
Nursing Students' Experiences from Their First Clinical Education — a qualitative study

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Abstract

This article describes the experiences of 137 nursing students from their first clinical education. The material was collected with four open questions and was analyzed through qualitative content analysis. The descriptions focused on students' experiences in general as well as their clinical education circumstances and learning experiences. They reported on the characteristics of their preceptors, the feedback, and the preceptorship culture on the ward. The students assessed their own learning from the perspectives of activity level, nursing procedures they had practiced, and personal development. Taking responsibility for their own learning was manifested as responsibility for learning according to the learning outcomes, an experience of having taken only a small amount of responsibility, and a desire to take part in all things possible.

Keywords: clinical education, learning, nursing education, nursing student, preceptor

Learning in clinical practice is a type of experiential learning and its importance is considerable within professions such as nursing (Warne et al., 2010). However, there are variations in students' clinical placements (e.g., Midgley, 2006). Preceptor of nursing students implies facilitating learning experiences through the creation of supportive learning environments in order to activate the individual student's learning process. Moreover, it comprises the strengthening of professionalism through the development of their professional attributes and identities, which, in turn, will successfully develop the students' professional competence within nursing. (Jokelainen, Turunen, Tossavainen, Jamokeeah, & Coco, 2011.) According to CINAHL Headings the term *Preceptor: Student* refers to "assisting and supporting learning experiences for students providing care to patients". Also for example terms *Clinical Supervision* and *Student Supervision* are used in association with clinical education of nursing students (CINAHL Headings, 2012) .

This article is a part of a Nordic joint project with the aim of developing the clinical preceptor of nursing students during clinical education and promoting students' learning process. This is in line with the Bologna declaration to develop the quality system of educational programmes (Keeling, 2006). The partners in the project are one Swedish university (hereinafter referred to as SWE) and two Finnish universities of applied sciences (hereinafter referred to as FIN1 and FIN2). In Sweden, the scope of nursing education is 180 credits, and in Finland 210 credits. According to European Council Directive (Council Directive 89/595/EEC), clinical education should comprise 50% of the nursing education.

The project is a follow-up study that charts the experiences nursing students gain from their clinical education during their nursing education. This article focuses on one section of the survey, the open questions. The results from the quantitative survey are presented in another article (Sandvik, Melender, Jonsén, Jönsson, Salmu & Hilli, 2012).

Literature review

In various studies, students have often been satisfied with clinical education (Saarikoski, Isoaho, Leino-Kilpi, & Warne, 2005; Saarikoski, Marrow, Abreu, Riklikiene, & Özbicakci, 2007; Warne et al., 2010), but on the other hand, they have also pointed out deficiencies in the clinical education arrangements. Finnish and British students have been especially satisfied when they have had a designated preceptor and dissatisfied when they have not (Saarikoski, Leino-Kilpi, & Warne, 2002). In a study covering nine countries by Warne et al. (2010) in which Finland and Sweden also took part, the most satisfied students studied at university colleges and had a clinical education period of at least seven weeks, during which they had an individual relationship with the preceptor.

As a learning environment, clinical education provides the opportunity to learn how to link theory with practice. For this to work successfully, clinical education requires that the preceptor will arrange learning situations whereby students are able to plan and carry out

theoretically justified work. This is done together with discussions whereby the students can critically evaluate what they have perceived and experienced (Jokelainen et al., 2011; Laitinen-Väänänen, 2008).

Effective preception of nursing students during clinical education in health-care units consists of an individual mutual relationship between the nursing student and the preceptor (Jokelainen et al., 2011). A supportive yet challenging professional relationship between the preceptor and the student is an important factor contributing to professional development. This is a relationship built on mutual respect and openness to learning needs (Severinsson & Sand, 2010). The preceptor plays an important role in creating interaction during preception. By using preception initiatives, she or he can direct the student's attention to specific issues during clinical education and discussions (Laitinen-Väänänen, 2008).

In a study comprising eight countries by Saarikoski, Marrow, Abreu, Riklikiene, and Ozbicakci (2007), most of the students evaluated their relationship with the preceptor as being positive. The students who had a designated preceptor as a mentor (Papastavrou, Lambrinous, Tsamgari, Saarikoski, & Leino-Kilpi, 2010) and a functioning perception relationship were most satisfied with the clinical education on the whole. In the study, only the occurrence of preception was associated with the overall satisfaction of the students. In a study by Jonsén, Melender, and Hilli (2012) the nursing students described good quality in clinical practice, which included, for example, stimulating and visible preceptors providing a sense of safety and security and a permissive atmosphere which allowed the student's self confidence to develop. In a review by Papastavrou et al. (2010), neither the atmosphere at the ward nor leadership was important for learning.

Hunter (2010) has assessed the experiences of nursing students in clinical practice by referring to a six-part *senses framework* presented by Brown, Nolan, Davies, Nolan, and Keady (2008). The framework comprised the following six senses: *security*, meaning the freedom to learn and explore roles and competencies within a supportive but enabling environment; *belonging*, meaning feeling part of a defined group with a clear and valued role to play; *continuity*, meaning the ability of nursing students to link theory and practice; *purpose*, meaning having something meaningful and important to aim for, identifying important personal and professional goals; *achievement*, meaning the fulfilment of professional goals and development of nursing competencies; and *significance*, meaning the recognition by nursing students that they have made important contributions to care delivery.

Löfmark and Wikblad (2001) investigated facilitating and obstructing factors for the development of learning in clinical education. In their study, the students emphasized responsibility and independence, receiving feedback, and opportunities to practice different tasks as facilitating factors.

During the preception process, students have the opportunity, for example, to take the initiative by asking questions, thus directing and deepening their own understanding. Identifying initiatives and responding to them during preception strengthens student-oriented learning (Laitinen-Väänänen, 2008). As students are allowed to take responsibility and initiative, their self-confidence increases, and when they succeed and receive feedback, this gives them occasion to reflect on their own development, which may contribute to increased self-confidence (Löfmark & Wikblad, 2001).

In Hunter's (2008) study, the nursing students' goals were directly linked to the learning outcomes set by their university, whereas in a study by Tupala, Tossavainen and Turunen (2004), only a slight tendency towards a profound level of competence emerged in the objectives that public health nursing students set for their own clinical education. There was little conscious effort towards the subjective handling and formation of knowledge, and there were no objectives whatsoever related to a critical contemplation of various issues. Although learning by participation and the acquisition of experiences were emphasized in the objectives of experiential learning, there was not much inclination towards internalization and reflection. During clinical education the students can also reflect upon their career choices and explore areas that they might not have previously considered (McKenna, McCall, & Wray, 2010).

Because it is well known that experiential learning is so important for nursing students and that there are differences in their experiences concerning clinical education, there was a need to explore the phenomenon qualitatively among the students involved in this project.

Purpose of the study

The purpose of the study was to describe the nursing students' experiences of their first clinical education period. The aim was to gain knowledge that can be utilized in the development of clinical education.

Methods

Description of the material. During the first phase of the project, in spring 2009, a total of 139 students from all three universities were asked to write down their experiences of their first clinical education period. This was done by answering four open questions. All in all, 137 students took part in the survey (FIN1: 44, FIN2: 20, SWE: 73). The students had completed their first clinical education period in long-term care, geriatric nursing, or on internal medicine and surgical wards.

The learning outcomes of the students in all of these three universities involved being able to create a caring relationship to a patient, to understand the special characteristics of an individual patient, and to identify the basic needs of the patient and to meet the patient's needs. Moreover, the students were supposed to take part in the pharmacotherapy under the preception.

The students were asked to describe their experiences of the following themes:

- 1) The clinical education period as an experience.
- 2) The clinical preception from their own perspective.
- 3) The learning during the clinical education period.
- 4) How responsibility was taken for individual learning during the clinical education period.

The students' background information was collected with separate questions.

Analysis of the material. The answers to the open questions were analyzed with an inductive qualitative content analysis, by analyzing the replies from the viewpoint of the material. All in all, five researchers participated in the analysis. At each institution, the institution's own material was coded first. After that, the materials were combined and the analysis was continued until everyone agreed on the results. By coding expressions that were significant for the research purpose, the material was reduced. The reduced expressions were grouped together on the basis of similarity of the content and abstracted into subthemes and themes (Graneheim & Lundman, 2004). An example of the coding procedure is presented in Table 1.

Table 1.

**An example of the coding procedure: how the subtheme
"Useful learning experiences" was produced.**

Examples of the substantive material	Key words or phrases	Subtheme
"...so good to come to the clinical placement and practise the things learnt in theory."	good to practice the same learned in theory	Useful learning experiences
"I gained a lot of confidence and unequalled competence."	a lot of confidence unequalled competence	
"My knowledge and skills deepened during the period."	knowledge and skills deepened	

The results have been reported by the questions (Table 2), and quotation marks show authentic quotations from the students' writings.

Table 2.

Questions asked of the students and themes formed in the content analysis.

Content of the open question	Theme	Subthemes
Clinical education period as an experience (n=24)	Experiences in general	Satisfied with perception Dissatisfied with preception Technical approach to nursing Atmosphere in the ward
	Clinical education includes diverging learning circumstances	Few learning opportunities Many learning opportunities Application of the theory into practice
	Positive learning experiences	Attractiveness of nursing Useful learning experiences
Clinical preception as experienced by the students (n=121)	Characteristics of the preceptor	Pleasant preceptor Safe preceptor Different antitheses (Table 3)
	Preceptors' feedback – supportive or not?	Constructive feedback giving support Non-constructive feedback not giving any help
	Qualities of preceptorship culture	Preceptors' interest in preception Giving responsibility to the student Focus on learning outcomes
Learning during the clinical education period (n=126)	Components of students' own activeness	Very active Less active
	Fluctuated attending in nursing procedures	Many procedures Few procedures
	Personal development of the student	Development as a nurse Development as a human being
Responsibility for one's own learning (n=116)	Responsibility for learning in the direction of the learning outcomes	
	Little responsibility	
	Desire to take part in as many things as possible	

Trustworthiness of the study. The trustworthiness of the study involved credibility and transferability. In order to ensure credibility, an effort has been made to describe the analysis of the material and the results as clearly as possible, so readers can assess the strengths and weaknesses of the study from the perspective of both the analysis process and the results (Graneheim & Lundman, 2004). Except for the first question, a large number of responses to the material were obtained from the students. They were fairly brief but very descriptive as far as content was concerned and, mostly, clear themes could be formed. An example of the coding procedure is presented (Table 1) in order to provide readers with an illustration of the thought processes in the analysis.

Experienced researchers took part in analyzing the material and discussed the analysis until they agreed on the results, which enhances the validity of the analysis. Since the material originated from three institutions — each of which coded their own material — one researcher coded all of the material and made sure that the results described the entire collection as a coherent whole. She was a faculty member of one of the institutions involved in the study. Although all the five researchers were experts in clinical education didactics, none of them were involved with the clinical education of the student groups participating in this study. There is a minor possibility that the experiences and other knowledge of the researchers would have affected the analysis. The researchers were, however, aware of this possibility and in order to prevent this, kept on identifying and withholding any preconceived opinions and beliefs about the phenomena under investigation.

At first, the students were asked to evaluate the clinical education as an experience. The intention was to discover how students answer when the question is this open. It was noticed that this question produced remarkably less writings than the other questions which were more specific. The results produced from the responses of the first question were, however, analysed separately, in order to show the unique insights of the students.

Transferability indicates how largely the results could be transferred to some other context (Graneheim & Lundman, 2004). For such a review, an attempt has been made to describe the context of the study as carefully as possible. The results could be transferred to other contexts in the teaching of nursing. Quotations of students' writings presented in the report of the results are typical extracts from the original material (Elo & Kyngäs, 2008).

Ethical considerations. Research permits were obtained from each institution. Students were informed about the study in advance through both oral and written information. When the material was collected, the students received information about the study once again. They were informed that participation was voluntary, and that they had an opportunity to drop out of the study at any stage. The students gave their informed consent by participating in the study (Burns & Grove, 2009).

Since this was part of a follow-up study, each student was given a personal code number that was used to process the replies. At each institution, one researcher was aware of the identity of the owner of each code number. The results have been reported in such a way that an individual respondent cannot be identified.

Results

Description of the informants. The average age of students participating in the study was 22.1 years. Of these, 80% were between 19 and 24 years of age. A total of 86.1% ($f=118$) were women and 13.9% ($f=19$) were men. Of the respondents, 80.5% ($f=107$) had been in gainful employment at some type of job before they started studying. A total of 19.5%

(f=26) of respondents had no work experience. Of the participants, 60% (f=78) worked during their studies whereas 40% (f=52) did not. The duration of the students' clinical education period varied from three to ten weeks (FIN1: 10 weeks, FIN2: 7 weeks, SWE: 3 weeks).

Clinical education period as an experience. First, the students were asked to describe the clinical education period as an experience. Descriptions were received from 24 students. They reported on their *experiences in general*, on *clinical education including diverging learning circumstances*, and on their *positive learning experiences* (Table 2). As an *experience in general*, some of the students were satisfied with the preception "It was great to have an experienced person with whom you could change thoughts and ideas", whereas some were dissatisfied. Some were satisfied with the clinical education placement, the preception received there, and/or with their own learning. Experiences of dissatisfaction arose from the nature of the clinical education placement "I have learnt a lot, but I would have wanted to learn more... Another clinical placement could possibly have offered me more challenges." Moreover, actions by the teacher did not promote learning by one student. Several students had a "technical approach" to nursing, manifested in their writings as training of various procedures and often as a description of the number of procedures taken. "I was happy to learn a lot, but I would have also wanted to do more myself, e.g., procedures, but in my clinical placement there were not so many procedures." Some students said there was a good atmosphere at the clinical education placement; others had found it to be poor, particularly in the relationships between the head nurse and the personnel. The students' situation was difficult if the atmosphere was not good. "I fell into a difficult situation with some staff members, because the atmosphere was so very bad between the staff and the head nurse."

Clinical education including diverging learning circumstances refers to matters related to how the student learnt nursing. The students described these circumstances from a quantitative perspective: some felt they had few learning opportunities, whereas others thought there had been many of them. Those who felt that they had had few training opportunities considered the clinical education period to be too long. "The clinical education period was unnecessary long. During the last weeks I was able to work totally independently." Application of theory into practice emerged as students' experiences of how they could deepen the knowledge learnt at school during their clinical education period.

Learning experiences were mostly *positive*. Nursing was seen as an attractive job: "It was more interesting than I had thought . . .", even though the students had noticed that it was mentally and physically demanding. In the students' opinion, the clinical education had provided them with useful learning experiences, as one of the students stated: "I gained a lot of confidence and unequalled competence."

Clinical preception as experienced by the students. Descriptions on clinical preception were written by 121 students. They were formed into three themes (Table 2): *characteristics of preceptor*; *preceptors' feedback — supportive or not?*; and *qualities of preceptorship culture*. The preceptor was *characterized* as a pleasant preceptor, as a secure preceptor and through various antitheses that described the differences between the preceptors. The antitheses, which became the third subtheme, are presented in Table 3.

Table 3.

Subtheme describing the preceptor's characteristics as different antitheses.

Skilful at preception – not very skilful at preception
Secure at preception – insecure at preception
A good role model as a nurse – not a good role model as a nurse
Gives support – does not give support
“There” for the student – not “there” for the student

Feedback given by the preceptor was either constructive feedback giving support, or non-constructive feedback not giving any help. Constructive feedback was received regularly throughout the clinical education, and it addressed both the student's strength and issues that required development. The latter was given in a way that the students still did not need to feel like they failed. “Both preceptors in my clinical education placement have guided me and supported me and given feedback in a good way.” Students also had experiences of non-constructive feedback. “She was competent in her work, but not personal and not pedagogical. Poor feedback.” At its most negative, the preceptor's feedback made the student feel like she or he was a bad person. Some students had received only positive feedback and wondered whether there was nothing to improve. Several students expressed that they did not get enough feedback. They felt that they needed more constructive feedback to promote their learning process.

Qualities of preceptorship culture described the preceptors' interest in preception, the assignment of responsibility to the student, and the focus on learning outcomes. Preceptors' interest in perception varied. Some were very well prepared for it, received the students well, and were available to them. On the other hand, some students had experiences of completely opposite situations. “The preception involved pretty much following the preceptor. The preceptor often did not explain why something was done like this or that.” Another student described: “It could have been planned better and more profoundly.”

Students were given varying levels of responsibility. Mostly students felt they had received appropriate or too little responsibility, but some thought they had been given too much responsibility. There was variation in the focus on learning outcomes. A majority of the students who described issues related to it said that the preceptor had supported them

in achieving their learning outcomes which supported their learning process. However, some reported that the preception was fragmented and not based on the learning outcomes and students' starting level. "... (the preceptor) informed if something "interesting" happened."

Learning during the clinical education period. Students were asked to assess their own learning during the clinical education period with a verbal description of their learning. Descriptions of their own learning were written by 126 students. They were related to the *components of students' own activeness, fluctuated attending in nursing procedures*, and the student's personal development (Table 2). The first two themes were characterized by opposing views when seen in the quantitative descriptions made by the students. Own activeness was described as an experience of oneself as either a very active or less active person. "I was open and ready to learn, I tried to work in a calm manner and learn from my mistakes." The very active ones had worked hard, taken initiative, studied independently, asked a lot of questions, listened to the preceptors and learned their lesson, experimented, and utilized the feedback they had received. "...I have received knowledge from my preceptor but I have also actively sought information."

There were fewer students who described themselves as less active. These students stated that they could have been more active during the clinical education, because there would have been opportunities for learning. "... sometimes I felt like I needed a kick in the backside."

Fluctuated attending in nursing procedures consisted of the subthemes "many procedures" and "few procedures." A high number of procedures were often connected to good learning, whereas a small number of procedures were often deemed a factor that prevented learning.

The students described their *personal development* mostly as development as a future nurse "This feels like the right career for me", but some experienced that they had also developed as human beings. Development often involved experiencing an increase in self-confidence.

Responsibility for one's own learning. A total of 116 students wrote descriptions of how they had taken responsibility for their own learning. The material was illustrated by three themes (Table 2): *responsibility for learning in the direction of the learning outcomes*, *little responsibility*, and *a desire to take part in as many things as possible*. Some students stated that they had taken their *own responsibility* for studying on the basis of their *learning outcomes*: for example, by attending to the needs of patients, acquiring more theoretical knowledge about issues that came up during clinical education, and by keeping a learning diary. The experience of having taken *little responsibility* emerged as students' reflections on how they could have been more active in acquiring learning experiences and, for example, talked more with the patients. The *desire to take part in as many things as possible* was the strongest phenomenon in the answers to this question. "I showed an interest in

the nursing procedures that were performed and I wanted to take part in everything.” It consisted of expressions where the students repeatedly described taking responsibility as a constant interest in everything and participation in everything. “I tried to be as visible as I could and wanted to take part in everything where I was given an opportunity.” . . . “By taking part in as many nursing procedures as possible.”

Discussion

Reviewing the results. There was variation in the students' descriptions of how the clinical education was implemented, as also Midgley (2006) has reported. Various students often had opposing experiences with regard to many different issues. It is evident that variation exists between the clinical education placements, but the students might also have had varying expectations of clinical education.

Some students reported having been able to apply theory into practice. This is an important learning experience described also by Hunter (2010). According to Laitinen-Väänänen (2008), clinical education provides an opportunity to learn linking theory and practice through arranged learning situations. When this is planned, it is important to consider the student's learning outcomes and discuss them enough so that the student, preceptor, and teacher share an understanding of what kind of learning the student should aim for during the clinical education period.

Descriptions showed that students were both satisfied (Saarikoski et al., 2005, 2007; Warne et al., 2010) and dissatisfied with the clinical education. By reference to the students' verbal accounts, the quality of the preception varied a great deal.

Some students told that they had found nursing as an attractive, yet demanding job. McKenna et al. (2010) have previously reported about the students reflecting on their career choices during clinical education. This is an important lesson to learn: in order to recruit new personnel, every nursing work-place should offer high-quality clinical education opportunities, showing the students a realistic, but supportive learning environment.

According to the students' descriptions, good preceptor qualities included skill and security at guidance (Hunter, 2010; Jonsén et al., 2012), being a role model, providing support (Hunter, 2010; Jokelainen et al., 2011; Severinsson & Sand, 2010), and “being there” for the student (Saarikoski et al., 2007). The descriptions also gave rise to opposing experiences on the part of preceptors with regard to these factors. Since several students wanted more feedback, the importance of it became evident. Löfmark and Wikblad (2001) report that receiving feedback gives the students the possibility to reflect on their own development. This was also experienced by those informants who had received constructive feedback and felt that it supported them, while non-constructive feedback did not give any help.

It has been previously stated that the atmosphere in the ward and leadership are not important with regard to the student's learning (Papastavrou et al., 2010). However, a permissive atmosphere does increase one's self confidence (Jonsén et al., 2012). In this study some students were sensitive to the atmosphere of the ward and it affected their learning.

Some students described their personal development, a thing that also Hunter (2010) has reported, as the fulfilment of personal and professional goals and the development of nursing competencies (Jokelainen et al., 2011). This is also closely linked to the goal-orientation of preception (Severinsson & Sand, 2010), about which some students in this study had good experiences of, and some did not.

Students' descriptions often focused on nursing procedures. According to Jokelainen et al.'s (2011) systematic review, facilitating the attainment of stipulated clinical skills in preception includes training the student to improve both hands-on clinical nursing and communication skills in interaction with patients. McMillan and Shannon (2011), who have studied nursing students' and medical students' attitudes toward empathy in patient care, say that empathic communication skills are critical in providing high-quality nursing care. When students' learning outcomes are set and learning experiences are planned, it is important to take the training of the patient-nurse relationship into account, as the experiences of some students in this study show.

While there had been deficiencies in the focus on learning outcomes in the preception, the same phenomena had been present in some students' attitudes. Many students had "tried to take part in all things possible." Similar results were found in a study by Tupala et al. (2004). "Taking part in all things possible" may seem like a desirable thing for a student, but preceptors and teachers should emphasize the learning outcomes of the students' clinical education period and the fact that one does not have to, nor is one able to, learn everything during one clinical education period. When students take responsibility for their own learning, it includes an understanding of the purpose of the clinical education period in question and preparation for their own learning outcomes accordingly. When preceptors assign students responsibility (Löfmark & Wikblad, 2001), they must know the student's background and learning outcomes at the time.

Conclusion

There is great variation in how nursing students experience their clinical education. Even in written evaluations, students may describe their clinical education and what they have learned in it through the quantity rather than the quality of their learning experiences. Clinical education is not necessarily always focused on the acquisition of learning experiences according to the expected learning outcomes. In the students' opinion, being satisfied or dissatisfied with clinical education may involve the total number of varied, unconnected events in clinical education.

Clinical education needs to be developed in order for the preception to have a more uniform quality. In the future, studies on how students and preceptors understand the significance of learning outcomes in clinical education and how implementation of the clinical education is planned should be conducted.

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References

- Brown, J., Nolan, M., Davies, S., Nolan, J., & Keady, J. (2008). Transforming students' views of gerontological nursing: Realizing the potential of 'enriched' environments of learning and care. a multi-method longitudinal study. *International Journal of Nursing Studies*, 45(8), 1214-1232. doi:10.1016/j.ijnurstu.2007.07.002
- Burns, N., & Grove, S. K. (2009). *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (6th ed.). St. Louis, MO: Elsevier/Saunders.
- CINAHL Headings. (2012) The Cinahl * Database. EBSCO Publishing.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis. *Journal of Advanced Nursing* 62(1), 107-115. doi:10.1111/j.1365-2648.2007.04569.x
- Council Directive 89/595/EEC of 10 October 1989. Retrieved from: <http://eur-lex.europa.eu>
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today* 24(2), 105-112. doi:10.1016/j.nedt.2003.10.001

- Hunter, D. (2010). How clinical practice placements affect professional development. *Emergency Nurse* 18(5), 30-34.
- Jokelainen, M., Turunen, H., Tossavainen, K., Jamokeeah, D., & Coco, K. (2011). A systematic review of mentoring nursing students in clinical placements. *Journal of Clinical Nursing*, 20(19-20), 2854-2867. doi:10.1111/j.1365-2702.2010.03571.x
- Jonsén, E., Melender, H-L. & Hilli, Y. (in press). Finnish and Swedish nursing students' experiences of their first clinical practice placement: A qualitative study. *Nurse Education Today*, (2012). doi:10.1016/j.nedt.2012.06.012
- Keeling, R. (2006). The Bologna Process and the Lisbon Research Agenda: The European commission's expanding role in higher education discourse. *European Journal of Education* 41(2), 203-223. doi:10.1111/j.1465-3435.2006.00256.x
- Laitinen-Väänänen, S. (2008). The construction of supervision and physiotherapy expertise: A qualitative study of physiotherapy students' learning sessions in clinical education. (Doctoral dissertation). Studies in Sport, Physical Education and Health 130. University of Jyväskylä, Finland. Retrieved from: <http://urn.fi/URN:ISBN:978-951-39-3297-8>
- Löfmark, A., & Wikblad, K. (2001). Facilitating and obstructing factors for development of learning in clinical practice: A student perspective. *Journal of Advanced Nursing*, 34(1), 43-50. doi:10.1046/j.1365-2648.2001.3411739.x
- McKenna, L., McCall, L., & Wray, N. (2010). Clinical placements and nursing students' career planning: A qualitative exploration. *International Journal of Nursing Practice*, 16(2), 176-182. doi:10.1111/j.1440-172X.2010.01827.x
- McMillan, L. R., & Shannon, D. M. (2011). Psychometric analysis of the JSPE nursing student version R: Comparison of senior BSN students and medical students attitudes toward empathy in patient care. *ISRN Nursing*, 2011, 726063. doi:10.5402/2011/726063
- Midgley, K. (2006). Pre-registration student nurses perception of the hospital learning environment during clinical placements. *Nurse Education Today*, 26(4), 338-345. doi:10.1016/j.nedt.2005.10.015
- Papastavrou, E., Lambrinous, E., Tsamgari, H., Saarikoski, M., & Leino-Kilpi, H. (2010). Student nurses experience of learning in the clinical environment. *Nurse Education in Practice*, 10(3), 176-182. doi:10.1016/j.nepr.2009.07.003
- Saarikoski, M., Leino-Kilpi, H., & Warne, T. (2002). Clinical learning environment and supervision: Testing a research instrument in an international comparative study. *Nurse Education Today*, 22(4), 340-349. doi:10.1054/nedt.2001.0715
- Saarikoski, M., Isoaho, H., Leino-Kilpi, H., & Warne, T. (2005). Validation of the clinical learning environment and supervision scale. *International Journal of Nursing Education Scholarship*, 2(1), Article 9. doi:10.2202/1548-923X.1081
- Saarikoski, M., Marrow, C., Abreu, W., Riklikiene, O., & Özbicakci, S. (2007). Student nurses' experience of supervision and mentorship in clinical practice: A cross cultural perspective. *Nurse Education in Practice*, 7(6), 407-415. doi:10.1016/j.nepr.2007.02.006
- Sandvik, A-H., Melender, H-L., Jonsén, E., Jönsson, G., Salmu, M. & Hilli, Y. (2012). Sjuksköterskestudenters erfarenheter av sin första kliniska utbildningsperiod – en nordisk kvantitativ studie. [Nursing students' experiences of the first clinical education – a Nordic quantitative study]. *Vård i Norden* 32(3), 20-25.
- Severinsson, E., & Sand, Å. (2010). Evaluation of the clinical supervision and professional development of student nurses. *Journal of Nursing Management*, 18(6), 669-677. doi:10.1111/j.1365-2834.2010.01146.x
- Tupala, M., Tossavainen, K., & Turunen, H. (2004). Terveystenhoitajaopiskelijoiden tavoitteleman osaamisen taso lasten ja nuorten hoitotyössä. [PHN students' target levels of competencies in children and adolescents' nursing]. *Hoitotiede*, 16(3), 99-110.
- Warne, T., Johansson, U-B., Papastavrou, E., Tichelaar, E., Tomietto, M., Van den Bossche, K., . . . Saarikoski, M. (2010). An exploration of the clinical learning experience of nursing students in nine European countries. *Nurse Education Today*, 30(8), 809-815. doi:10.1016/j.nedt.2010.03.003