A student-centered clinical educational unit — Description of a reflective learning model

Berit Lindahl a,b,*, Kerstin Dagborn a, Maud Nilsson a

a School of Health Science, Boras University College, SE-501 90 Borås, Sweden
b University of Gothenburg, Sahlgrenska Academy, The Institute of Health and Caring Sciences, SE-405 30 Gothenburg, Sweden

Accepted 30 March 2008

Summary This article describes a model of a student-centered Clinical Education Unit (CEU) within an undergraduate nursing education programme. The model comprises three various levels of learning in the nursing education programme at School of Health Sciences, University College of Borås, Sweden. The three levels of learning correspond to the first, second and third programme years of the nursing education. Each level of learning is represented by clinical training in three different hospital care settings. The educational model was developed through a co-operation between hospital representatives and nurse educators at the university college. The model is built on a human caring science perspective and knowledge that focuses on patients’ lived experience of their care and illness. The model emphasises collaboration in communion between students, hospital and faculty members as an alternative to bridge the gap between theory and practice in nursing. Reflection and critical thinking are the vital components in a clinical learning environment.

Introduction

Nursing education in Sweden

The Swedish undergraduate nursing education programme extends over three years and leads to a Bachelor’s degree in Caring/Nursing Science. An additional fourth, advanced level, year and specialty training lead to a professional specialist degree, e.g. graduate diploma in midwifery, emergency or primary healthcare. The bachelor’s programme consists of clearly defined courses covering both theory and practice. Practical skills are developed during clinical training within various clinics in hospitals, healthcare centers and in community care. Each course is labelled in credit points and is studied and examined separately in

KEYWORDS Reflective practice; Education clinical; Student-centered; Learning environment; Education; Nursing; Students; Reflection; Student placement
a modular system. Marks are given on a two- or three-level scale: Fail, Pass or Pass with distinction. However, starting in 2007, Swedish higher education, including the nursing programme, is changing to a structure that conforms to that laid down in the Bologna Process, leading to the establishment of a Europe-wide standardisation of higher education. This means each course should carry credits that conform to the European Credit Transfer System (ECTS). In addition, syllabuses have to be translated into English and the required reading should be research based and applicable internationally. Learning outcomes for the students should be clearly stated and possible to assess. Each course is usually worth 7.5 or 15 ECTS, and read separately, one at a time, in order to facilitate student participation in international exchange programmes.

Senior lecturers and lecturers with at least a Master’s degree teach the theoretical content in the courses and are also responsible for the implementation and development of the individual students’ clinical skills. However, in clinical practice the nurse students are taught and guided by preceptors, i.e. registered nurses (RNs). Preceptorship refers to the system whereby (Yonge and Myrick, 2007, p. 405) a RN is assigned to one nursing student, or a small group of students, in the RN’s own clinical setting for the purposes of role socialization and teaching. This arrangement enables each individual student to receive in-depth teaching.

Through the National Swedish Board of Health and Welfare and the Swedish National Agency for Higher Education (HSV), the Government controls the duration and goals of nursing education and the standards for nursing practice. However, university colleges and universities are relatively free to develop their own curricula and syllabuses. This has lead to a variety of profiles and teaching methods in Swedish nursing education. The overall goal for Borås University College is to offer high-quality education on an international level and research relevant to today’s society, in close co-operation with both the professional and the public sectors. This means facilitating the development of the students in such a way that they will be highly desirable and well prepared for tomorrow’s labour market. The establishment of a clinical educational unit (CEU) for nursing students is seen as one manifestation of this. A student-centered CEU can be defined as an educational environment specially designed to provide nursing students with clinical training and to teach them how to put caring science into practice. A CEU can be an existing health-care unit, or an extension of a specific activity within a unit or clinic, where student development is achieved through a clearly outlined learning strategy. The students take an active role in their own learning process and are supervised and supported in this process through close collaboration with the professional health team, academic staff, patients and their next of kin.

**Background**

**A move towards a reflective practice**

The word reflection means originally “a bending or turning back”. To reflect means to establish a distance to yourself and your practice (Bengtsson, 1995). Reflection also means living with uncertainty and remaining open to the possibility of being wrong (Burnard, 1995). Schön (1983, 1987) claimed that professional competence develops through dialogue between teacher and student, which he calls ”problem setting”. The act of problem setting is a reflection-in-action process. It means being aware of different solutions and through a dialogue leading the student toward the student’s own goals. The world of nursing is a constantly changing environment. Stockhausen (2006) claims that RNs do not in practice carry out their work according to a lesson plan. Instead the happenings in their everyday work are the ”palette” from which they chose their way they will work with patients and in doing so demonstrate to students what nursing is all about. The author conceptualizes this as Métier Artistry and it features the kind of teaching which highlights the experienced practitioner’s reflection-in-action.

Ekebergh (2001) presented a theoretical educational model based on a student-centered approach, which aimed at encouraging reflection from a caring and patient perspective during the learning process. When collecting data from nursing students she claimed that reflection was the core in the students’ learning process. Student reflection was described as lived experience and, when shared with their preceptors in clinical practice, this reflection helped the students to bridge the gap between theory and practice. Reflection and critical thinking are intellectual processes. According to Kupier and Pesut (2004), critical thinking can be traced back to Greek philosophy which was based on questioning and a critical attitude. Price (2004) stated that reflective practice emphasises the intuitive, and instinctive challenge of nursing practice as an art and craft, as well as developing a sensitive patient care. On the other hand, critical thinking is reasoning, i.e. a more
analytical, cognitive and strategic process. It embodies challenging assumptions by using argument based on research and theoretical models and defending practice when its expertise or decisions are questioned. Crucial condition that influences in the development of critical thinking is the emotional attitude and relations between student and preceptor (Kupier and Pesut, 2004; Myrick and Yonge, 2004).

The problem with the theory-practice gap is highlighted in nursing research (Ekebergh et al., 2004; Kupier and Pesut, 2004; Teekman, 2000). Various approaches can be used to develop reflection and critical thinking (Lambert and Glacken, 2005; Myrick and Yonge, 2004), the experience of preceptorship (Hargreaves, 2004) and reflective practice (2007). Since the Swedish nursing education programme became integrated into the academic organization, there has been an ongoing debate concerning the competence of newly qualified nurses’ concerning practical skills. Some argue that knowledge in nursing skills has been reduced in favour of scientific training. Clinical training and the integration of caring science are of vital importance for nursing students’ learning and we see a CEU as a place, one among many other alternatives, where students together with preceptors might be able to bridge the theory-practice gap in nursing. Paterson (2007) stated that only a few scholars have described the challenges inherent in clinical education.

In searching international databases we found few studies describing the concrete work involved in establishing a clinical educational unit (CEU). The process of developing the CEU described in the present article is based on the findings of Ekebergh’s (2001) research concerning Swedish nursing students’ assimilation of caring science in theory and practice and Dahlberg’s et al. (2003) writings about caring science. The model has been further developed based on the empirical work of the academic and clinical staff and on the students’ experiences. It is our hope that our description of the model will inspire nurse educators to facilitate teaching and a good learning environment in the practice of nursing education. Thus, this paper aims to present a description of a student-centered, reflective learning model within a Swedish undergraduate nursing education programme.

**Description of the CEU model**

The CEUs were two different, existing healthcare units, developed into an optimal learning environment and one newly opened unit within an existing clinic. The project was undertaken in co-operation between academic staff, clinicians and hospital managers. The three levels of learning in the nursing education programme are represented at each CEU, namely introductory level corresponding to the first programme year, intermediate level corresponding to the second programme year and bachelor’s level corresponding to the third and last programme year.

**The starting-up process**

To find clinical placements for all students, and to ensure a good quality of learning can sometimes be a problem. A project was therefore started concerning co-operation between the Faculty of Nursing and the regional hospital. The goal was to facilitate an environment built on partnership, community and shared values about the care of patients and the teaching—learning process. The project also aimed to create congruence between paradigm of care of the Faculty of Nursing (Ekebergh, 2001), course outlines, the objectives communicated by the clinical staff and the students’ personal learning objectives. A work group was formed with representatives from both institutions. The Faculty of Nursing was represented by a lecturer, senior lecturer and student representative. The hospital was represented by a chief physician, who was also a member of the hospital’s executive board, a director of clinical studies and a quality control manager, responsible for both medical and nursing care at the hospital. Together the group created common goals (Table 1) for a CEU.

The first CEU, which opened in 2001 is a 20-bed ward for internal medical treatment, i.e. the treatment of patients suffering from renal failure. A unit for renal dialysis and an out-patient unit are connected to the ward. When the project started, staff had to apply for a post at the CEU. The main requirement for employment was an interest in preceptorship. The RNs employed were expected to undergo a special course in preceptorship corresponding to 7.5 ECTS credits, while the enrolled nurses did a shorter course. The chief physician, RNs and ENs were then introduced to the common goals of the CEU (Table 1). An introduction programme for the staff was created comprising four educational sessions. Study visits to hospitals that used some kind of education model were included.

The content of the introduction programme concerned the following questions: What characterises a CEU? What are the necessary conditions? What pedagogical ideas support the integration of theory and practice in clinical settings? Lectures were given about the content and concepts of the nursing
curriculum. Teaching and preceptorship processes in clinical practice were introduced. A special approach was applied in terms of supporting students in their critical reflection and thinking and encouraging learning in an atmosphere of communion (Egideus, 1999). The roles of the clinical lecturer, preceptors and clinical placement coordinator (CPC) were also discussed. The CPC at the CEU is the contact person for both student and preceptor.

The initial model — being a student at the CEU

The pedagogical model at the CEU implies that one preceptor is assigned to one or two students. A CEU offers clinical placements for at least two but sometimes four periods each semester. The group of students can be 12–20 per unit and period. The students are randomly assigned to a CEU. The goal is for all students to receive their clinical training at a CEU at least once during their nursing education. However, if it is reported during the first year of education that a student has problems with the learning process, caring attitude or motivation, this student can be offered a clinical placement at a CEU as a form of special support. Student clinical training corresponds to 35 h a week. The first day at the CEU is reserved for introduction. All students are gathered together, with the clinical lecturer and the CPC. All students formulate their personal objectives in accordance with the course objectives and leave a copy at the CEU. The student and the preceptor together are responsible for 4–6 patients; here, the goal is continuity in the student-patient relationship. This does not necessarily mean that the student shadows the preceptor for all work shifts. The choice of patients is not random. On the contrary, the preceptor chooses suitable patients for each student. The goal is to facilitate the student’s progress and development of skills and competence. At the beginning of their clinical training, the students are assigned to one or two patients. In co-operation with the preceptor and the patients, the students will then be responsible for the planning, assessment, decision-making, delivering and evaluation of each patient’s process of care.

All students keep a diary which means that, every day, time is devoted to reflection about situations that occurred during working hours. These thoughts are discussed with the preceptor. Moreover, the students use the diary to review and form their personal objectives for each day. Students, their preceptors and the clinical lecturer attend regular clinical seminars and case analyses at the CEU (Table 2). At the case analyses, each student presents a case, as a narrative, in which she/he has lived experience of the nursing care given. The case will then be analysed and reflected on critically within the group. Critical thinking is encouraged through a questioning of taken-for-granted assumptions that may have influenced the patient’s care. The students are also given support in concrete caring situations to enable them to reflect on the care they gave to the patients, i.e. reflection-in-action.

At the CEU, the students are provided with certain facilities such as a place to work, a computer, course literature, and access to the hospital databases and library. A preceptor–preceptee learning plan is discussed and agreement is drawn up which includes a taxonomy that specifies student development regarding clinical skills. It also serves to guide both students and preceptors through the planning of a step-wise process of learning in relation to the questions of dependency and autonomy between students and preceptors. This structure functions as a guideline for the students in terms that it describes their progression and level regarding achievement in practical skills and competence.

The initial model — being a member of the professional health team

All members of staff participate in supervision sessions every second week. These sessions are led by
the clinical lecturer and aim to give the RNs support in their role as preceptors. In each semester, the caring personnel are invited to the faculty of nursing for a one-day seminar. This seminar is given on separate occasions affording all members of the staff the chance to participate. The seminars focus on the documentations of the students’ evaluations of their clinical placements. There is also time for discussion of ideas about improvements in the education of the students at the CEU and about how to prepare, in order to provide the support of students’ reflective learning and critical thinking skills. Nursing research performed at the nursing faculty is also presented.

The overall responsibility of the CPC is to give an introduction for all students at the beginning of their practicum workplace experience. As a student contact person, the CPC together with the student and the clinical lecturer is involved in the planning of each student’s clinical training period. Furthermore, the CPC supports the preceptors, teaches the students – in groups or individually – takes part in seminars and reflection sessions, and collects information from the preceptors for individual assessment of the students. The CPC is also responsible for the planning of the clinical teaching and evaluating the development process in the CEU.

The preceptors support one or two students at a time. Together with the students, the preceptor is responsible for the achievement of their educational goals in terms of creating learning situations within the daily care of patients. The goal is to give students responsibility corresponding to their ability at a given time and to create an atmosphere in which they can develop their skills. The preceptor provides individual concrete nursing actions for each student; she encourages students’ reflections and critical thinking and gives them daily oral or written feedback. The preceptors also participate in clinical seminars and examinations and in the supervision sessions provided for all preceptors on the CEU. Together with the CPC and clinical lecturer, they assess the students’ achievements by providing information about each student’s learning process.

The clinical lecturer is the bridge between the university college and the hospital. The lecturer promotes the exchange of experiences between theory and practice. Being a lecturer at a CEU involves supervision of the regular staff at the CEU, i.e. the students’ preceptors and the CPC. The lecturers of the separate CEUs have the main responsibility for the students’ educational processes and for the encouragement and support of staff members in their work.

A further implementation

In 2007, there were three CEUs representing the three levels of learning in the nursing education programme, the first, second and third programme years. Each unit has a CPC and nurses working as preceptors and all preceptors have participated in courses on clinical preceptorship. In addition, there is a part-time clinical lecturer in each unit. The goal is for all students to do their clinical training at a CEU at least once during their nursing education. An introduction programme, supervision sessions and regular seminars for the nursing staff, as well as an introduction programme for the students, are planned and carried out at all CEUs. The model also requires that during each work shift, some time is devoted to reflection in partnership between preceptor and student and in groups.

The CEU for the first year is a clinic for geriatrics and rehabilitation care. Here, the students’ clinical training focuses on how to care the basic human needs of individual patients. The clinic has 58 beds divided into three units, all serving as CEUs. Rehabilitation is given to patients after disability or injury. The clinic cares largely for patients of all ages suffering from stroke. A day-care center, out-patient clinic, and centers for physiotherapy and occupational therapy are connected to the clinic. The wards are organized according to the
CEU model with close-cooperation between students, preceptors, CPCs and the clinical lecturer. The students, together with their preceptors, are responsible for 2–4 patients each.

In the second year, the students attend the first CEU to be established (described above as the initial model), the learning perspective of which became the foundation for the other CEUs.

In the third year of the nursing education programme, the students should be prepared to grasp the "whole picture" of nursing care. The third-year CEU deals with patients with orthopaedic injuries and thus many of them are elderly people. This demands careful discharge planning and communication with the community care. This unit is both a student-centered and a student-run unit in that the students are members of the clinical staff. In the second year, the preceptor's role can be described as that of being a clinical expert who works, "walks side by side" and gives guidance to the student. In the third year, the preceptor's role changes into being the person who "walks behind", who supports the student and ensures the patients' quality of care. Each nurse student is responsible for two patients and independently plans, implements and evaluates her/his patients' needs for basic and special care and treatment. Managing the staff in the caring team (preceptors and enrolled nurses) around the patients becomes of special importance, as well as taking responsibility for handovers. Concepts such as trust, being welcoming and openness are part of the caring philosophy of the CEU and they should also characterise the learning environment. The idea that imbues the third year CEU is that students should be challenged in their learning process. A development project, which aims to implement evidence-based practice, has recently started at the unit. The project is led by a professor from the nursing faculty in close co-operation with the head nurse of the unit and the research leader at the hospital.

A further step in the development of the CEU model is in the planning stage. It encourages students from other professional groups to carry out their clinical training at a CEU. The CEUs will then evolve into multi-professional learning environments. Two senior lecturers are now connected to the CEUs and it is planned to implement clinical research programmes in order to facilitate the integration of evidence-based practice. This could stimulate the CPCs and preceptors to enrol on a Masters programme in nursing. On entering a Masters programme, the RNs would identify and study caring problems within their own workplace and subsequently report their findings in the form of published articles. Moreover, work with the development of clinical examination is ongoing. The goal for the year 2008 is that all students in the last year of their education should have a clinical placement in the orthopaedic third-year CEU and do a final comprehensive clinical examination there. This examination will consist of a written part and a "bed-side" part, using case-methodology. A special assessment structure for this examination will also be developed.

The process of assessment

The assessment process takes place at the CEU as a reflective three-way conversation between student, preceptor and lecturer. An assessment form guides this reflective dialogue. As the purpose is also to encourage the student's self-reflection, it is important to give sufficient time for the meeting. The student's personal learning objectives, caring experiences and activities are explicitly stated, explored and feedback is given on them. The student evaluates how the staffs have responded to his/her learning needs. Finally, the student receives a written evaluation form signed by the lecturer and preceptor. Upon completion of the clinical training, the students evaluate, both orally and in writing, their learning process in a narrative form, and complete a web-based evaluation form.

Discussion

Paterson (2007) claimed that introducing student-centered teaching in a clinical setting sometimes implies a risk for nurse educators, since many of the staff members act in authoritarian structures and are schooled in a more dominant idea of pedagogy. Our opinion is that a good clinical learning environment demands well-motivated preceptors. Henderson et al. (2006) evaluated undergraduate nursing student's perceptions of psychosocial characteristics within different clinical placements. CEUs that had learning strategies that were clearly worked out were rated higher by students than those that worked according to a standard model. The model described in this paper has been scientifically evaluated from a student perspective (Ekebergh and Määttä, 2005). The findings indicated that the students assimilated a caring discourse during their clinical training. However, students sometimes lacked support from preceptors concerning knowledge about the theory and concepts of human caring science. This could have helped them to better connect the concepts to their learning process in practice, i.e. to bridge...
the theory-practice gap. Dreyfus and Dreyfus (1996) claimed that the practice of nursing reveals that theory is dependent on practice and reason requires intuition. Only if both theory and practice are cultivated and appreciated can full expertise be achieved. Burnard (1995) claims that reflective group sessions which follow a certain structure and reflective evaluations are fruitful methods for use in nursing education programmes. The reflective three-part assessment invites the student to consider her/his own practice, learning or the course of study that she/he has taken part in.

Yonge and Myrick (2007) claimed that sometimes the preceptors discover that they have some free time, which could be used to develop projects within the units. The CEU assessment form, taxonomy and preceptor—preceptee manual, are examples of such a work. The nursing faculty now uses the same form for all clinical training and levels of education. Drennan (2002) found in a study about the CPCs’ role that it was sometimes confusing due to a lack of definition of this rather new position. However, the students highlighted the individual support they received. Yonge and Myrick (2007) claimed that patients also benefit from being cared for in an organisation with preceptorship and student-centered learning. All patients in the present CEUs are aware that the unit is an educational unit and that as a consequence the nursing care will be delivered by students more often than on traditional hospital wards. The views of patient or staff roles have not yet been scientifically evaluated.

Conclusion

Why did we develop three different learning levels at various units? Our idea is that the establishment of a learning environment designed for each year of the students’ education fosters knowledge among all those involved in the teaching—learning process. Moreover, the students’ personal goals become integrated and well known to all. Being familiar with the teaching process may facilitate the development of preceptorship and the process of assessment at each level. In addition to the pedagogical advantages mentioned above, the organisation of the CEU team also facilitates the management of a larger number of students during each period of clinical training. We are firmly convinced, however, that the establishment of a well-functioning CEU depends on the presence of “real enthusiasts”. Collaboration between the hospital leaders, head nurses, preceptors and academic staff has provided a very positive atmosphere during the process. Last but not least, the students who actively bring their reflections and learning objectives to their clinical training encourage a good learning environment and quality of care. Current ongoing projects are the development of CEUs within community and psychiatric care.

References


