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Clinical education and training of student nurses in four moderately new European Union countries: Assessment of students' satisfaction with the learning environment

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ABSTRACT

Nurses underwent different models of education during various historical periods. The recent decade in Europe has been marked with educational transitions for the nursing profession related to Bologna Declaration and enlargement of the European Union. This paper aims to explore the situation of clinical placements for student nurses and assess students' satisfaction with the learning environment in four relatively new member states of European Union: the Czech Republic, Hungary, Lithuania and Romania. The data for cross-sectional quantitative study were collected during the exploratory phase of EmpNURS Project via a web based questionnaire which utilized a part of Clinical Learning Environment scale (CLES + T). The students evaluated their clinical learning environment mainly positively. The students' utter satisfaction with their clinical placements reached a high level and strongly correlated with the supervisory model. Although the commonest model for supervision was traditional group supervision, the most satisfied students had the experience of individualised supervision. The study gives a picture of the satisfaction of students with the learning environment and, moreover, with clinical placement education of student nurses in four EU countries. The results highlight the individualized supervision model as a crucial factor of students' total satisfaction during their clinical training periods.

Introduction

At the end of 1990's, European Ministers of Education agreed in Bologna to construct European wide development reforms in all fields of education, including health care education. This process led to several reforms which have explored development phases of education systems in European countries and tried to define the main structure of professional education (Suhonen et al., 2009; Salminen et al., 2009).

During the last decade many of the current European Union (EU) countries, from the former Communist Block (the Soviet Republics' Union and aligned countries) in particular, have undergone substantial re-organization of nursing education that also aimed at the transition of registered general nurse (RGN) training programs from vocational or hospital-based school systems to Higher Educational Institutes (HEIs – universities or colleges). The survey of the training of nurses in the EU certified the fact that in 2012 sixteen EU Member States educated general care nurses exclusively at university level (Bachelors' degree) and two Member States had both academic and diploma level education for nurse students in vocational colleges (DG Internal Market, 2012).

It is emphasized that higher education of nurses is a particular phenomenon in the former Soviet Union and aligned countries and it is not further associated only with getting clinical knowledge and skills, but also with the need for the development of professional identity and values, the acquisition of scientific knowledge and the search for its application when implementing the benefits of modern nursing education, humanistic ideas and professional autonomy (Karosas and Riklikiene, 2008).

Increasing globalization has extended to nursing education programs even more as students move from country to country

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seeking international opportunities and entire programs are being delivered abroad. Internationally moving students, the expansion of health care service across borders and a highly mobile nursing workforce altogether demand an examination of how we educate nurses for their profession. Numerous national, regional and international research initiatives have focussed specifically on the education of nurses and recognize the importance of ensuring not only a sufficient quantity, but also the quality and relevance of health professionals joining the workforce, preparing socially accountable professionals, able to practice collaboratively and to deliver care in current complex and global international context of practice (Barry, 2012; Tichelaar et al., 2012).

Together with modern nursing theories, clinical training in a real health care environment has always been in the centre of nursing education supporting students' transition from the "didactic classroom environment to the hands-on clinical world" (Zipp and Colber, 2014). Clinical education experiences support the mastery of psychomotor, cognitive, and affective behaviours needed for competent entry-level practice. Despite the fact that formal mentors in nursing education in the countries under consideration (the Czech Republic, Hungary, Lithuania and Romania) is just a recent practical implication, there is a wide range of international evidence regarding the effective nursing theory and practice integration with changing health care needs and the improvement of educational, psychological and managerial competencies of practicing nurses through mentorship relations (Warne et al., 2010; Tichelaar et al., 2012).

The nursing program providers usually raise the similar questions seeking the improvement and quality assurance of clinical training of student nurses: What are the main features of a good clinical learning environment? What is an ideal duration of a clinical training placement? What kind of mentor–student relationship has to be developed during clinical training? What are the most important elements of good co-operation between HEIs and a health care service organisation? There is still a limited number of studies considering these questions in an international context (Suhonen et al., 2009).

The existent situation of clinical teaching and students' satisfaction with the learning environment has been explored in four relatively new member states of EU: the Czech Republic, Hungary, Lithuania and Romania inside the EmpNURS Project (www.empnurs.eu), during the preliminary exploratory phase, and this article describes the results of the exploration. The analysis of the quality and the relevance of clinical training as a substantial part of the nursing programme from students' perspective are important to ensure the acquisition of expected competencies of graduating nurses and strengthen educational systems further by sharing good practices within the EU countries. Finally, evaluation of how we educate future nurses is essential if nursing is to lead the world to better health (Barry, 2012; WHO, 2013).

Background

The decades after II World War indicated a period of isolation in few relatively new EU countries of Central/Eastern Europe that joined the Union in 2004–2006. In the Czech Republic, Hungary, Lithuania and Romania, being part of the Communist Bloc influenced many fields of life and science stagnated without cooperation and external links with Western European countries. Nursing in these countries used to be treated as a vocation and was dominated by the biomedical approach to health care and by the medical profession – even though the education processes have been recently moved to universities (Kalnins et al., 2001; Karosas and Riklikiene, 2008). Weaknesses of the independent nursing profession could be seen both in theoretical and clinical studies of nursing, as curricula were strongly based in biomedicine with the subservient role of nurses to physicians. The instructors of nurse students in medical schools were mainly medical doctors with different specialities, but without an official degree in nursing.

The enlargement of EU linked the strategic reorganization of nursing education in every new European Union member state to the implementation of the Directive of the European Parliament, of the Council on the Specialist Education and the recognition of professional qualifications (Directive 2005/36/EC). This was a real reason for nurses to overcome the traditional stereotype attributed to their profession. The training of nurses was taken more seriously, stimulating action towards the necessary changes mostly regarding the content and duration of nursing studies. Despite the harmonization of nursing education in EU member states, there are still remarkable differences in educational standards and pedagogical arrangements between these Central/Eastern EU countries (Spitzer and Perrenoud, 2006).

After the implementation of the Directive 2005/36/EC, a comparative study on practice education of nurse students in nine Western EU member states was carried out in 2007–2009, exploring the factors that enhanced students' learning experience (Warne et al., 2010). The results of this research identified important influences of the national nursing cultural differences on the nurse students' learning environment.

There is also one comparative study that included the learning environment of nurse students in Central/Eastern EU countries (Saarikoski et al., 2007) with similar conclusions as Wrane's et al. research, published in 2010 regarding the importance of students' clinical placement.

The most recent evidence from established European countries goes forward and reflects on roles of clinical mentors, students' expectations and their mentorship experience in different settings outside the hospital. International case study research regarding the variation of roles of clinical mentors in eleven EU and non-EU countries shows the absence of a common model of mentors role across the sampled countries recognized (Dobrowolska et al., 2015). Studies in Sweden focused on student nurses' experience with the clinical learning environment in a nursing home (Carlson and Idvall, 2014) and in primary healthcare (Bos et al., 2015). Their results showed the importance of a good supervisory relationship and their influence on how students experience the clinical learning environment. Qualitative study in Norway reported that learning experiences and motivation of student nurses relates to individual, relational, and organizational aspects. Bachelor students in nursing highlighted the importance of positive relationships between student and mentor under the influence of their own as well as their supervisors' attitudes and competences. In addition, the motivation, self-confidence, and self-respect of students improve when the "feeling welcomed, included, and valued in the ward" is created (Dale et al., 2013).

A study on understanding students' expectations and own experiences of mentorship has been carried out in the UK (Foster et al., 2015). The students were the most positive about involvement of mentors in teaching and explaining, support and supervision, and encouragement. Moreover, the results showed the importance of the support mentors need to provide in the clinical environment.

Despite the expanding the research on mentorship, more international comparative studies on student nurses' clinical training, especially those including the relatively new EU member states, are still needed. This would allow us to close the gap of information on how and to what extent cultural, organizational and educational differences influence nurse students' satisfaction with their learning results from practice.

In our study we have used the term supervision as to the short time relation between the mentors and students during the survey.

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Clinical supervision is fostering self-reflection and self-growth in relation to professional skills (Fowler et al., 2007). We did not know about the real situation and relation between clinical nurses and students in the four involved countries (CZ, HU, LT, RO) and because of this we did not use the term mentorship, which is mostly understood as interpersonal professional relationship between an experienced, more knowledgeable practitioner (mentor) and a less experienced, less knowledgeable individual (protégé or menteé), in which the menteé receives career-related and personal benefits (Henry et al., 1994; Dunn et al., 2000; Adams, 2002). Supervision and mentoring are supportive relationships which help individuals to obtain new skill, knowledge and approaches. Each may be accomplished through various models incorporating both basic and specialized skills.

Aiming to describe the situation of clinical placements for student nurses and assess students' satisfaction with the learning environment, this study was carried out with a view to: (1) examine how educational systems of pre-registered nurses occur in four moderately new EU countries – the Czech Republic, Hungary, Lithuania and Romania–in the context of clinical training and (2) identify student nurses experience of and satisfaction with their learning environment and supervision by staff nurses during their clinical placements.

Methods

Study setting and sample

The sample (N = 418) was drawn from student nurses in four HEI's located in the Czech Republic, Hungary, Lithuania and Romania during the exploratory phase of the EmpNURS Project (510111-LLP-1-2010-1-FI-ERASMUS-ECUE) in the spring of 2011 (www.empnurs.eu). The students had just had a clinical placement as a part of their studies for registered nurse (Bachelors' degree).

Study design and instrument

The quantitative study design was applied for this study. The survey method was selected using a questionnaire including 43 items. The questionnaire utilized a part (25 items) of a validated research instrument: the Clinical Learning Environment, Supervision and Nurse Teacher (CLES + T) scale (Saarikoski et al., 2008). These 25 items evaluate four domains: the Educational atmosphere on the ward (8 items), the Leadership style of the ward manager (4 items), the nursing care in the ward (4 items) and the content of the supervisory relationship (8 items). The respondents evaluated all items of the questionnaire using 5 points Likert scale. For instrument reliability we measured Cronbach's alpha values of the instrument sub-dimensions. They varied from 0.85 to 0.95 and proved sufficient high internal consistency of the scale. Additionally, the questionnaire included 18 background variables connecting demographic factors and structural elements of the clinical placements. The questionnaire was translated into the four target languages of the survey countries using double-blind translation procedure (Bechling and Law, 2000).

Data collection and analysis

Data collection utilized a web-based questionnaire. The link to the questionnaire was submitted to students via e-mail and this e-mail message acted as an informing letter about the study. The students gave their informed consent to participate in the study as they answered the questionnaire. Data confidentiality was guaranteed by the anonymous character of the answers. The collected data were analyzed using descriptive statistics and cross-tabulation. Chi-square was used to test the connections between students' experience with clinical learning environment and related factors; $p < 0.05$ was considered significant. Comparisons between the four countries, using statistical tests, were not operated because of the small number of sub-samples. Therefore some values describing sub-samples are presented in this paper, without checking their statistical significance. All analysis was operated with SPSS 18.0 software.

Results

The study sample included 418 nurse students studying for a registered general nurse Bachelors' degree. The clinical instruction hours comprised at least 50% of undergraduate level nursing program duration. Most of the students were younger than 25 (75% of study sample), while 25% were older than 25 and being 88 percentile female. The respondents were mainly students in their first year (42%) or second year (29%) of their nursing education.

Organization of the clinical placements. Half of the student nurses had short term placements (1–6 weeks) and the other half experienced long term (7 weeks or more) clinical placements. Over 40-week-long placements were typical in Hungarian and Romanian sub-samples and the mean of placement duration in the whole sample was 10 weeks. Theoretical lectures were also delivered during the clinical placements in 47% of the study sample. Theory studying days during the placements accumulated on students who had long-lasting placements (7 weeks or more). Clinical placements were organized mostly in the hospital and only in 5% cases in the community. Most of the hospital wards receiving students were medical (36.6%), surgical (15.6%) or paediatric (12.2%) wards. The rest of the practice placements were gynecology and obstetrics (6%), geriatric ward (6%), psychiatric hospital (1.6%) and 22% were miscellaneous (community care and GP's office, palliative care and terminal care settings).

The basic organisation of clinical practice is presented in Table 1.

Students' evaluations of their clinical learning environment. Students evaluated the learning environment in four domains using

Table 1
The sub-samples by countries, basic features of general nurse education (under-graduate level) and organisation of clinical training (n = 418).

	Responsible operative organisation of education:	Duration of the program:	Duration of the clinical placements		
			Mean:	Minimum:	Maximum:
Czech Republic (Brno) n = 78	University College since 1990, earlier secondary school (higher schools for nurses)	3 years	10 weeks	1 week	14 weeks
Hungary (Budapest) n = 103	University College since 1990, earlier secondary schools (higher medical schools)	4 years	14 weeks	1 week	46 weeks
Lithuania (Kaunas) n = 124	University and college since 1990, earlier higher medical schools	4 years at University and 3.5 years at the college	5 weeks	2 weeks	12 weeks
Romania (Iasi) n = 113	University College since 1999, earlier secondary schools (higher schools for nurses)	4 years	11 weeks	1 week	45 weeks

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Table 2
Students' evaluations of their clinical learning environment in four domains: sum–variable, the highest and lowest scored items[a] of the sum–variable and internal consistency test (n = 418).

	Mean (min = 1, max = 5)	Std. Deviation	Alpha-value
Sum-variable 1: **Educational atmosphere on the unit**: (9 items)	**3.74**	0.88	0.90
The staffs were easy to approach	4.12	1.04	
There were sufficient meaningful learning situations on the unit	3.39	1.47	
Sum-variable 2: **Leadership style of the ward manager (WM):** (4 items)	**3.85**	0.91	0.87
The WM regarded the staff on her/his ward as a key resource	3.94	0.94	
Feedback from the WM could easily be considered as a learning situation	3.74	1.12	
Sum-variable 3: **Nursing care on the unit:** (4 items)	**3.99**	0.85	0.85
The unit's nursing philosophy was clearly defined	3.81	1.05	
Documentation of nursing (e.g. nursing plans, daily recording of nursing procedures) was clear	4.16	0.95	
Sum-variable 4: **The content of supervisory relationship**: (8 items)	**3.91**	0.99	0.95
My supervisor showed a positive attitude towards supervision	4.23	1.02	
I felt that I received individual supervision	3.64	1.23	

Sum-variables in four domains are marked in bold.
[a] All items of the scale have been published elsewhere (Saarikoski et al., 2008). The copyright of the CLES + T scale resides with Elsevier Science Ltd.

25 items of the CLES scale. The total mean of the CLES scale was 3.87 in 1–5 continuum scale. The students were mainly very satisfied for their placement and they evaluated with high scores also the CLES scale's items describing their learning environment and experiences in their supervisory relationship (Table 2).

Models of supervision provided by clinical staff. Most typical supervision model in our sample was group supervision (56%). A quarter of the sample had had an individualized supervisory relationship. A small part of students' sample (11%) did not have any supervision by the unit (Table 3). The commonest professional background of the supervisor was in nursing (63%). A remarkable part of students (19%) had had physicians as supervisors, mostly in Romania (55%). The rest of the students (18%) had a supervisor from the university or some other person from the unit, in most cases in Hungary. Group supervision model was the commonest in Romanian sub-sample, where 83% of the students were supervised in a group and model of individualised supervision was most common in Lithuanian sub-sample, where 41% of the students were supervised by one-to-one relationship by the ward staff.

The students' utter satisfaction towards their learning experience. Students' utter satisfaction was estimated using 3 items: "Can the unit be seen as a good learning environment?", "Are you satisfied with the supervision you have received?" and "How satisfied were you with the clinical placement as whole?" The students' utter satisfaction was considered with crucial background variables (gender, age, studying year, clinical specialty, placement duration), but none of these items significantly related with the students' utter satisfaction (p value of Chi-test >0.05).

The first clear connection was found with the supervisory model of clinical practice. The most satisfied students were those with an individualized supervisory relationship (mean 4.13), and most dissatisfied students were students without any supervision (mean 2.89) (Table 3). The second factor that was linked with total students' satisfaction was the professional background of supervisor. The most satisfied students were those who have had nursing based supervisors (mean 4.05), and most dissatisfied students were those without any supervision (mean 2.89). The students' own motivation for the placement and clinical learning was mainly very high (mean 4.1). Statistically, the students' own motivation was significantly related with their utter satisfaction of clinical placement (p-value of Chi-test < 0.001).

Table 3
The mean values of student nurses' Utter satisfaction linking to the supervision model (n = 418).

	Utter satisfaction:		
	% (n)	Mean (in 1–5 scale)	Std. Deviation
Occurrence of supervision:			
Group or team supervision	56% (233)	3.99	0.80
Individualised supervision (mentorship)	26% (107)	4.13	0.86
Other system	7% (30)	3.93	0.88
No supervisor at all	11% (48)	2.89	0.99
Total	100% (418)	3.92	0.90

The mean difference is significant at the 0.05 level (p-value in ANOVA <0.001).

Communication with the course teacher. Over half (51%) of our student sample had met their nursing teachers from the HEI at least 3 times during their clinical placements, but 26% of the students had not had such connection at all. Less than half of our students' sample (40%) had used e-communication (e-mail, text messages etc.) with their nurse teacher. This kind of virtual e-communication applied to students who had also had 'face-to-face' contacts with their course teacher.

Students' professional identification during the placements. There were two different questions related to the professional identity: "How important is it to you that the professional background of your supervisor should be in nursing?" and "Who was the most important person to help you better understand the core concepts of the nursing process?"

The professional background of the mentors in our sample was mainly as registered nurse or ward manager, but one could also encounter physicians and nurse teachers from the nursing HEI as supervisors. Eighty percent of students in our sample reported that nursing background of supervisor is very important. A minority (5%) thought that this is not at all important and 15% considered that it has only minor significance. In 36% of cases students in our sample considered that teachers in HEIs and supervisors were equally important in explaining the core concepts of the nursing process; 35% of students considered the supervisor's role more important, and 26% favoured HEIs teachers' role in this process.

Discussion

This study deals with the situation of clinical placements for student nurses and their satisfaction with the learning environment in four moderately new EU countries (the Czech Republic, Hungary, Lithuania and Romania). The assessment of the results revealed that student nurses were mainly very satisfied with their clinical placement experiences. The structural issues of their clinical placements were quite similar ones than had been found in older EU countries (Warne et al., 2010). Even though then the sample had been collected from 17 nursing schools which have

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offered degree level programmes in older Europe for many decades, there were only few structural differences regarding how the clinical practice had been organised reported in Warne's et al., 2010 research. The biggest difference was in the supervision model of clinical placements; group supervision model was clearly commoner in this study done in 2013 by Saarikoski et al. than in the study carried out in nine older EU countries, where individualized supervisory model was predominant (Warne et al., 2010).

The duration of the clinical training placement connected with students' utter satisfaction, so that the students with longer placements (7 weeks or more) were more satisfied than the students with shorter placements (under 7 weeks). The mean of placement duration in this study was 10 weeks. This result can be as an interpreted positive feature of nurse education system in new EU countries. One of the most important finding of Warne et al's study (2010) was that students who had longer clinical placements had a higher total satisfaction value than students who had had short placements. In that study the duration of the placement was 6.4 weeks. Similar findings were reported in the other Lithuanian study (Riklikiene and Nalivaikiene, 2013) where the overall assessment of pedagogical atmosphere on the ward positively correlated with the duration of practical placement. It is recognised in the literature that students' satisfaction and quality of learning can be influenced by many aspects, including how busy clinical areas are and the nature of the practice setting, which can often make it impossible for planned learning opportunities to take place, as the mentor is pulled in many different directions during any one shift. This in accordance with the fact that a short duration of training leaves even more little time to demonstrate skills or talk through events in a meaningful way, highlighting the need to find further ways to support and practice learning in a meaningful and less ad hoc manner (Williams and West, 2012).

The students evaluated the cooperation between their course teacher and the unit with lower scores than other elements of clinical learning environment. Majority (approximately 60%) of the students met their course teacher 1–3 times during the placement and communicated also with her or him using e-communication tools (e-mail, text messages etc.). Other studies (Chan, 2002a,b; Gleeson, 2008; Rashid et al., 2015) constantly prove the importance of close co-operation and continual communication between educational and clinical facilities in the planning and evaluation of clinical learning experiences at undergraduate level. Open communication with each other is central to the partnership and aims to promote effective clinical teaching environments for nursing students. Commitment to communicating is crucial to success as it helps to utilise clinical time to its maximum capacity with favourable outcomes to all parties involved.

Supervisory role of staff nurses was very important; the most common (58%) supervisory experience was a successful individualised supervisory relationship and majority of the students kept own staff nurse mentor as the most important professional role model.

The strong point of this study consists in being the first attempt to investigate this area of nursing Bachelors' education with a standardized instrument in new Central/Eastern EU member states and the use of the internet as a communication media. The delivery of a web based addressed questionnaire was more attractive to and more trusted by the students. Clinical training of student nurses shares the similar educational requirements and methodical rules like the practical training of many other health care students at under-graduate level (doctors, dentists, midwives, etc). However, such comparative studies in health care education area are still lacking, firstly because of different instruments used. We presume that the CLES instrument or its broad elements may be adapted to measure satisfaction with the clinical placement in other sample groups of health professions.

However, there are a few limitations in this study. We have not presented any comparisons between the four countries, using statistical tests, because the sub-samples were too small and represented mainly one or two nursing HEIs in each country. Neither do the sub-samples represent a common situation in a current country. Some values describing the sub-samples have been presented in this paper as examples of the most obvious differences between HEIs of different study countries. The small size of sub-samples and the limited geographical areas representation do not allow for any generalizations.

Implications for nursing education in practice

The message for the providers of nursing education in the new and moderately new EU countries is that the group supervision model should shift towards individual supervision, involving in the teaching process more staff nurses instead of ward nursing managers and physicians, even if this represents a good interprofessional cooperation. Likewise, revising the nursing curriculum in order to provide students with longer clinical training periods, ensuring steady contacts with the nursing teacher or tutor from HEI is undebatable. Positive learning environment that is essential to the effective development of student nurses' practical skills, their personal motivation to learn and to the successful professional socialization must be used as the main quality criterion for institutional internal and external assessment of training process of future nurses.

Conclusions

The integration progress of EU demands unique education systems in all EU countries and harmonisation of nursing education. In some of the new EU member states the lack of perception of nursing as totally independent academic discipline and the still strong influence of medical profession are matters of concern that deeply affect the teaching and supervision procedures of future Bachelors' student nurses in clinical practice, whereas in some other countries more progressive action towards nursing education driven by the nurses themselves are present.

Despite slight educational differences between the relatively new EU member states, the same general practical challenges for nursing educators and clinical nursing staff appear in the effort to change inappropriate and outdated approaches and to develop new educational practices which will better meet student nurses' needs and advance professional identity of clinical nurses. One of the most important issue is the role of clinical staff nurses in this process, the Central/East EU countries, similar to those in this study, should innovate ways to train and support clinical nurses to commit to supervision of Bachelors' student nurses. We suggest the improvement of teaching/learning materials for student nurses (manuals, clinical training diaries, reflection sheets) and continuing professional development programs on mentorship for clinical nursing staff at basic and advanced levels.

Declaration of interest

The authors report no declarations of interest. The authors alone are responsible for the content and writing of the article.

Ethical approval statement

The local ethical approvals to conduct the survey were issued by HEI and responsible bodies at each site of the study. The students

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gave their informed consent to participate in the study as they answered the questionnaire on-line. Data confidentiality was guaranteed by the anonymous character of the answers.

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