Teaching style in clinical nursing education: A qualitative study of Iranian nursing teachers' experiences

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SUMMARY

There are many studies about nursing clinical settings and their problems, but the teaching style as a whole has not been widely studied. Therefore, this study aimed to explore nursing teachers’ perceptions about teaching style in the clinical settings in Iran. A grounded theory approach was used to conduct this study. Fifteen nursing teachers were interviewed individually, 2006–2007. The interviews were tape-recorded and later transcribed verbatim. The transcriptions were analyzed using Strauss and Corbin’s method. Three main and 12 sub themes emerged from data and these could explain the nature of the teaching style in clinical education of the Mashhad Faculty of Nursing and probably others in Iran. The main themes included: multiplicity in teaching style, nature of clinical teaching, and control and adaptation in education atmosphere. Multiplicity in teaching style was the dominant concept in this study. Each educator had a personal and individualized style which was flexible according to the situation, type of the skill (course content), education environment and facilities, and level of the learner. This study can guide nurse educators to know more about teaching styles and use them appropriately in the clinical settings. Further research into the themes of this study are recommended.

Introduction

The mission of nursing education is to produce qualified nurses with the requisite knowledge, attitudes and skills (Li et al., 2007). For achieving this goal, clinical teaching is the cornerstone in nursing education (Zamanzadeh et al., 2002), because approximately 50% of the curriculum, as in other countries such as the United Kingdom (50% theory and 50% practice) in the nursing program is devoted to clinical studies (Peyrovi et al., 2005). Therefore, clinical teaching style plays an important role in developing nursing skills and holistic caring, and nursing teachers need an awareness of teaching styles in order to utilize them effectively.

Teaching style is a characteristic ways each individual collects, organizes, and transforms information into useful knowledge (Heimlich and Norland, 2002). There are many factors that affect teaching styles. Teachers have different personalities, and they change over time (Walklin, 2002). In addition, teaching style changes along with technological, social and cultural changes. Furthermore, the development of different disciplines (e.g. nursing science, medicine, pedagogy) has an effect on the content of the nurse teachers’ work and on their personal experiences of teaching (Holopainen et al., 2007). On the other hand, in clinical settings, teachers are in a very different position from teachers in most other fields. Patient presence in this environment makes the teaching and learning more complex, because teachers and students must consider patient safety and satisfaction (Mahmoodi, 1997). Therefore, in order to be a good nurse teacher an extensive list of desired characteristics is necessary (Walklin, 2002).

It is generally accepted that research into teaching styles should focuses on the beliefs, values, and behaviors of teachers in the education system (Heilmich and Norland, 2002). But over the years, questions about teaching styles and the potential for flexibility in their use have surfaced and need to be assessed deeply (Brown, 2003). In addition, the concepts of teaching style (main process of teaching) have not been studied as a whole in clinical settings, and its complexity and variables have not been widely explored. Furthermore, we have not found any study in relation to the teaching style of nursing teachers in practice and this is probably the first study in this field using a qualitative approach.

Therefore, this line of research has many implications. Firstly, it can help in understanding what it means to be a clinical teacher...
(Collins et al., 2006), and in developing the curriculum and promoting quality in clinical teaching. (Borhan Mojabi, 2002). Secondly, it can contribute to the theory of teaching and learning in higher education (Samuelowicz and Bain, 2001). Thirdly, it can help teachers to become knowledgeable about their styles so they can consciously adjust, adapt, or modify them in order to increase learning (Hunt, 2006). Fourthly, it can provide answers to questions concerning the quality of clinical teaching and all the many variables that influence clinical education (Hallberg and Ohrling, 2000). Finally, and most importantly, by exploring and understanding teachers’ perspectives we can reduce our reliance on assumptions and base our work on reality.

Context

Iran is located in the south-west of Asia, covering over 1.64 million km², with a population of approximately 65.5 million. The country consists of thirty provinces that vary widely in terms of their socioeconomic development. In each province there is at least one Medical Science University (MSU). These MSUs, as the main approved authorities, hold the dual responsibilities of training and provision of higher education to health care professionals, and delivery of health care. Each MSU runs at least one full-time basic nursing program (Tabari Khomeiran and Deans, 2006).

In Iran, students can study nursing across all higher education levels – from bachelor to doctoral – but they are required to have passed the competitive National Higher Education Entrance Examination (NHEEE) (Tabari Khomeiran and Deans, 2006).

The basic nursing programs in Iran offer a four year baccalaureate in nursing accredited by the High Council of Medical Education of the Ministry of Health and Medical Education (Salsali, 2005). Currently, there are approximately 152 bachelor programs that educate nurses in Iran. All schools are obliged to follow a basic curriculum established by the Ministry (Nikbakht Nasrabadi and Eman, 2006).

The learning environment for students engaged in baccalaureate programs is shared between classroom, hospital, community and other educational settings (Tabari Khomeiran and Deans, 2006).

Nursing students start clinical training from the second semester and this is run concurrently with theoretical courses until the end of the third year. The fourth year is allocated exclusively to clinical placement training. They learn in the clinical environment under the direct guidance and supervision of a nurse teacher for the first 3 years. In the final year they work under the guidance of staff nurses and alternate supervision of nurse teachers (Peyrovi et al., 2005). Students at bachelor and master levels are taught mostly by teachers who hold master degree in nursing. In Iran it is nurse academics who engage in both theoretical and clinical teaching.

Grounded theory is commonly used where there are few research findings in the subject area (Bonner and Walkey, 2004). Because this method can provide in-depth identification, description, and explanation of interactional processes between and among individuals or groups within a given social context (Strauss and Corbin, 1998). Since the concepts of teaching style and its variables are not explained and defined clearly in Iranian nursing education system, the grounded theory method was considered appropriate for this study.

Participants

The participants in this study included 15 teachers with M.Sc. degrees from the Faculty of Nursing and Midwifery of Mashhad University of Medical Sciences, Iran. Nine participants were female and six were male, with a mean age of 43.4 years. Their education experiences ranged from 5 to 30 with a mean of 15.3 years.

Data collection

In-depth and semi-structured interviews were used for data gathering during September 2006 to April 2007. The interview questions were asked in an open ended manner, in no fixed order. They were based on an interview guide (Chenitz and Swanson, 1986), which was formulated from a critical review of the literature, peer review and pilot study. Subsequent interviews were then guided by the analytical process (Peter and John, 2000). First, each participant was asked to describe one of his/her own typical work day, then specifically to explain his/her own perceptions and experiences of teaching in the clinical settings and the factors influencing it. The interviewer probed participant responses by using questions or statements, such as ‘Could you say something more about that?’, ‘What did you think then?’ or ‘When you mention…what you mean?’

All the participants were interviewed in their own or the principal investigator office (based on their preference) in the Faculty of Nursing and Midwifery. The interviews were recorded and transcribed verbatim. The interview duration ranged between 50 and 120 min. The principal investigator performed all interviews and transcribed them.

Data analysis

Consistent with the grounded theory method, the data of each interview were analyzed before proceeding with subsequent interviews. Data were analyzed according to the Strauss and Corbin method (Strauss and Corbin, 1990). Therefore, coding of data was done in three stages: open, axial and selective coding. During open coding, each transcript was read multiple times and codes were generated from the participant's words and the researcher's constructs. For example, the code “teaching by doing” was generated by the researcher from a participants' comment that “if it was the first time for the student or a new skill I would do it myself and the student observed”. Codes that were found to be conceptually similar in nature or related in meaning were grouped in categories. The categories and codes from each interview were compared with those from other interviews in order to identify common links. Categories were related to their subcategories in axial coding. Coding was done around the axis of a category, linking categories at the level of properties and dimensions. In this stage the structures of categories were related to the processes. For instance, the factors that contributed to nurses' teaching styles were identified. The process of integrating and refining the theory occurred in selective coding. It is here that the main category “the multiplicity in teaching style in clinical settings” was verified.

Purpose

The main objectives of this study were to explore and describe teachers' perceptions of teaching styles in nursing education in Iran. In this paper the intention is to highlight multiplicity of teaching styles in clinical settings, including narratives from participants.

Methodology

A qualitative approach known as grounded theory was used in this research study. Grounded theory was developed in the 1960s by two sociologists, Glaser and Strauss (1967), whose theoretical roots were in symbolic interactionism (Polit and Beck, 2006).
Ethical considerations

Permission to conduct this study was given by the Ethics Committee of Mashhad Faculty of Nursing and Midwifery, according to a formal letter of introduction from the Vice Dean for Research of University of Medical Sciences, serving as the legal authority in this area (July 2006). We have emphasized on the confidentially, informed consent, right to exit from study at any time, and to select the time and place of interview, and anonymity. Permission, as oral informed consent, was sought from the participants for the audio-taped interviews.

Results

The themes that emerged from the data of this study are all related to the nursing teachers’ clinical teaching experiences. After the reduction and integration of similar codes, three main and 12 sub themes were revealed. All the themes are related to each other and reveal the pattern of clinical teaching. In fact, these themes describe the phenomenon of teaching style and what variables affect it. Therefore, in response to the research question we can say that teachers use a multiplicity of teaching styles in clinical education, due to:

1. the nature of clinical teaching,
2. the need to control the educational atmosphere, and
3. the need to adapt to it.

These concepts help the reader to understand the reality of teaching in clinical settings (see Table 1).

This paper presents data about multiplicity in teaching style, including narratives from participants.

Multiplicity in teaching style

Multiplicity in teaching style was the dominant concept in this study. Although the individuality of teaching style was clear in the data, teaching styles of nurse teachers were modified according to situation, skill (course content) and learner level. This means that the clinical teachers might use one or more teaching styles to ensure student learning (see Table 1).

Table 1

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
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<tr>
<td>Multiplicity in teaching style</td>
<td>1. Teaching by doing</td>
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<td></td>
<td>2. Teaching by supporting (student learning)</td>
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<td></td>
<td>3. Teaching by being a role model</td>
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<td></td>
<td>4. Teaching by creating learning context</td>
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<td></td>
<td>5. Teaching by monitoring</td>
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<td>Nature of clinical teaching</td>
<td>1. Concept and meaning of clinical teaching</td>
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<td></td>
<td>2. Converting potential abilities into actual</td>
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<td></td>
<td>3. Teaching professional skills</td>
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<tr>
<td>Control of and adaptation in the educational atmosphere</td>
<td>1. Teacher’s perception of self</td>
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<td></td>
<td>2. Teacher’s perception of the student</td>
</tr>
<tr>
<td></td>
<td>3. Teacher’s perception of the environment</td>
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<td></td>
<td>4. Teacher’s perception of nursing knowledge</td>
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</table>

Teaching by doing

Clinical education involves doing tasks in real environments and conditions. Clinical teachers teach and transfer experiences to the students by empowering them to carrying out tasks, fulfilling professional roles and caring to patient. For completing the teaching–learning process, teachers involve the students in all ward duties including patient care and patient education. They assign patients to students, and then they guide, help and carry out samples to facilitate students’ learning. Tasks may be done by teachers, students or both, on students’ competency. In the early stages, students observe, then participate, and finally do the tasks independently.

In addition, students must take part in weekly or daily conferences and present their assignment, prepare pamphlets and posters and report duties done to teachers and head nurses.

Teacher K: If it was the first time, I would do the procedure myself and the student would observe, but she or he must do the second one.

Teacher B: I assign the patient or patients to students and tell students that this is your patient and you must do all the duties related to your patients, and you are responsible for the every thing related to your patients.

Teaching by supporting

Teaching by supporting student learning is one of the main approaches in clinical education. This style of teaching promotes student learning and development, and also guarantees patients’ safety. Reinforcing students and giving feedback to them will increase student responsibility for learning. The following items are necessary for teaching by supporting student learning:

- Encouraging students to learn independently.
- Guiding and directing students.
- Accompanying student when doing procedures.
- Learning from classmates.
- Offering indirect help to students.
- Developing and reinforcing the right psychological base, and
- Determining desired knowledge, skills and attitudes of students.

Teacher H: If I see that one student is weak, I will ask another student to accompany him or her when doing a procedure, or I accompany him or her myself.

Teacher B: I ask students to implement sensitive procedures such as inserting an angiocath with me, following certain rules.

Teaching by being a role model

Nursing teachers believed that being a role model in clinical education is the most effective and right way for transmitting professional experiences and attitudes. Teachers in clinical setting have two basic roles, a model of a good nurse and a model of a good teacher. In fact, teachers were committed to the professional roles of ideal nurse and teacher simultaneously. In this way they transmit right attitudes and the ways of doing professional duties and roles to students. Role modeling of the teachers in the following fields was dominant: communication with staffs and patients, similarity in actions and speeches, standard implementation of skills, having a special teaching style, and behaving in a special way.

Teacher N: I emphasize that first I must be a good model in my behavior, then a good science teacher. I mean, students accept me as a socially normal person.

Teacher Z: I communicate with patients and decide which questions to ask in order to teach students what they can ask a patient with cancer, and how.

Teaching by creating learning context

Data indicate that making a suitable scenario is one the most import challenges in clinical education. To providing good
conditions for teaching in hospitals, teachers needed to work in different fields. Firstly, working based on plans was very important for training courses. Secondly, making diversity (introducing new and interesting cases, changing work unit and students' patients, putting student in good situation etc.) was another important task for teachers. Thirdly, providing conditions for observing, team working, and visiting related units were necessary in teaching in hospitals. The final task was to establish good management and to seek help from others when teaching students.

Students' management in clinical setting, so that they can reach the predetermined goals, is one of the most worries of teachers, because there are many unpredictable events. Having training program help teachers to response on time to these events and it is necessary for the dynamicty of clinical education. Using students free times for introducing interesting cases, visiting relative wards, participating in medical rounds, and using other nurses and medical team experiences, can deepen students learning.

Teacher V: I arrange the activities in a manner in order to be in a new situation. I try to have diversity in our patients and wards.

Teacher B: each student spends at least three days with his or her patient in order to know patient completely. After three days I assign other patient to student that means student can not be with the same patient until end.

Teaching by monitoring

In order that students learn procedures and communication skills it is important that the teachers constantly monitor the students' activities. This is a basic need of students especially in early stages. There are many advantages in this style of teaching. Firstly, students gain confidence and become less anxious. Secondly, students learn to provide standard cares, which helps prevent harm to patients. Some times, in order to further reduce students' anxiety and increase the patients confidence monitoring should be done discreetly. Teachers by continuous supervising and monitoring help students to gain professional competency and confidence.

Asking students when they are doing a procedure, involving of student and other patient to student that means student can not be with the same patient until end.

Teacher Z: I ask students when they are administering drugs, "What is this for? How should you give this? What types of controls are needed? And ...."

Teacher H: I usually don’t stand very close to students when they are doing a procedure, because they may lose confidence.

Discussion

Although this study was carried out with only 15 teachers, it provided a good description about the phenomenon of teaching style in clinical settings. The flexibility and other strengths of the grounded theory methodology made it possible to capture and describe the teachers' experiences. The most important finding is that multiplicity in teaching style is necessary for education in clinical settings. Although many authors have classified teaching styles differently (Felder and Silverman, 1998), there is a global agreement that teaching styles are constant even though the content that is being taught may change (Bautista, 2007). The data from our study appear to contradict that view; this may be because of the different contexts in clinical education settings, where the teachers have to use diverse styles to achieve different goals and cover the content. Also, McCollin's study indicated that a collaborative style is not used in universities and other educational institutions, although this style has been recommended for adult education (McCollin, 2000). However, the findings of our study show, collaboration between teachers and students is necessary and it cannot be separated from nursing clinical education. This result indicates that in addition to other factors, the domain of content (knowledge or skill) and assigned duties play an important role when choosing a specific teaching style. In fact, it must be said that clinical education is student centered, and cooperation between students and teachers is the essential part of clinical education. Whereas, many studies about teachers’ beliefs and their strategies in higher education show that teacher-centered strategies are dominant in universities, especially in theoretical courses (Samuelowicz and Bain, 2001). However, the present study shows that teaching of skills and procedures is not possible without active participation of the learners. This is understandable if we bear in mind the psychomotor domain of Bloom's Taxonomy of Learning Domains (Petty, 2006). Because, teaching in psychomotor domain requires students' participation.

Our study shows that the teaching and learning of clinical skills are experienced as the following phases: dependency, collaboration (cooperation and partnership), and independence. This is similar to Schwenk's three-part structure in teaching clinical skills such as venipuncture: Introductory Phase ("See One"), Practice Phase ("Do One") and Perfecting Phase ("Do One More") (Schwenk, 2006). The dependency and collaboration phases of our study are to some extent similar to Schwenk's practice phase and the independence phase corresponds to Schwenk's perfecting phase. However, in our study the nurse teachers were not involved in a phase like Schwenk's introductory phase in clinical settings. This is probably because students of nursing in Iran have to take courses in clinical procedures in a clinical skill lab using simulated methods. Therefore, the teachers in our study were involved mostly in the practice phase. They promote competency and independency in students by guiding, monitoring and accompanying the students in skill implementation, and expecting students to perform independently. In this way, instructors can accelerate the transition process from the dependency phase to independency by using appropriate teaching styles. If the instructors can complete the phases successfully, then students will achieve a competent clinical level.

Conclusion

The findings of this part of the study have developed knowledge in the field of teaching in clinical settings and revealed the nature of nursing clinical teaching style. Teachers, students, educational planners and stakeholders can use these findings to promote the quality of teaching and learning in clinical settings, nursing education and health care.

This study illustrates that clinical education is a personal and interpersonal experience with its rules and principles, and requires the active participation of both teachers and students. The teaching styles discovered in this study can be used in any kind of clinical education.

Further research into clinical teaching is necessary to develop teaching styles, standards and strategies to improve quality in nursing education. Themes derived from this study can be subjects for other research in Iran.

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