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Future challenges for nursing education – A European perspective

Leena Salminen [a,*], Minna Stolt [a], Mikko Saarikoski [b], Arja Suikkala [c], Heli Vaartio [d], Helena Leino-Kilpi [a]

[a] University of Turku, Department of Nursing Science, 20014 University of Turku, Turku, Finland
[b] Turku University of Applied Sciences, Turku, Finland
[c] Diakonia University of Applied Sciences, Helsinki, Finland
[d] Novia University of Applied Sciences, Turku, Finland

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SUMMARY

In Europe, there have been reforms in nursing education during last years and many political papers have been published. The reforms have given need for harmonising nursing education. In spite of that, there are differences in nursing education system in Europe. In this paper, we describe some main policy papers in the field of nursing education and identify selected future challenges. These challenges have been named for developing cross-cultural collaboration, clinical learning environment, role of patients and teacher education.

Introduction

In Europe in the last few years there have been several reforms in nursing education, especially different processes attempting to harmonise it. In spite of these processes, however, the nursing education system still lacks coherence (Spitzer and Perrenoud, 2006). In this paper, our aim is to identify future challenges for nursing education from a European perspective, in the light of educational policy papers and scientific literature in the field. Findings from this review can be used in developing nursing education, competence of educators and research both in national and in European levels. We conclude this review with suggestions for future nurse education.

Policy papers on nursing education in Europe

In 1999, European Ministers of Education agreed in Bologna to construct a European higher education area (EHEA) for adapting higher education and research in Europe to the changing needs of society and advances in scientific knowledge (European Ministers of Education, 1999). Implementation of the Bologna agreement has had significant influence on education in Europe (Davies, 2008). The Tuning Project (2000) was created to examine learning outcomes and competences to distinguish the different roles of academic staff and students. Fostering competences requires a dynamic combination of the knowledge, understanding, skills and abilities which are formed in various course units and assessed at different stages.

The Thematic European Nursing Network (TENN, 68 institutions, 26 countries, Marrow, 2009) was developed to evaluate current European nurse education by examining generic as well as subject-specific competencies, curriculum components, core elements of learning cultures and assessment procedures, and adoption of the European Credit Transfer and Accumulation System. As a result of three tuning cycles, competency categories for registered nurses have been established as follows:

- professional values and nursing role,
- nursing practice and clinical decision-making,
- nursing skills, interventions and activities,
- knowledge and cognitive competencies,
- communication and interpersonal relationships and
- leadership, management and team abilities.

In nursing curricula these nursing competencies are defined as learning outcomes in relation to generic competencies. Some authorities have issued statements in clarification of the Bologna declaration. For example, several European nursing organisations (e.g., European Federation of Nurses Associations (EFN), European Specialist Nurses Organisation (ESNO), European Nursing Students Association (ENSA), and International Council of Nursing (ICN) stated in 2008 that first-level nursing programmes (minimum bachelor level) needed to guarantee the acquisition of basic competencies and cover at least three academic years. Furthermore, the curriculum should be based on research and skills. With regard to this criterion, there are inconsistencies within the EU. In Finland, nursing education is organised in polytechnics (multi-field

* Corresponding author. Tel.: +358 2 3338576.
E-mail addresses: leesalmi@utu.fi (L. Salminen), minna.stolt@utu.fi (M. Stolt), mikko.saarikoski@turkuamk.fi (M. Saarikoski), arja.suikkala@diak.fi (A. Suikkala), heli.vaartio@novia.fi (H. Vaartio), helena.leino-kilpi@utu.fi (H. Leino-Kilpi).

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institutions) with a practical orientation. The first-cycle polytechnic degree is a bachelor-level degree, which takes 3.5–4.5 years to complete (OPH, 2008). Nursing programmes include clinical skills and practical modules about 90 ECTS (European Credit Transfer System) points in accordance with European directives (European Commission, 2005, 2009). European nursing organisations also call for tools to facilitate learning outcome assessment (EFN, ENSA, ESNO, and ICN, 2008). Success is not only about how learning outcomes can be achieved but also how they can be measured.

Continuing professional development, post-graduate specialisations, lifelong learning and nursing career development are central in any response to societal challenges. In order to safeguard quality of care and patient safety, there is a need for a large number of highly qualified nurses. The Bologna agreement offers a structure for lifelong learning and therefore European Union legislation needs to set out a clear framework to assist in harmonising the outcomes between European countries. Work needs to be done in comparing and defining an agreed master's degree in terms of an integrated theoretical and practical career such as nursing (EFN, ENSA, ESNO, and ICN, 2008).

In summary, and on the basis of policy papers, the following challenges are a minimal target for future nursing education:

- Competency categories for registered nurses should be demonstrated by curricula. This implies the need for integration of theoretical studies, clinical training in healthcare organisation and research skills relating to changing needs of society and advances in scientific knowledge. Clinical learning environments have a special importance.
- Quality of nursing education should be evaluated in local, national and international networks.
- Nursing curricula should be more specific with regard to content, learning strategies and evaluation of learning outcomes.
- Student-centred learning culture needs to be improved.
- Conditions for student and educator mobility should substantially increase, requiring knowledge about cross-cultural activities and willingness to understand other societies.
- Nurse educators should have clinical, pedagogical and research skills and skills for research implementation.

In the next sections, some of these challenges will be described in more detail. We start first by analysing cross-cultural research in Europe and then move to look at the clinical learning environment and students' relationships with healthcare clients or patients. Challenges for nurse educators will also be presented. The ultimate goal is to persuade nurses, nurse educators and managers to consider the importance of cross-cultural collaboration and policies for their work in the field of nursing education.

The need for cross-cultural research

Cross-cultural collaboration in Europe and globally shows a clear demand for nurse educators (Jackson et al., 2009; Marrow, 2009). In this section, we identify from research papers the future challenges for nursing education.

Two databases, Medline and CINAHL, were used for cross-cultural collaboration in educational research between 1999 and 2009. The search terms nursing OR nurse AND (educ* OR teach* OR studen*) AND europ* and limitation to English language were used. The search produced 292 references. After including only empirical studies, those with nursing education content and those reporting comparative data from two or more European countries, we ended up with eight articles for the analysis.

Generally, comparative studies in nursing education between European countries seem to be limited. There is, however, a comprehensive overview of nursing education reforms enacted in Western Europe in the last three decades reported in a review by Spitzer and Perrenoud (2006). This review indicates that two major phases of reforms were initiated in nursing education. The first phase was geared to create a unified European platform of solid pre-registration programmes and the second to integrate nursing programmes into higher education institutions.

In another large descriptive literature review ($N = 1286$, Yonge et al., 2005), quality of nursing education, curricular content, geographic locations, research designs, sample sizes, instruments and funding sources were analysed. According to the review, 90% of nursing education research was generated in North America and Europe. Most of the articles were quantitative in nature, sample sizes diverse, with a bare majority using a sample between 50 and 99 participants. More than half of the studies used structured questionnaires to obtain data and 80% of the studies were not funded. The number of publications of nursing education research generated annually stabilised at approximately 120 per year (Yonge et al., 2005). In Finland a large review of Finnish nurse education research ($N = 118$) between the years 1984 and 2004 has also been published. According to the review, studies are mainly descriptive and experimental research designs and longitudinal studies are quite rare (Salminen et al., 2006). Similar results were found by Hegarty et al. (2008) in the Republic of Ireland.

There are studies which compare just a few countries. For example, UK and Spanish nursing students' views on studying or working abroad are reported (Goodman et al., 2008). Perceived barriers for UK students were funding, family, and language. Family commitments, however, were not a major problem for Spanish students, who saw language as more of a barrier. Experiences of supervision are mainly positive in Europe, as was indicated by Saarikoski et al. (2007) in a study comparing student nurses' experiences of supervision and mentorship in eight European countries.

There are also studies reporting on different educational clinical fields. For example, education of nurses in mental health settings has been evaluated in 12 European countries. The findings indicate that there is considerable disparity between countries in respect of nurse training, with few countries requiring a specialist nursing qualification for practice in the mental health field (Nolan and Brimblecombe, 2007). Also, there seem to be differences in knowledge about childhood asthma between first-year nursing students in Spain, the UK and Germany (Garcia-Marcos et al., 2004). In the field of cardiac knowledge (Bakalis et al., 2004), final-year English student nurses have better knowledge than their Greek counterparts.

Cross-cultural research among nurse educators is limited. Jackson et al. (2009) identified what is known and written about in the nursing communities on nurse educator careers from a pan-European perspective, common themes and underlying influences. They found that most of the literature relating to nurse educators remained centred on a single country, with little or no reference to the Bologna process.

In summary, all reviewed articles present a challenge to further research in nursing education (Bakalis et al., 2004; Garcia-Marcos et al., 2004; Yonge et al., 2005; Spitzer and Perrenoud, 2006; Nolan and Brimblecombe, 2007; Saarikoski et al., 2007; Goodman et al., 2008; Jackson et al., 2009). Also, the need for additional cross-cultural research in Europe was emphasised (Bakalis et al., 2004; Nolan and Brimblecombe, 2007; Saarikoski et al., 2007). The common policy papers for Europe mentioned above give one starting-point for this research.

Clinical learning environment facilitates understanding

The European Commission (2007) requires the Bologna agreement integrative development in all fields of education. Problems

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in nursing education in Europe seem to be rather identical (Saarikoski et al., 2009a). Clinical learning environments, including the supervisory system, have a special importance in terms of achieving desired learning outcomes. A particular question surrounds the situation in the new European Union (EU) countries, where educational culture has adopted the traditional hospital-based school model and medical staff act as clinical teachers for both medical and nursing students (Kalnins et al., 2001; Saarikoski et al., 2007).

Clinical practice in nursing education has been examined from three different perspectives during the last three decades. Three main strands are visible in the empirical studies: (1) the earliest studies (in the 1980s and early 1990s) focused on the pedagogical atmosphere of learning environments and highlighted the importance of the ward manager as a key resource for a good learning environment (see, e.g., Ogier and Barnett, 1986; Allan et al., 2008). (2) The later studies in the 1990s and 2000s focused on the supervisory role of clinical nursing staff, especially from the perspective of individualised supervisory relationships (see, e.g., Hsieh and Knowles, 1990; Lewin, 2007). (3) The most recent studies focus on the relationship between patients or clients and nursing students (see, e.g., Loftus, 1998; Suikkala and Leino-Kilpi, 2001).

The clinical learning environment and supervisory systems have been considered from the perspective of nursing students, nurse educators and qualified nursing staff. The studies, however, have not produced a consistent or universal theory of clinical teaching. The main focus of the studies, however, seems to be on the contributory factors involved in clinical learning from the student's perspective. The majority (91%) of the empirical studies considered the clinical learning environment through students' unique experience (Saarikoski et al., 2009a).

What kind of perspectives on the future do we have? How can we prepare for the coming challenges? Developments in Finland can be used as an example. The Finnish nurse education system moved to HEI (Higher Education Institutions) in the 1990s. A study was carried out (Saarikoski et al., 2009a) which reports on the changes in nursing students' ($N = 965$) perceptions of clinical practice during a 10-year period (1997–2007). As a result of this study, the group supervision practices have decreased, and supervision has focused more on individualised supervisory relationships. In 1997, 38% of the students reported being supervised through group tutoring whereas only 16% of polytechnic students reported a group supervision experience. Reported successful individualised supervisory relationships increased during the period from 42% to 66%. The ratio of different kinds of unsuccessful experiences of the supervision process (e.g., not supervised at all) decreased from 20% to 18%. The polytechnic students gave more positive assessments of the learning environment and supervision than the students in nursing colleges 10 years earlier.

Pedagogical conditions offered by the wards have clearly improved and the supervisory skills of clinical nursing staff have also increased during the 10-year study period. We can also conclude that the role of the nurse educator has decreased whereas the role of nursing staff in education has increased during the transition process to HEI. There is research evidence that the development trends in other Western European countries have been similar as well (Saarikoski et al., 2009b). For example, Wills (1997) reported the decreasing frequency of meetings between nurse educators and students from her empirical study in England earlier in the 1990s and this observation has also been evidenced by later studies (see, e.g., Ramage, 2004; Barrett, 2007; Lewin, 2007).

One challenge for future teaching and supervision in clinical practice is the utilisation of modern information technology. A virtual learning environment (e.g., Blackboard or Moodle) can act as a communication base for student, supervisor and nurse educator. At present, the research evidence in the field of clinical learning is limited (McAllister and Moyle, 2006; Saarikoski et al., 2009b). It is clear, however, that there will be change in clinical learning environments, including change in community healthcare services and a proportional decrease in hospital-based services. Thus, the future of learning nursing skills will be more and more realised through simulated learning environments (Bloomfield and Tofts, 2006; Landry et al., 2006), giving a special importance to new technologies (Kelly et al., 2009).

Patients are the core of nursing education

Health care is becoming increasingly patient-centred and patients are regarded as active subjects in health care, participating in decision-making, selecting services and managing their own health (European Commission, 2007). Equally, in nursing education the role of patients in clinical practice is changing towards partnership. Even though there are increasing examples of good practices of patient involvement in educational activities such as inclusion of their views and experiences in curriculum development and in producing learning material as well as their involvement in classroom and clinical placement teaching, there is still a dearth of information on patients' involvement in students' learning (Suikkala and Leino-Kilpi, 2001; Le Var, 2002; Repper and Breeze, 2006).

In the context of clinical teaching, patients provide the reality of practice for students. The benefit of patient involvement is described by patients as an increase in confidence and self-worth and a feeling of empowerment (Mossop and Wilkinson, 2006; Repper and Breeze, 2006). Actual contacts and relationships with patients are crucial in developing skills needed for the provision of good nursing care (Suikkala et al., 2008). There is a need to involve student–patient relationships in educational activities in a more effective way in clinical settings. In these encounters, the supervising nurse is often involved as a third, more or less active party in the collaboration between student and patient to ensure the safety of patient care (Suikkala and Leino-Kilpi, 2001; Mossop and Wilkinson, 2006). Patients providing feedback and encouragement to students are found to be beneficial to the learning experience. Most importantly, patient assessments provide valuable feedback on the professional performance of students, help students realise how they can influence patients' situation and facilitate patients to attain positive health outcomes (Suikkala et al., 2008).

This limited literature has highlighted the importance of involving patients as active participants in students' clinical learning. There is, however, a need to develop strategies that encourage patients to take a more active role in students' learning and assessment processes in such a way that patients can feel that they have contributed positively to the student learning process. In a study concerning students' and patients' experiences of their relationship (Suikkala et al., 2008), three types of categories emerged: a mechanistic relationship focusing on the student's learning needs; an authoritative relationship focusing on what the student assumed was best for the patient; and a facilitative relationship focusing on the common good for both the student and the patient. In these relationships, the patients were either objects of nursing tasks performed, recipients of help and advice, or experts on their own well-being, thus also serving as learning resources for students (Suikkala et al., 2008). For sharing good practices for patient involvement in education, national and international networks are important and will be a major challenge for educators in the future. Also, the increasing number of older patients, and patients with cognitive disorders, present a special challenge for nurse education.

Competence of educators is multidimensional

Nurse educator roles have been discussed for decades. There is, however, little current evidence in the published literature about

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nurse educator mobility across Europe. Language barriers, lack of financial support, differences within countries relating to the roles, qualifications, nurse educator career pathways and variability in educational systems are all factors that have an impact on educators' workforce mobility.

Nurse educator education varies across Europe, and there is no consensus on the minimum qualifications or required experiences of educators. Generally, nurse educators need at least to complete a university degree (Dempsey, 2007; Jackson et al., 2009; see also the Nursing and Midwifery Council, 2006).

Nurse educator career pathways are also often poorly defined and career routes vary across Europe (Jackson et al., 2009). Moreover, a doctoral-level qualification is seen as desirable for nurse educators as it provides the basis for future research leaders in nursing. In the UK, Jackson and Butterworth (2007) have commented that the low percentage of doctorally qualified nurses in the registered nursing population is a cause for concern in terms of future research nurse leaders. In Finland, for example, about 10% of nurse educators have doctoral qualifications.

Barrett (2007) suggested that there is a lack of strategic management regarding the role of nurse educators and that it is unrealistic to expect them to perform the teaching, research, clinical and managerial roles that may be prescribed for them. Furthermore, the lack of strategic management can result in difficulties between academic and clinical spheres (Butterworth et al., 2005). In Finland, Hyrkäs et al. (2001) emphasised the importance of collaboration between nurse mentors (on the hospital ward) and nurse educators. In the USA, Young and Diekelmann (2002) reported that new educators were inadequately prepared in the skills, strategies and practice of lecturing.

The competence of nurse educators has been described in different terms. Based on the recommendations of the European Federation of Nurse Educators, common core competencies of nurse educators include four areas: academic, research, clinical practice, and management (Costa and Barbieri Figuereido, 2008). Davis et al. (2005) propose 37 competency statements and Green (2006) has developed a Synergy Model of Nursing Education (SMNE) describing eight different competencies for nurse educators (clinical reasoning, advocacy agency, caring practices, collaboration, system thinking, response to diversity, clinical inquiry and facilitator of learning). The goal of the SMNE is to improve the teaching–learning process and outcomes for nurse educators, learners, and the system, adopting a comprehensive approach to the professional development of nurses spanning a career (Green, 2006).

In the literature (Table 1), the competence of nurse educators is often divided into five categories: nursing competence, teaching skills, evaluation skills, personality factors and relationships with students (e.g., Mogan and Knox, 1987; Nehring, 1990; Johnsen et al., 2002). Usually, the relationship between educator and student is evaluated as the most important characteristic or requirement category. Only in one study (in Norway; Johnsen et al., 2002) were teaching skills the most important. New virtual- and e-based pedagogical methods, including social media and simulation, will change the approach to the work of the nurse educator (McAllister and Moyle, 2006; Leigh, 2008; Akhtar-Danesh et al., 2009; Saarikoski et al., 2009b).

For the educators, many challenges have been presented, including the skills of teaching evidence-based practice. Changing the focus from nurse educators as educator developers to nurse educator researchers demands a new way of thinking about teach-

Table 1
Competence of nurse educators in order of importance.

Researcher, year, country Respondents, *n*	Nursing competence	Teaching skills	Evaluation skills	Personality factors	Relationships with students
Knox and Mogan (1985), USA					
Students 393, Teachers 49	III, II	II, IV	I, I	V, V	IV, III
Mogan and Knox (1987), USA					
Students 173, Teachers 28	I, I	II, II	IV, V	III, III	V, IV
Nehring (1990), USA					
Students 121, Teachers, 63	II, I	V, V	IV, III	III, IV	I, II
Leino-Kilpi (1992), Finland					
Students 379	I	II	III	III	V
Sieh and Bell (1994), USA					
Students 199, Teachers, 22	IV, III	III, IV	I, I	V, V	II, II
Kotzabassaki et al. (1997), Greece					
Students 185, Teachers, 31	II, V	III, III	V, IV	IV, II	I, I
Benor and Leviyof (1997), Israel					
Students, 123	I	IV	II	V	III
Wills (1997), UK					
Students, 102	II	III	IV	V	I
Johnsen and Aasgaard (1999), Norway					
Students 121	I	II	III	V	IV
Salminen (2000), Finland Great Britain					
Students 46, Teachers 12	II, III	III, V	V, IV	IV, II	I, I
German					
Students 112, Teachers, 49	I, I	IV, IV	V, V	III, II	II, III
Finland					
Students 225, Teachers, 105	II, IV	V, II	IV, III	III, V	I, I
Gignac-Caille and Oermann (2001), USA					
Students 292, Teachers 59	V	III	II	IV	I
	IV	II	I	V	III
Viverais-Dresler and Kutsche (2001), Canada					
Students, 56	II	IV	I	–	III
Johnsen et al. (2002), Norway					
Teachers, 348	II	I	III	V	IV
Lee et al. (2002), Australia					
Students 134, Teachers 17	II, III	IV, IV	III, II	V, V	I, I
Tang et al. (2005), Taiwan					
Students 214	II	IV	–	III	I

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ing and learning (Yonge et al., 2005), more effective skills in facilitating learning, clinical supervision, research and clinical audits, communication, and other non-traditional nursing skills such as marketing, negotiation, and entrepreneurial skills (Deans et al., 2003). This demands improvements to the quality of teaching practice.

Discussion

Health and educational policies are usually set for a long period of time. In Europe, the directives of the EU and the statements of the Bologna declaration in 1999 have had a major impact on nursing education. There are still, however, inconsistencies between countries, in both theoretical and clinical studies. A sensible idea is needed of what constitutes a common core for the curriculum in nurse education grounded on EU directives, because the EU is a coherent labour market and in terms of economic policy there is a need for freedom of movement for workers. The implementation of that curriculum, however, is dependent on different countries' cultures, healthcare needs, healthcare philosophy and structure, economic situations, migration and immigration. Therefore, a great amount of freedom to develop nursing education according to the policies in different countries is needed.

More research in the field of nursing education is needed. Particularly, there is a need for cross-cultural projects, including different European countries. Through collaborative research it is possible to educate a new generation of researchers in the field of nursing education, whose arena is the whole of Europe and who look after educational solutions in a wide global context. Educational solutions would include research on curricula, learning and teaching methods in theoretical and clinical environments, and research on the education of professional ethics in nursing education (see Numminen et al., 2009).

There is also a need for an agenda for nursing education research in Europe. This agenda should be worked out in collaboration with countries, educators and practitioners, patients and other groups of healthcare workers. The agenda would facilitate and strengthen funding in the field. The agenda could be even established under frameworks of EU.

Educators have a key role in nursing education but there are many differences across Europe. In some countries, nurses have only a few weeks of education and in some countries they achieve master's level education, as is the case in Finland. European-level competence and an education description for nurse educators are called for. There also is a need for research analysing the work, role, activities and competence of nurse educators. Part of this competence needs to be an active participation in the formulation of national and international health policies. Educators also need systematic, international, continuing education.

Conclusions

As a summary, the following suggestions for future nurse education could be made:

- Nursing education must be based on evidence-based nursing and teaching.
- The health policy of each country must pay stronger attention to curriculum planning.
- Patients, population and families must be taken into account.
- We must develop empowering learning environments together with other EU countries and combine our resources, for example, by establishing a common virtual simulation laboratory.
- We must increase the research on nursing education.
- We must found an international nurse educator programme.

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