Altogether, 22 pharmacists remained at the level of affective reflectivity (the novice level of competency) and 10 remained at the level of consciousness (the beginner level of competency). With the exception of one pharmacist, they had poor understanding of the interactive role of a patient.

Conclusion: New teaching methods and evaluation tools applicable to basic education, continuing education and in-house training are needed to support reflective learning process in developing professional competencies, such as patient counseling skills.

Keywords: *Counseling, Finland, pharmacists, reflectivity*

Introduction

Patient counseling competency of pharmacists is based on their education, knowledge and skills it provides. Previous studies have indicated that the challenge in pharmacy education is to broaden the role of pharmacists in patient counseling from a traditional approach to an empowerment approach (Airaksinen, Vainio, Koistinen, Ahonen, Wallenius, & Enlund, 1994, Benson & Latter, 1998, WHO, 1999, Katajavuori, Valtonen, Pietilä, Pekkonen, Lindblom-Ylänne, & Airaksinen, 2002, Katajavuori, Hirvonen, & Lindblom-Ylänne, 2003). The work and the role of community pharmacists are changing rapidly over the last decades (Szasz & Hollander, 1956, Airaksinen, Ahonen, & Enlund, 1998). Nowadays, pharmacists are expected to develop and re-evaluate their expertise in order to succeed in an ever-changing working life, thus fulfilling the demands of society. One of the tasks that has become essential in modern pharmacy practice is communication about medicines to customers (Hepler & Strand, 1993). As in the case of Finland, pharmacists worldwide experience problems in applying theoretical knowledge in practice and particularly, in patient counseling (Närhi, Vainio, Ahonen, & Enlund, 1999, Sihvo & Hemminki, 1999,

Correspondence: H. Kansanaho, Division of Social Pharmacy, Viikinkaari 5 E (B.O.Box 56), 00014, University of Helsinki, Finland. E-mail: heli.kansanaho@helsinki.fi

ISSN 1560-2214 print/ISSN 1477-2701 online © 2005 Taylor & Francis Ltd
DOI: 10.1080/15602210500075077

Sihvo, Ahonen, Mikander, & Hemminki, 2000, Katajavuori et al., 2002).

The initial qualification expected of pharmacists today is an understanding of patient needs in terms of understanding the disease and its treatment, and the role of self management (Marinker, 1997). Pharmacists need to know principles of patient counseling, health education and reflectivity and be able to implement these competencies into their practice. The empowerment approach refers specifically to the need for clarifying values, beliefs, health and health-related determinants of behavior and the need for foster empowerment through improving self-evaluation.

Advice giving to the patient can be divided into four different stages of competency according to the United States Pharmacopeia (USP) Medication Counseling Behavior Guidelines: *Monologue* of the pharmacist (lowest level); *Dialogue* between the pharmacist and the patient, *Conversation* and *Discussion* (www.usp.org). These stages of competency can be explained by the levels of reflectivity (Mezirow, 1981, 1991, Van Manen, 1977, Tiuraniemi, 2002).

The aim of this study was to describe the levels of patient counseling skills of 40 Finnish community pharmacists in the context of reflectivity. Theories used as a framework of the analysis are based on patient counseling according to the USP Medication Counseling Stages (www.usp.org) and Mezirow's theoretical underpinning (1981, 1991).

Literature review

Concepts related to advice giving to patients have been changing over time (De Young 1996, www.usp.org). Changes reflect alterations in understanding the meanings of the concepts of health education, counseling, role of the patient and learning. Counseling has been defined as "the means by which one person helps another to clarify their life situation and to decide upon further lines of action," and its aim is "to give the client an opportunity to explore, discover and clarify ways of living more resourcefully and towards greater well-being" (Blenkinsopp, Panton, & Anderson, 2000, p.65). According to this definition, counseling seeks to enable or empower the patient to decide on a particular course of action and see it through. The key point is that the counselor is helping the patient to make their own decision, even if that decision varies from that which the counselor thinks should have been made (Marinker 1997, Blenkinsopp et al., 2000, p.65).

Drug information and the change from medicine-centred counseling to patient-centred counseling can be described by the concepts developed by the USP. The concepts developed by the USP are: medication information, medication information transfer, medication information exchange, medication education and medication counseling. Medication counseling is viewed as a continuum of interaction between healthcare professional and the patient. The medication counseling stages integrates key definitions related to medication counseling behavior and is designed to assist the healthcare professional in determining the stage of medication counseling. Patient counseling can be understood as interactions, which take place during various stages of counseling. According to the USP medication counseling stages, patient counseling can be divided into four categories: Monologue of the pharmacist, Dialogue between patient and pharmacist, Conversation and Discussion. (www.usp.org).

Although the pharmacist's role in drug information to patients has been a widely discussed topic, few attempts have been taken to set up concrete models for quality communication and self-evaluation of performance (www.usp.org, Hargie, Morrow, & Woodman, 2000). The model developed by the USP is one of the most comprehensive in this respect (www.usp.org). The USP model illustrates the continuum of communication stages from monologue to discussion. It also introduces each patient counseling encounter as a process that consists of four phases: the introduction that aims at assessing patient's needs for information; the content of information that should be customized according to needs assessment; the concluding part which should focus on ensuring understanding. The fourth part of the process includes communication techniques that are needed in each step of the process. This process model applies to all counseling episodes regardless of their length or other characteristics. It was developed by specialists for the purpose of learning and self-improvement for pharmacists. The validity and suitability of the USP guidelines has been tested in the context of community pharmacy (Puumalainen, Halonen, Enlund, Johnson, & Airaksinen, 2004).

Patient counseling stages can also be contemplated through the concept of reflectivity, which is closely related to developing professional competence. There is no single generally acceptable definition for reflectivity. Jarvis (1992) defines reflection as an essential phase of the learning process, where people consciously explore their experiences in order to arrive at new understandings and behaviors. Mezirow (1981) defines reflectivity as 'consciousness of own observations, interpretations of meaning or behavior or of one's own ways of seeing, thinking and acting.' Mezirow (1991, p.102) defines that "through reflection we see through the habitual way that we have interpreted the experience of everyday life in order to reassess rationally implicit claim of validity made by previously unquestioned meaning scheme or perspective."

According to Mezirow (1981, 1991), the objects of reflection are "the ways of observation, thinking and acting." Reflectivity can also mean observation, recognition and expression of one's own internal states and those of the others as well as the attitude towards them, which means that the individual

attempts to recognize other people's internal conditions through his/her own states (Tiuraniemi, 2002).

Mezirow (1981, 1991) divides reflection and reflective learning into seven hierarchical levels (Table II). Mezirow (1981, 1991) refers to the first four levels of reflection (1–4) as consciousness and to the last three levels (5–7) as critical consciousness. The transformation of the pharmacists' meaning schemes can occur at the level of consciousness when they reflect on the content and process of counseling. Critical consciousness entails becoming aware of one's own awareness, criticising it and challenging one's underlying assumptions, which results in a changed perspective. Only reflection on the premises of counseling at critical consciousness level can lead to transformations in meaning perspectives and transformative learning. This involves assessment of the concepts used in patient counseling, identifying new learning needs and objectives, recognizing in oneself the habit of making precipitant judgements on the basis of limited information, and finally, becoming aware that the routine practice may not be the complete answer. In professional work, reflectivity means examination of one's own professional performance from various points of view and development of performance based on this examination. In professional work, the focus is often on social observation, interaction and meanings given to various situations (Schön, 1987, Jarvis, 1992, Tiuraniemi, 2002). For example, in patient counseling in a pharmacy, the pharmacist must observe, ask questions of, discuss with and evaluate the patient in many ways in order to receive a comprehensive view of the guidance needed by the patient. At the same time, the pharmacist must be aware of the effect of his/her own action. The literature used in this study is summarized in Table I.

In the field of Finnish pharmacy, patient counseling has not been examined in the context of reflectivity. On the contrary, reflectivity of the professional activity of teachers, nurses and nursing students has been studied to some extent in Finland and in other countries (Järvinen, 1990, Poskiparta, 1996, Boud & Walker, 1998, 1999, Boud & Middleton, 2003, Ora-Hyytiäinen, 2004).

Materials and methods

The data for this study consisted of essays written by a convenient sample of 40 practicing pharmacists (M.Sc.Pharm. and B.Sc.Pharm)* starting a long-term training course on communication skills in 2000 and 2001. As a part of a 4-year Finnish national project (TIPPA 2000–2003, aimed at promoting patient counseling in community pharmacies), the Pharmaceutical Learning Centre in Finland developed a long-term continuing education course focusing on patient counseling skills. The course was organized twice in 2000 and 2001. The learning objectives of the courses were to introduce the principles of two-way communication and self-evaluation of the pharmacist's performance, to set goals for personal development, and to create a development plan for pharmacists by applying principles of strategic planning (Table III) (Kansanaho, Pietilä, & Airaksinen, 2003). Before starting the course, the participants were asked to write a free-form essay about themselves as patient counselors. The participants were also asked to fill in a structured questionnaire about the demographic data (i.e. gender, age, working experience). The participants were not given any information and education concerning the model of the USP medication counseling stages when they were asked to write an essay. The essays were written in Finnish.

The data from the essays were qualitatively content analyzed and the data from the structured questionnaire were quantitatively analyzed. This study involved two levels of analysis. First, the researchers developed a coding scheme on the basis of the USP medication counseling behavior guidelines (www.usp.org) and studies using Mezirow's (Mezirow, 1981, 1991) conception of reflection. Two researchers coded data independently, after which the results were

Table I. Literature review used in this study.

Beginner	Novice	Professional	Expert
Knows the basic concept. Gives information	Knows the concept. Under the supervision able to counsel	Able to counsel independently. Capable of reflection to improve performance	Deep knowledge, able to teach and counsel
Monologue: transfer of knowledge	*Dialogue*: exchange of information	*Discussion*: two-way communication	*Conversation*: patient counseling
Expert-controlled health education	Patient-centred health education	Empowermental health counseling	Empowermental health counseling
Thoughtful action without reflection	Consciousness	Critical consciousness	Critical consciousness

Summary of concepts describing competency in patient counseling as constructed through concepts in health education and levels of reflection (www.usp.org, Mezirow, 1981).

Table II. Levels of reflection derived from Mezirow (1981, 1991) and Poskiparta et al. (1999).

Thoughtful action without reflection
Level 0. Non-reflective thoughtful action
Consciousness—"how" questions concerning process and content
Level 1. Reflectivity: awareness, observation, description
Level 2. Affective reflectivity: awareness of feelings
Level 3. Discriminant reflectivity: assessment of decision-making process or evaluation of planning
Level 4. Judgemental reflectivity: being aware of value judgements and the subjective nature of these
Critical consciousness—"why" questions looking for reasons and consequences of perceiving, thinking or action
Level 5. Conceptual reflectivity: assessments of whether further learning is required to assist in decision-making
Level 6. Psychic reflectivity
Level 7. Theoretical reflectivity: awareness that routine or taken-for-granted practice may not be the complete answer, obvious learning from experience or change perspective

compared. Then the essays were reviewed again and discussed until the consensus agreement was reached. The analysis was done by categorising the content of the essays into different themes, which were based on two theoretical frameworks; medication counseling stages of the USP (www.usp.org), and reflectivity (Mezirow, 1981, 1991).

The study pharmacists

The participants ($n = 40$) who attended the CE-course either in 2000 or 2001 were practising pharmacists whose mean working experience was 15 years (SD + 1.09 years; range 1–36 years). The mean age of the participants was 39 years (SD + 1.32 years; range 26–59 years). All but two of the participants were women. Most (59%) had a Bachelor's degree in Pharmacy, and the rest (41%) had a Master's degree. From the participants, 17 (8 pharmacists with Master's degres and 9 with Bachelor's degrees) did not have any previous education in communication skills (e.g. they did not understand the meaning of non-verbal communication in counseling) and in pharmacotherapy during their basic studies, although they are expected to have these skills in their current work at the pharmacy. In Finland, the pharmacies have been polarized, meaning that there are pharmacies where owners are committed to long-term professional development and those where professional development is not priority (Kansanaho, Puumalainen, Varunki, Ahonen, & Airaksinen, 2004). Most of the participants attended the CE courses on their own initiative, thus it does not represent a level of reflective thought.

Table III. Outline of the one-year continuing education course organized in 2000 and 2001.

First module
Principles of constructive learning
Principles of two-way communication (USP Medication Counseling Behavior Guidelines)
Analysis of participants' strengths and weakness in patient counseling
Second module
Therapeutic guidelines (project work)
Practicing two-way communication in small groups using role play technique
Practicing self-evaluation and peer-evaluation of performance
Third module
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 counseling (project work)
Introduction to the final project (project work)
Fourth module
Long-term development plan on patient counseling for the pharmacy (project work)
Presentations of the final projects
Ethics in patient counseling
Evaluation of the CE course

Source: Kansanaho et al. (2003).

Ethical considerations

The principle of informed consent was applied in this study. The study pharmacists were informed orally that the data collected before and during the long-term courses were intended to be part of this study and the participants gave their oral consent for study participation. The privacy of the study pharmacists was protected during the analysis. Verbatim quotations from individual study pharmacists are shown and after each citation, a code number is given in parentheses preceded by either a "b" (referring to a study pharmacist with a Bachelor's degree) or "m" (a study pharmacist with a Master's degree).

Results

Non-reflectors at the stage of medication information transfer

Table IV summarizes the pharmacists' level of patient counseling and reflection. Ten of the study pharmacists (5 pharmacists with Bachelor's degrees and 5 pharmacists with Master's degrees) had their patient counseling competency at the lowest stage, reaching the level of non-reflection (Table IV). They self-reported to be poor drug information providers, but they were quick in serving their patients. These pharmacists were indicated to need continuing education in basic knowledge and communication skills. They had poor understanding of the interactive role of a patient (concordance). These pharmacists reported that young and middle-aged patients, especially males, old people and children were difficult to serve. They did not want to even provide drug information for these patients. The pharmacists wanted to develop their competency from the monologue stage to the dialogue stage but they did not know how to implement the skills into practice.

Table IV. Medication counseling stages (www.usp.org) and level of reflectivity (Mezirow, 1981, 1991) of the study pharmacists according to content analysis of the essays ($n = 40$).

	Medication information transfer ($n = 10$)	Medication information exchange ($n = 22$)	Medication education ($n = 7$)	Medication counseling ($n = 1$)
Level of information	Basic, brief, non-individualized	Detailed, individualized	Comprehensive, group or individualized	Detailed discussion and guidance
Level of counseling	Most often spontaneous in response to the medication prescription	Spontaneous or planned	Planned	Planned
Objective of process	Essential information related to taking prescribed medication as directed (Monologue)	Provider responds to and asks questions related to prescribed medication (Dialogue)	Collaborative learning experience and process regarding prescribed medication (Conversation)	Guidance that assists in fulfilling needs in managing medical condition and prescribed medication (Discussion)
Product to Patient	Focus is on safe and proper use of drug product	Answers and solicits questions about the drug product. Adapts information to the individual. Increases knowledge regarding proper and safe use of medication for specific condition	Increases knowledge regarding proper use and safe use of medication forspecific condition	Enhanced problem solving skills and assists with proper management of medical condition and effective use of medication
Nature of relationship	Passive individual receives instruction given by the healthcare provider	Questions and answers are actively exchanged between patient and provider	Interactive learning about the implication of the medication is shared between patient and provider	Interactive and collaborative discussion and learning between patient and provider
Level of reflectivity	Non reflector (level 0)	Reflector (consciousness at levels 1–4)	Critical reflectors (critical consciousness at levels 5–7)	Critical reflectors (critical consciousness at levels 5–7)

The study pharmacists were not able to reflect on the counseling experience. When describing the counseling sessions they used disconnected empirical knowledge without analyzing their actions in relation to their knowledge. They described their counseling briefly and the meaning scheme of practice was constructed directly without evaluating what was counseled during the session:

> "I know what good counseling is but I don't know how to implement it into the practice. I know that I should ask questions but obviously I don't do that."[b4]

> "I tell the patients how to use the medicines and then I ask the "target" to repeat the instructions after. I tell the patients what to do and don't ask the questions." [m13]

Reflectors at the stage of medication information exchange

From the participants, 22 study pharmacists (15 with Bachelor's degrees and 7 with Master's degrees) had their competency at the Medication Information Exchange stage and reached the lower level of consciousness reflection (at levels 1–4 according to Mezirow, 1981, 1991), as explained by Table IV. The study pharmacists were aware that they needed long-term continuing education courses on pharmacology, disease management and therapeutic guidelines. These pharmacists reported that the owner of the pharmacy did not support the staff and did not give them enough possibilities to educate themselves. A lack of time and privacy in the pharmacy were also reported as barriers to provide drug information. The study pharmacists were technical and medicine-centred, without personal or affective involvement. The counseling focused on the instructions of the medicines and how to store them, and the content was quite general:

> "Information must be transferred to the patient. For example, this medicine is taken without food in the mornings."[m20]

> "The pharmacy owner's attitude to counseling is important. He should support the pharmacy staff more and realize the meaning of counseling."[b39]

Critical reflectors at the stage of medication education

From the participants, 7 pharmacists (5 pharmacists with Bachelor's degree and 2 pharmacists with Master's degree) demonstrated competency at the Medication Education stage and reached the higher level of critical consciousness (Table IV). The study pharmacists reported that providing drug information was the most important work in pharmacies. They also reported that a pharmacy could be more than

a place to buy drugs; it could be a comprehensive source of health information. The pharmacists thought that life-long learning is essential to develop their professional competence and saw themselves as approved professionals capable of providing legitimate patient counseling. Usually, these study pharmacists were satisfied with their ways of counseling and found only few technical things that could have been carried out better:

> "The patient is the best expert concerning his own diseases. Pharmacists are not allowed to underestimate the patient while counseling. If the patient has used some medication for years, the patient usually knows everything about the medication. Pharmacists have to make sure that everything is ok. In order to do that, the pharmacist should have new pharmacological knowledge and good communication skills." [m19]

> "I try to negotiate with the patient about his medication. I want to find out if the patient's medicines are new or has he used them for long time. I try to make sure that the patient knows how to use medicines, especially if he is using asthma medication." [b39]

Critical reflector at the stage of medication counseling

Only one study pharmacist, who had a Master's degree, achieved the highest level of patient counseling stage and the level of theoretical reflectivity, like interactive discussion with the patient (Table IV). It was typical for the critical reflector to have an open, affective and personal style of reflecting and to explicate any earlier assumptions regarding the self and counseling. According to this pharmacist, patient counseling is based on: listening, asking questions, discussing, concretizing and repeating. In order to be a good drug information provider and maintain communication skills, continuing education and good support from management are required. By activating his/her own self-reflection, the pharmacist is able to help the patients reflect on their thoughts concerning their medication:

> "I try to create the situation where both of us talk, ask questions and listen." [m7]

Discussion

The findings of this study showed that most of the study pharmacists achieved the level of consciousness when evaluating their written essays in the context of reflectivity. Only one study pharmacist reached the level of critical consciousness and ten study pharmacists remained at the level of non-reflection. Pharmacists need to be able to critically reflect their communication skills and understand the role of the patient counseling in order to reach the highest level of medication counseling critical reflectivity (www.usp.org, Mezirow, 1981, 1991). Studying pharmacotherapy alone is not enough; one needs to understand and internalize critical reflectivity and communication skills, have the ability to integrate these skills into practice, and understand the interactive role of a patient (concordance).

However, the results of our study reflect that old traditions still dominate pharmacist–patient interaction. They are in line with another Finnish study, which is aimed to explore patient–pharmacist interaction, assess the existing myths concerning patient counseling and determine if it was possible to change them by practicing new communication skills (Katajavuori et al., 2002). In our study, pharmacists seemed to still have the attitude of selling medicines instead of selling treatments, which influenced their behavior. The pharmacists' relationship is paternalistic and asymmetrical, leaving the pharmacist "in control". They have a drug-centred way of thinking and the transfer of information is monologue-based. According to these results, it seems that the development of the role of the pharmacists in patient counseling requires communication, critical reflection and transformative learning.

In pharmacies, the support from the management level is essential in developing patient counseling in practice towards more concordance based counseling (Kansanaho et al., 2003). The role of the pharmacists should change from the paternalistic counselor towards a counselor who supports the patient emotionally and helps them to combine actions, knowledge and feelings—critical reflection. In order to support the pharmacists' reflection, educators at and pharmacy owners should be committed to reflective practice and to be sensitive to pharmacists' learning. The role of the educators and pharmacy owners is important in the creation of an open and supportive atmosphere (Katajavuori, Lindblom-Ylänne, & Hirvonen, 2004, Katajavuori, Lindblom-Ylänne, & Hirvonen, 2005).

Professional development in the healthcare field requires conscious and practical knowledge (Jarvis, 1992, Tynjälä, Nuutinen, Eteläpelto, Kirjonen, & Remes, 1997). Using these skills, pharmacists are able to pay more attention to the patient. Flexible patient counseling situations are constructed when the patient is an active partner and all personal needs and wishes are taken into account. In order to develop professionally, the pharmacists have to combine knowledge, action and feelings. Using critical reflection, the pharmacist can redefine his/her own work and improve his/her performance. Another previous study was focused on evaluating the impact of a new kind of long-term continuing education course on patient counseling skills for pharmacy practitioners (Kansanaho et al., 2003). It was found that an extensive learning process is needed at the pharmacy

level that involves: individual pharmacists to develop personal competency; the entire working society to change the communication culture; pharmacy owners to incorporate professional services into the vision and business strategy of the pharmacy; local consumers to educate them to take an active role in self-management; and other health care providers to agree on the new roles in multidisciplinary teams (Kansanaho et al., 2003). As the same study pharmacists were interviewed after the long-term CE-courses.

Concrete tools are needed in educating pharmacists. One of the fundamental tools has been the USP Medication Counseling Behavior Guidelines. They have been systematically applied to introduce practitioners to the principles of two-way communication and self-assessment of performance (www.usp.org). In this study, the USP medication behavior guidelines proved to be a very practical tool to illustrate differences between counseling stages. The first step in training is to raise awareness of different approaches to the patient. The challenge in continuing education, and for educators, is to identify the pharmacist as fixed at the lower level of reflection and help him or her towards a personal and reflective growing process. The USP medication counseling behavior guidelines could be used as an assessment tool to evaluate pharmacists' reflective learning. Work experience alone does not develop health professionals' reflective abilities (Wong, Kember, Chung, & Yan, 1995, Katajavuori et al., 2004).

Continuing education for pharmacists as health care professionals should be focused even more at the practice level and involve dynamic verbal- and non-verbal communication situations, which could be videotaped for further theoretical, consciousness and developmental feedback and self-assessment. In order to activate self-reflection, pharmacists need practice (Van Manen, 1977, Mezirow, 1981, 1991, Smyth, 1992).

Methodological considerations

Even though content analysis is originally a quantitative method, it is still significant as a qualitative method also (www.metodix.com, Pietilä, 1976). Content analysis is a research method, which makes it possible to draw repeatable and valid conclusions about the relation between the research data and its context and contents. It is a tool for producing new information, knowledge and conceptions, and for bringing forward the hidden facts. The division of content analysis can be considered as a set of different methods, which are used in observing the contents of data and gathering data by the scientific rules. The method of essay writing allowed the pharmacists to explicate their suppositions of counseling in the context of reflectivity. In this study, two authors analysed the data. In order to avoid bias the analysis was first done independently and then compared, and in the case of scoring discrepancy, the essays were reviewed again and discussed until the consensus score was reached. The results of the study reflect the subjective experiences of the study pharmacists in the beginning of the course and cannot be generalized more widely. It would be useful to repeat the study among large amount of pharmacists during CE-courses in order to follow the development of reflective practitioners in the area of patient counseling.

Conclusion

In this study, the essays, which were written by 40 practicing pharmacists before attending a long-term CE-course, were analyzed in order to find out pharmacists' patient counseling skills in the context of reflectivity. In order to support the reflective learning process in developing professional competencies, such as patient counseling skills, new teaching methods and evaluation tools applicable to continuing education and in-house training are needed. The challenge in both basic and continuing future pharmacy education is to support pharmacists in constructing their meaning perspectives toward empowerment patient counseling and the broad roles that will be expected of pharmacists. To achieve this goal, pharmacists must undertake training skills needed for patient counseling and reflective methods, as these enhance learning from practice via critical reflection.

Acknowledgements

We would like to thank The Pharmaceutical Learning Centre for organising the continuing education course, and the participants of the CE course for their enthusiastic co-operation.

This study was supported by the Finnish Cultural Foundation, Elli Turunen Fund., and the Finnish Pharmaceutical Association.

Note

*There are two pharmaceutical qualifications in Finland. One qualification is the Master in Science of Pharmacy degree (M.Sc.Pharm), which takes five to six years to complete, including six-months practical training in a pharmacy and can be obtained from either Helsinki or Kuopio University. In order to own a pharmacy, one must have the Master in Science of Pharmacy qualification. The second qualification in Finland is the Bachelor in Science of Pharmacy degree, which takes three years to complete including six-months practical training in a pharmacy and can also be obtained from either Helsinki or Kuopio University, and Åbo Academi. Only the pharmacists with the Bachelor or Master in Science of Pharmacy degrees are allowed to dispense medicines, serve and counsel patients at the pharmacies.

References

Airaksinen, M., Vainio, K., Koistinen, J., Ahonen, R., Wallenius, S., & Enlund, H. (1994). Do the public and pharmacists share opinions about drug information? *International Pharmacy Journal*, *8*(4), 168–171.

Airaksinen, M., Ahonen, R., & Enlund, H. (1998). The "Questions to ask about your medicies" Campaign—an evaluation of pharmacists and the public's response. *Medical Care*, *36*, 422–427.

Benson, A., & Latter, S. (1998). Implementing health promoting nursing: The integration of interpersonal and health promotion. *Journal of Advanced Nursing*, *27*, 100–107.

Blenkinsopp, A., Panton, R., & Anderson, C. (2000). *Health promotion for pharmacists*, 2nd ed. Oxford: University Press.

Boud, D. (1999). Avoiding the traps: Seeking good practice in the use of self assessment and reflection in professional courses. *Social Work Education*, *18*(2), 121–132.

Boud, D., & Middleton, H. (2003). Learning from others at work: Communities of practice and informal learning. *Journal of Workplace Learning*, *15*(5), 194–202.

Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. *Studies in Higher Education*, *23*(2), 191–206.

Content analysis in qualitative research. http//www.metodix.com. Accessed from the Internet 02/2003.

De Young, M. (1996). Reflections on guidelines and theories for pharmacist–patient interactions. *Journal of Pharmacy Teaching*, *5*, 59–81.

Hargie, O., Morrow, N., & Woodman, C. (2000). Pharmacists' evaluation of key communication skills in practice. *Patient Education and Counselling*, *39*, 61–70.

Hepler, C. D., & Strand, L. M. (1993). Opportunities and responsibilities in pharmaceutical care. *American Journal of Hospital Pharmacy*, *47*, 533–543, 1990.

Järvinen, A. (1990). Reflektiivisen ajattelun kehittyminen opettajankoulutuksen aikana. *Kasvatustieteiden tutkimuslaitoksen julkaisusarja A. tutkimuksia 35*. Jyväskylä: Jyväskylän yliopisto.

Jarvis, P. (1992). Reflective practice and nursing. *Nurse Education*, *12*, 174–181.

Kansanaho, H., Pietilä, K., & Airaksinen, M. (2003). Can a long-term continuing education course in patient counselling promote a change in the practice of Finnish community pharmacists? *International Journal of Pharmacy Practice*, *11*, 153–160.

Kansanaho, H., Puumalainen, I., Varunki, M., Ahonen, R., & Airaksinen, M. (2004). Implementation of a professional program in Finnish community pharmacies in 2000–2002. *Patient education and counselling*, in press.

Katajavuori, N., Valtonen, S., Pietilä, K., Pekkonen, O., Lindblom-Ylänne, S., & Airaksinen, M. (2002). Myths behind patient counselling; a patient counselling study of non-prescription medicines in Finland. *Journal of Social Administrative Pharmacy*, *19*(4), 129–136.

Katajavuori, N., Hirvonen, J., & Lindblom-Ylänne, S. (2003). The Development of excellence in pharmaceutical knowledge–New curriculum for the B.Sc.(Pharmacy) studies. *Pharmacy education*, *3*(3), 149–160.

Katajavuori, N., Lindblom-Ylänne, S., & Hirvonen, J. (2004). Practical training period in pharmacy curriculum–mentors' point of view. *Research in Science Education*, in press.

Katajavuori, N., Lindblom-Ylänne, S., & Hirvonen, J. (2005). The significance of practical training in linking theoretical studies with practice. *Higher Education*, IN PRESS.

Marinker, M. (1997). *From compliance to concordance: Achieving shared goals in medicine taking*. Merck Sharp and Dohme: Royal Pharmaceutical Society of Great Britain.

Mezirow, J. (1981). A critical theory of adult learning and education. *Adult Education*, *32*(1), 3–24.

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass publishers.

Närhi, U., Vainio, K., Ahonen, R., & Enlund, H. (1999). Detecting problems of patients with asthma in a community pharmacy—a pilot study. *Journal of Social Administrative Pharmacy*, *16*(3/4), 127–133.

Ora-Hyytiäinen, E. (2004). Auttajasta reflektiiviseksi sairaanhoitajaksi–Ammattikorkeakouluopiskelijan kasvu ja kehittyminen ammattiin. (In Finnish with English abstract: The professional growth and development of a polytechnic student from a helper to a nurse) Doctoral Thesis, Acta Universitatits Tamperensis 1032, The Univeristy of Tampere, Tampereen Yliopistopaino Oy, Juvenes Print, Tampere.

Pietilä, V. (1976). *Sisällön erittely*. (In Finnish: Content analysis) Helsinki: Gaudeamus.

Poskiparta, M. (1996). Terveysneuvonta, oppimaan oppimista. Videotallenteet hoitajien terveysneuvonnan ilmentäjinä ja vuorovaikutustaitojen kehittämismenetelmänä. (in Finnish) (Nurses'self-assessment via videotaping to development communication skills) Studies in sport physical education and health 46 (Doctoral dissertation), Jyväskylän yliopistopaino, University of Jyväskylä, Jyväskylä.

Puumalainen, I., Halonen, P., Enlund, H., Johnson, K., & Airaksinen, M. (2004). Validation of the United States Pharmacopeia (USP) Medication Counselling Behavior Guidelines. *Pharmacy World and Science*, under review at the moment.

Schön, D. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in problems*. San Francisco: Jossey Bass Publishers.

Sihvo, S., & Hemminki, E. (1999). Self medication and health habits in the management of upper gastrointestinal symptoms. *Patient Education and Counselling*, *37*, 55–63.

Sihvo, S., Ahonen, R., Mikander, H., & Hemminki, E. (2000). Self medication with vaginal antifungal drugs: Physicians' experiences and women's utilization patterns. *Family Practice*, *17*(2), 145–149.

Smyth, J. (1992). Teacher work and the politics of reflection. *American Education Research*, *2*, 267–300.

Szasz, T., & Hollander, M. (1956). A contribution to the philosophy of medicine. *Archives of Internal Medicines*, *97*, 585–592.

Tiuraniemi, J. (2002). Reflektiivisyys asiantuntijatyössä. Teoksessa Taitavan toiminnan psykologia. (Reflectivity in professional competence) (In Finnish) In P. Niemi, & E. Keskinen (Eds.), *Turun yliopiston psykologian laitoksen julkaisuja*. Turku: Yliopistopaino.

Tynjälä, P., Nuutinen, A., Eteläpelto, A., Kirjonen, J., & Remes, P. (1997). The acquisition of professional expertise—a challenge for educational research. *Scandinavian Journal of Educational Research*, *41*, 475–494.

United States of Pharmacopeia. On the Internet: http://www.usp.org. Accessed 06/2002.

Van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, *6*, 205–228.

WHO/Regional Office of Europe (1999). Health 21—Health for all in the 21st century. The Health for all Policy Framework for the WHO European Region. European "Health for All" Series no. 6. Regional office of Europe, Copenhagen.

Wong, F. K. Y., Kember, D., Chung, L. Y. F., & Yan, L. (1995). Assessing the level of student reflection from reflective journals. *Journal of Advanced Nursing*, *22*, 48–57.

Author Queries

JOB NUMBER: MS 107490—

JOURNAL: GPHE

Q1 Number of figures is given as "4" in Typescript Cover Note, but no such figures or citations exists. Please check.

Q2 Please check the sense of the sentence.

Q3 Please check the year.

Q4 Please update the reference.

Q5 Please update the reference.