



# Clinical education: a challenging component of undergraduate nursing education

## ABSTRACT

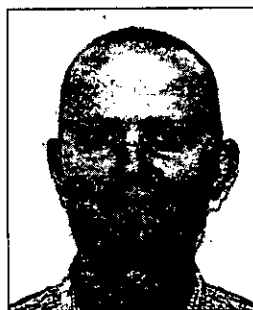
### KEY WORDS

clinical education; teaching; evaluation; literature review

*Clinical education is an essential part of every undergraduate nursing curriculum. The main benefits are that it allows students to put theory into practice and experience the realities of the practice-based nursing profession. Limitations include the unstable nature of the clinical area as a learning environment and the challenges this produces with students' assessments. This article reviews the literature and concludes there is room for significant improvement in the area of clinical education and numerous strategies can be implemented to do so.*

Received 31 October 2001

Accepted 29 January 2002



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## INTRODUCTION

Between the mid 1970s and 1993, Australia became one of the first countries to transfer undergraduate nursing education from hospital based training to tertiary institutions (National Nursing Workforce Forum, 2000). This transfer occurred for a number of reasons: to ensure quality teaching; to enhance the correlation between nursing theory and practice; and to facilitate students' effective use of theory and knowledge in a variety of clinical settings (Wong and Wong, 1987; Myrick, 1991; Gassner et al., 1999).

With this transfer, the universities acquired sole responsibility for the education of student nurses and their preparation for professional practice as Registered Nurses. This responsibility includes co-ordinating the education of nursing students in the clinical area. Teaching within the clinical environment is a challenging process, with many benefits and limitations. For example, clinical education allows students to see in reality what they can only imagine in a classroom but students may be put into anxiety provoking situations that hinder their learning (Kleehammer et al, 1990). The undergraduate nursing education system has also been criticised for its limited 'hands-on' or clinical component, though reportedly the quality of the experience is more important than the quantity (Battersby & Hemmings 1991).

## BENEFITS

Students have reported that they learnt the most about nursing whilst working in the clinical setting, suggesting that by seeing certain elements of nursing, they are more likely to

remember them (Burnard, 1992). Furthermore, they may feel more comfortable asking their peers (staff and other students) questions rather than risk being judged as unprepared by faculty (Packer, 1994).

Students have also described learning in the clinical setting as learning in the 'real world' (Burnard, 1992). On commenting on medical education, Crandall (1993) believes the great strength of clinical education is that it is 'live'. That is to say, it more closely mimics the real world where 'real doctors see real patients'. In a classroom, students cannot fully appreciate the smell of malena, the appearance of a jaundiced patient or the satisfaction that comes from relieving someone's pain. In the clinical area however, these experiences are real. Theory is put into reality. In the clinical environment students learn lessons they will remember for a long time.

A further benefit of the clinical learning environment is that although the student is supernumerary, he or she is still expected to initiate, respond and react, be concerned about the patient's welfare, and manage real crises (Grealish and Carroll, 1998). This is a benefit because although it will induce anxiety, it puts the student in exactly the same situation they will be in when they are employed as a registered nurse. It challenges the student, aides the development of problem solving skills, and may even increase the student's desire to acquire new knowledge and skills. These experiences will also provide the student with the opportunity to combine cognitive, psychomotor and affective skills (Hart & Rotem, 1994).

### LIMITATIONS

Learning in the contextual setting of clinical practice creates challenges that are absent from the classroom. For example educators have little control of environmental conditions; client safety must be maintained whilst he or she is cared for by a student; and educators must monitor the client's needs as well as the

student's needs (Windsor, 1987). Students in the clinical areas are frequently thrown into unplanned activities with patients, medical staff and nursing staff (Wong & Wong, 1987). It is difficult to know the staff, their routines, policies, procedures, politics, and idiosyncrasies, even if one is placed in one setting with some consistency (Packer, 1994). The 'foreign' nature of the clinical environment can easily increase students' stress levels.

Clinical teachers, ward staff and patients have differing expectations of students (Howie, 1988). This can cause confusion for students because they may be unsure of whom they are answerable to. The anxiety this causes can contribute to decreased learning and this has been identified as a barrier to what could be a smooth transition into learning nursing skills and care (Edwards, 1991). It is not surprising therefore that Beck (1993) identified pervading anxiety and envisioning self as incompetent as common feelings following student nurses' initial clinical experiences.

In Pagana's (1988) investigation of undergraduate nursing students' first clinical experiences, 77% of the students surveyed described fears of inadequacy in their clinical ability. These feelings of inadequacy were related to clinical inexperience and lack of relevant knowledge. The feelings were heightened by trying to absorb large amounts of knowledge in the short space of time spent in the clinical area. Other sources of these feelings included the high expectations of other clinicians, being actively responsible for nursing care or being asked to perform procedures they were not familiar with. Unfortunately, feelings of inadequacy have much to do with the attitude and practices of ward staff (Nolan, 1998) who may not be familiar with the undergraduate curriculum.

Another reason why clinical education is stressful for students is that it is not given enough importance by academics. The higher education system emphasises publication and

research from its academics thereby reducing faculty interest in clinical teaching (Grealish and Carroll, 1998). Myrick (1991) believes that it is no secret that clinical teaching is deemed as low status within the modus operandi of the university setting. Myrick (1991) believes that this occurs because members of faculty are evaluated primarily on their publication and research productivity. Wong and Wong (1987) reinforce this, stating that some deans and directors of schools of nursing do not consider excellence in clinical teaching as evidence of academic contribution. This raises the question of whether universities are 'teaching institutions', whose primary focus is the education of students, or 'learning institutions', whose goal is the discovery of new knowledge. Regardless of the answer, the opinions of senior nursing academics must change if students' clinical experiences are to improve.

### CLINICAL EDUCATION

Clinical education is a highly skilled activity in that all clinical teachers must be advanced in both their clinical skills and their teaching skills (Reid, 1994). Unfortunately the two do not necessarily go hand in hand. Furthermore, it is one thing to tell clinical facilitators that they are expected to guide, supervise and teach students, and another thing for those facilitators to operationalize what they have been told (Morgan, 1991).

In their evaluation of clinical teachers, Grealish and Carroll (1998) found that these teachers did not feel prepared for their role and felt that the supervision requirements were unreasonable. This suggests that quality clinical facilitation is a product of both academic input and the abilities of the facilitator.

Unfortunately, the clinical instructor has been identified as a potential threat to students (Pagana, 1988). Terms used by students to describe the instructor include intimidating, threatening, demeaning, impatient, strict and demanding (Pagana, 1988). Clinical teachers

often lack any tertiary teaching background and as such their ability to guide, supervise, direct and teach students may be inadequate or completely absent (Naphthine, 1996). However the reasons such a person could be employed as an instructor may include budgetary constraints or a limited availability and thus choice of other suitable staff (Naphthine, 1996). Reid (1994) found that in Australia the responsibility for clinical teaching or facilitation of undergraduates was shared by: university academics; jointly appointed clinical teachers; practitioners from the health care agency where the students were placed; and casual clinical teachers who were not attached permanently to either the university or the health care agency.

### CLINICAL EXPERIENCE

One of the common criticisms of the undergraduate system is the limited amount of time students spend in the clinical area (Reid, 1994; NSW Nurses Registration Board, 1997). Burnard (1992) reported that students felt that they learned most about nursing from working in the clinical area. However, more time spent in the clinical area does not necessarily mean the student will acquire more knowledge or skills. Battersby and Hemmings (1991) suggested that the quantity of time spent in the clinical area may not be as significant as the quality of the experience and guidance the student receives. White and Ewan (1991) also suggest it is the quality of the clinical experience that is important and this is related to the opportunities students have for understanding what the experience means and for coming to terms with issues such as life and death, ethical dilemmas, personal responsibility and accountability for one's own actions.

The ratio of students to facilitators is also an area of concern. The most common staff to student ratio identified by Grant et al (1996) is 1:8. As one would expect, when this ratio increases, each student receives less supervision or teaching time and if the students are placed

geographically far apart, even a ratio of 1:4 will be difficult to supervise (Greenwood & Winifreyda, 1995; Grealish and Carroll, 1998). Reid (1994) similarly found that in small groups, the acquisition of knowledge was enhanced and each individual student's practice was more readily supervised. Unfortunately, clinicians do not want large numbers of students together in one ward area so the clinical teacher has to supervise two, three or more ward areas and is therefore not always available when needed (Perry, 1988; Ives & Rowley, 1991).

A further limitation of clinical education is student exploitation in which students are used as de facto rostered staff members (Naphthine, 1996). This may occur if staff are not familiar with the curriculum or aware of the goals and roles of students. Exploitation is a potential source of stress for students as they are trying to please the clinical facilitator, the university and the ward staff, whilst trying to 'pass' the clinical placement (Naphthine, 1996). Exploitation has a number of implications for clinical education. Firstly, students will not have access to learning opportunities, as they will be completing the tasks they have been allocated. Secondly, they will not know if they are completing the tasks correctly, due to a lack of direct supervision. Thirdly, there may be legal and ethical concerns for the ward staff if the students make a mistake.

## METHODS OF CLINICAL TEACHING

Following the transfer of nursing education to the tertiary sector, educators struggled to find ways to ensure that new graduates were able to manage the responsibilities of being a Registered Nurse (Grealish and Carroll, 1998). The preceptor model is a common model that has been used to make the transition from student to professional easier (Bain, 1996; Beattie, 1998; Clayton et al, 1989; Jairath et al, 1991; Nehls et al, 1997; Perry, 1988).

There are numerous advantages to using pre-

ceptors in clinical education. These include the ability of preceptors to facilitate the transfer of theory into practice; aide in the transmission of desired nursing behaviours throughout the profession; engender creative synthesis in nursing practice; and initiate the basis for mentoring and future collegial networks (Perry, 1988). The student also receives one-to-one attention and is given 'expert' guidance and assistance in identifying their learning needs (Grealish & Carroll, 1998).

Clayton et al (1989) found that precepted students scored higher on leadership, teaching/collaboration, interpersonal relations and communication, and planning and evaluation. Preceptorship is said to enhance the performance of students, whilst preceptors remain stimulated educationally and professionally by the experience (Bain, 1996). Perry (1988) believes that preceptorships have the potential to enhance student learning in tertiary nursing courses by utilizing the teaching skills of expert nurses already employed in service settings. Although Perry does not define what an expert nurse is, as discussed earlier, it should not be assumed that being a competent nurse means being a competent teacher.

Preceptorship is not without limitations. These may include the demands of work taking over learning; the difficulty in monitoring the progress of one student in isolation from the others; preceptors lacking educational qualifications or ability; and preceptor burnout (Grealish & Carroll, 1998). In Grant et al's study (1996), almost a quarter of all the Registered Nurses surveyed found teaching nursing students to be too time-consuming.

Peer teaching or 'students teaching each other' is a clinical teaching method described by Iwasiw and Goldenberg (1993). They identified peer teaching to be effective amongst students in the clinical area – not only did students show greater improvement than those students taught by clinical teachers alone, but students actually preferred being taught by each other.

Iwasiw and Goldenberg (1993) found that those students doing the teaching felt a responsibility to prepare for their teaching experience by reviewing content and principles of teaching, thus increasing and reinforcing their own learning. However one of the main problems or limitations of peer teaching is ensuring that the students are being taught the correct information or skills by their peers. The authors did not suggest a solution to this problem.

Baird et al (1994) described the Clinical Teaching Associate model in which a hospital ward nurse works as an associate for a group of two or three nursing students as they rotate through that nurse's ward. Associates are encouraged to focus less on agency-specific policies and procedures and more on principles and dialogue about clinical judgment and decision making (Melander & Roberts, 1994). With this method of teaching the Associates assume responsibility and ownership for student learning and are role models for students. The main advantage of this strategy is that students are taught by a clinician who is 'familiar' with the environment in which the students are placed. The main disadvantage is the financial cost of taking a clinician away from their usual role.

Greenwood and Winifreyda (1995) described 'cluster teaching' as a method for undergraduate clinical education. This involves the allocation of one nurse teacher and eight students to any one ward for the duration of the clinical practicum. Students are supernumerary, although they are allocated one or two patients. This load increases as the students knowledge increases. Evaluation of this method by ward staff, teachers and students was positive and the competence of the nurse teacher being consistently identified as a strength (Greenwood & Winifreyda, 1995). This was probably because of the prerequisite for the nurse teachers to be 'clinically current' or up to date with the area in which they teach.

From their exploration of student nurses' attitudes towards different teaching/learning

methods, Harvey and Vaughan (1990) concluded that the teaching methods most favoured by student nurses are those that are student-centred and involve groups of students, the interaction within the group appearing to be an important factor. The findings of Clayton et al (1989) however, supported the androgogical premise that adults learn more effectively in a one-to-one situation than in a group situation.

This conflict raises the question, what is the most effective strategy for teaching student nurses in the clinical environment? Although only a few of the many clinical teaching methods have been discussed in this review, it is obvious that further research is necessary to find such a strategy. It should be kept in mind though that further research may not find one 'perfect' method for every situation. Quite the opposite could occur. Research could find that each teaching situation has its own unique method that is effective.

## EVALUATION

Evaluation of students' clinical performance is an essential part of the undergraduate nursing curriculum. Its function is to ascertain the level of theoretical knowledge; to ascertain the level of practical clinical skills; to ascertain insight into the level of professional attitudes (Neary, 2000). Student evaluation can be a challenge for clinical educators. Because of the highly ambiguous nature of clinical evaluation, educators may ponder the 'whats', 'hows' and 'whens' of clinical assessment and may even resort to using the methods and criteria with which they were evaluated as students (Wong & Wong, 1991; Orchard, 1992).

A standardised evaluation tool would make performing student evaluations an easier task. Because of the complex nature of the evaluation process, educators' interpretations of students' performances are not always based on their ability to provide care but on how the educator would provide care (Orchard, 1992). Human observation is noted to have an inherent bias

and is a subjective process, and this may in part explain why grading standards vary from course to course and from teacher to teacher (While, 1991). Unfortunately a standardised tool does not exist because such a tool would require quantification of all human behaviours (Karns & Nowotny, 1991).

Evaluation of clinical performance is considered to be difficult because of nursing's complex goals requiring achievement via complex strategies (Orchard, 1992). Karns and Nowotny (1991) found that grading in clinical courses is an ongoing problem for most faculties, particularly because multiple variables over which the educator has no control can affect a student's performance.

Another problem of clinical evaluation is that of faculty subjectivity. Evaluation is always subjective for it involves human beings with their own set of values that influence the process (Reilly & Oermann, 1992). Irrespective of how well an evaluation instrument is designed, the reliability and validity of clinical assessment depends to a large extent on the educator's understanding and interpretations of the evaluation criteria (Wong & Wong, 1987; Reilly & Oermann, 1992). Evaluation involves consideration of all the surrounding issues. For example behavioural versus process objectives, norm-referenced versus criterion-referenced tools, and pass-fail versus letter or numerical grading (Karns & Nowotny, 1991).

The ability of educators to provide fair and equitable clinical evaluations for students can potentially be affected by numerous factors. These include the particular variables used to measure students' performances; the relationship between the complexity of students' clinical performance expectations and the degree of subjectivity of appraisals; evaluators' expectations of students' professional socialization; and evaluators' expertise in assessment of students' clinical performances (Orchard, 1992). These problems are compounded by the fact that the student's clinical performance is evaluated

while he or she is still in the process of learning the skills being evaluated – a less than ideal situation (While, 1991).

Numerous methods of clinical evaluation are used by educators. Anderson (1990) described 'clinical co-assessment' in which the student is assessed in the clinical area by two assessors. The abilities assessed were the use of the nursing process, effective interaction and formation of value judgments that reflect a respect for the dignity of others. The assessors, who may be a ward nurse, educator, nurse practitioner or director of nursing, are prepared for their role by attending training workshops.

The Clinical Skill Assessment Test (CSAT) is a tool which can be used to assess clinical performance. It is a checklist used to evaluate skills, specific procedures, work practices, communication and application of knowledge (Tolhurst & Bonner, 2000). The main advantages of this method of evaluation are its ease of administration, scoring and feedback to the student, however CSATs do tend to focus on psychomotor skills (Tolhurst & Bonner, 2000).

'Clinical focus guidelines' are also a 'tool' used to facilitate student learning in the clinical environment. They are derived from the course objectives and state specifically the expected learning outcome; how students can prepare for the learning; what specific observations, assessments, interventions, and written assignments students should perform in order to learn; and what evaluation the student should perform on his or her own learning (Blainey, 1991).

## RECOMMENDATIONS

Numerous recommendations have been made in the literature to help improve the quality of undergraduate clinical education although they do not necessarily address all the problems described here. Reid (1994) suggests the following: establishment of clinical chairs and health agency-based units specialising in clinical education and associated functions; the

establishment of award courses and career paths in clinical education; the full recognition of clinical teaching as teaching; the establishment of research into clinical education; and the development of endowment funds to finance innovations in clinical education.

Further recommendations made by Reid (1994) include:

- all clinical teachers should have clinical credibility, currency and familiarity with the area in which they have student responsibilities
- continuity of supervision for the same group of students
- students have access to the expertise of clinicians in the area of their placements
- when casual clinical teaching staff teach in an agency or hospital, it is desirable that they have a consistent allocation to particular areas of the agency
- the university prepare casual clinical teachers for that role by providing training sessions where necessary.

Other recommendations made in the literature include:

- clinical settings and university schools of nursing should collaborate in the establishment of creative models for clinical education which will take into account current health and education socioeconomic reforms (Dunn & Hansford, 1997)
- students should be encouraged to recognize the influence they exert over their own clinical learning environment and to proactively work to create the kind of environment which will best meet their learning needs (Dunn & Hansford, 1997)
- students could be taught priority setting and problem-solving early in the undergraduate curriculum so they are better equipped to handle the ever-increasing volume of material to be learned (Beck & Srivastava, 1991)
- participation in student education should

be an expected and valued part of the registered nurse's role (Dunn & Hansford, 1997)

- registered nursing staff on wards should be adequately prepared and supported for their role in student learning (Dunn & Hansford, 1997)
- the Nursing Unit Manager and clinical facilitator should cooperate in the development and implementation of strategies to enhance acceptance of students as fully participating members of the ward team (Dunn & Hansford, 1997)

Myrick (1991) believes that clinical teaching must be afforded equal status with classroom teaching, publishing, research, and most significantly, it must be classified as an essential criterion for promotion and tenure. As such, clinical instruction should not be relegated to the casually hired, part-time and inexperienced teachers (Myrick, 1991).

A further suggestion made by Myrick (1991) is that the most qualified faculty must assume responsibility for clinical teaching, and they should possess not only expert teaching skills, but also be competent clinical practitioners (Myrick, 1991). However Myrick fails to define what 'most qualified' and 'competent' mean or whom these faculty might be.

## CONCLUSION

Clinical education is an essential part of undergraduate nursing education, having benefits for the students as well as limitations. Various methods of clinical education are available to clinical facilitators though a universally efficient method is yet to be discovered or agreed upon, possibly because such a method does not exist. Although students are benefiting from their time spent in the clinical area, significant room for improvement exists in the quality of clinical education provided to undergraduate nursing students.

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