

The challenges of clinical education in nursing: A qualitative analysis of nursing students and clinical instructors' perspectives

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Abstract

Context: Clinical education is an integral part of nursing education and also it is considered as the heart of professional education. Internship is a part of nursing education program which provides internship students with suitable opportunities to enhance their skills in applying the theoretical knowledge in the clinical placement.

Aims: The objectives of this study were to (1) gain a deep understanding of the experiences and perspectives of nursing students and clinical instructors and (2) explain challenges of clinical education in nursing.

Setting and Design: This study was a qualitative content analysis conducted in Qom University of Medical Sciences.

Materials and Methods: The study participants included 25 senior nursing students in 7th and 8th semesters and 8 nursing instructors. Purposive sampling was conducted until data saturation was reached. Data were collected using semi-structured interviews.

Statistical Analysis Used: MAXQDA version 10 was used to store the interview data and codes and “qualitative content analysis with an inductive approach” was used to analyze the data.

Results: Data analysis revealed two themes and nine categories which were as follows: “lack of effective clinical education facilitators” (demands for diverse clinical learning methods, setting professional values, and focus on autonomy-based education) and “barriers to effective clinical education” (experiential learning by working in the ward, factors undermining scientific learning, focus on routine-oriented work, ineffective educational planning, nurse mentors' superficial knowledge, and communication barriers).

Conclusion: Clinical training as facilitators of learning in the clinical environment requires the participation of faculty, clinical instructors, students, and medical staff. Moreover, the paper has addressed the potential problems which are related to the nursing students, instructors, and clinical setting.

Keywords: Challenge, Clinical education, Nursing, Qualitative study

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INTRODUCTION

As an academic discipline which needs special skills and knowledge, nursing provides both patients and healthy people with services in various centers.^[1,2] Clinical education is an essential part of nursing education and also it is regarded as the heart of professional education.^[3-5] The importance of clinical education in the development of individual, professional, and clinical nursing skills is undeniable. At this level of education, the student interacts with the instructor and the environment and puts the learned concepts into practice.^[6] In the clinical education, students gain the necessary experience by learning the clinical practices and find the opportunity to transform their theoretical knowledge into intellectual, psychomotor, and social skills required for patient care.^[7,8] The internship program has been implemented since 1992 as an innovation in the structure of nursing education with the aim of enhancing the quality of nursing education and providing clinical services as well as preparing a holistic and community-oriented context in nursing. Internship is a part of nursing education program which creates the suitable opportunities for the enhancement of skills in applying theoretical knowledge in the clinical environments. It also offers the promotion of initiative and independence plus initiative so that nursing students can use appropriate measures to promote the health of their clients, families, and society.^[7,9,10] In fact, such educational courses aim to improve the quality of nursing services in society, thereby ensuring the community health.^[11]

Despite the importance of this part of education, the results of various studies indicate that there are many problems in achieving the objectives of this course. Asirifi *et al.*, (2017) for example, cases demonstrated such as a lack of specific task descriptions for students and instructors, inconsistency between the teaching material and its use in clinical placement, inadequate educational facilities, decline in the students' academic knowledge, and unscientific methods for learning.^[7] Other studies also revealed that problems associated with clinical education could be led to students' inadequate clinical proficiency. These studies showed that teaching staff and nursing clinical services did not coordinate and there was a strong need for the reflection and revision in clinical education.^[12-15]

In their qualitative study, O'Mara *et al.* showed that students experienced challenges related to instructors and nurses and pointed to the impact of such challenges on their learning.^[16] Another qualitative study indicated that a set of factors at planning, individual, and clinical environment levels would challenge students' learning.^[17]

Many studies suggest that current education does not provide the students with the ability to attain clinical competence.^[18-20] Currently, BSc educational program for nursing approved by the Supreme Council for Medical Planning of the Ministry of Health and Medical Education of Iran, consists of eight semesters, in which clinical education starts as apprenticeship from the second semester and continues up to the 6th semester. After the sixth semester and completing theoretical credits and the relevant apprenticeship courses as well as success in preinternship exam, students will start the internship period. Internship starts at the 7th semester and lasts for the two successive ones (7th and 8th semesters). During these two semesters, all credits will be related to clinical education.^[21] The position of clinical education has also been researched in Iran, demonstrating many challenges. The importance of clinical education in forming nursing students' necessary skills and professional competence is axiomatic^[22] and therefore promoting clinical education which requires assessing the status quo, reinforcing the strong points, and remedying the defects, is also of immense significance. Familiarity with the status quo of clinical education and its related challenges, especially during the internship, would help eliminate or correct weak points and would facilitate the achievement of educational goals, training of skilled people, and the provision of high-quality health-care services. The literature, concerning the objective of this study, reveals that most studies conducted in this area have focused on clinical education in nursing quantitatively while adopting a general view. Taking this into consideration and since clinical education is based on professional values which are studied in the context of that profession, this study employed a "qualitative content analysis with an inductive approach" to delve deep into the experiences and viewpoints of nursing students and clinical instructors and aimed to explain challenges of internship clinical nursing education.

MATERIALS AND METHODS

This qualitative study investigated the challenges of clinical education in nursing using semi-structured in-depth interview. This study was based on the experiences of the internship nursing students and clinical instructors and adopted conventional content analysis. Content analysis is a research method for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action.^[23] The study population consisted of senior BSc nursing students in the 7th and 8th semesters who had started their internship (and respective clinical instructors). To maximize variation in this study, samples (both students

and instructors) were selected with different economic, social, and demographic backgrounds (i.e., age, marital status, occupation, income level, work experience, clinical education background, and being native or nonnative, etc.). The participants were selected using purposive sampling which is a tried-and-true method for qualitative research. The study participants included 25 senior nursing students in the 7th and 8th semesters and 8 instructors. Data were collected using semi-structured individual interviews (due to additional interviews with some participants, a total of 35 interviews). The data collection process was continued, to achieve data saturation, and it took 6 months, from August 2017 to January 2018. Saturation is a tool used for ensuring that adequate and quality data are collected to support the study.^[24] The researchers continued the interviews until the data were completely saturated, i.e., when no new idea, concept, or category was derived from the final interviews. The questions were centered on students' and instructors' perceptions of in-field clinical education challenges.

The interview started with a general question (for students: "Please describe a day of your internship;" and for instructors: "Please describe a day of your clinical teaching"). The interview was then directed based on participants' responses and continued with follow-up, direct, and indirect questions, such as "You talked about educational problems, can you discuss them in detail?" Or, "What solutions do you offer for the problems you mentioned?" Each interview lasted 45 – 95 min. Interviews were conducted individually, in a comfortable environment, at a convenient time and place for participants so that they would feel relaxed. With participants' permission, all interviews were recorded and then transcribed verbatim immediately. Participants were asked to schedule another appointment in case a confirmation of their statements or conducting a subsequent interview would be necessary.

Data analysis was performed using "content analysis with an inductive approach." In this study, the unit of analysis was all interviews. The MAXQDA version 10 was used to store interviews and the emergent codes. Transcribed texts of the interviews were read several times so that units of meaning, in forms of sentences or paragraphs, were specified, and the initial open codes were derived. The main categories and themes were abstracted. The analysis process was repeated by adding each interview, and codes and categories were modified accordingly.

Lincoln and Guba's four criteria of credibility, dependability, confirmability, and transferability^[25] were used to establish trustworthiness of data in this study. In so doing and to ensure credibility and confirmability of the data through

continuous engagement and data verification by the participants, the research team members along with three nonmember experts teamed up to help. To determine the dependability, two members of the research team separately coded the interviews where there was a 90% agreement between their opinions. In addition, the data were collected, transcribed, and recorded, and sufficient time was allocated for data collection with utmost precision. For transferability, three faculty members who were not our research team members but were the leading experts in qualitative research studied and approved the obtained data. Furthermore, a description of study's area of research, necessary information about the participants, and direct quotations were regarded for transferability.

Ethical considerations in conducting study were as follows: (1) obtaining approval for the study protocol from the Ethics Committee of Qom University of Medical Sciences (MUQ.REC.1395.6), (2) explaining the study objectives and data collection process to the participants, (3) obtaining written informed consent from all participants, (4) informing the participants of the advantages of their participation, (5) ensuring anonymity in answering questions (assigning codes to interviews), (6) assuring the participants of the fact that they can leave the study in any time for any reason, and (7) assuring the participants of the confidentiality of the data.

RESULTS

A total of 8 clinical instructors aged 30 – 39 years (age mean: 35.37 ± 3.33), who had a work experience of 3 – 18 years (mean: 10.25) and earned MSc and PhD degrees participated in the study. Twenty-five students among whom 12 were male and 13 were female (age mean: 24.84 ± 5.50) [Table 1] also took part in the study. According to the analysis of 300 codes obtained from the interviews, two main themes and nine categories were identified [Table 2].

Lack of effective clinical education facilitators

The first theme emerging from participants' statements was a lack of the effective clinical education facilitators which included demands for diverse clinical learning methods, setting professional values, focus on autonomy-based education.

Demands for diverse clinical learning methods

In this category, students and clinical instructors referred to learning in various ways including learning new things, learning through clinical rounds, and integrating practical experiences with scientific knowledge. In this regard, an

instructor said, “*In-field learning experiences, providing that they have precise comprehensive plans which follow scientific principles, can have a positive impact on students’ clinical learning*” (Instructor 3). A student also said, “*If we have more rounds on the wards and on patients rather than focusing solely on practical work, we will gain better knowledge. Such learning will be lifelong*” (Student 16).

Setting professional values

Most participants emphatically stated this category. They regarded support for students, introducing nursing models, and admiring nursing profession and discipline (outlining advantages) as professional values which needed serious attention particularly during the internship. An instructor said, “*I believe that internship students are more mature (than their past) and they should be more effectively communicated with. We should work more on their confidence*” (Instructor 3). A student also said, “*Students need to be supported by authorities and head nurses, because we are their future nursing colleagues*” (Student 18).

Focus on autonomy-based education

Participants mentioned the following as cases to foster students’ independence: authorizing them to do ward activities and therefore strengthening their motivation and targeting their internship. Among participants’ statements in

this category are: “*Internship should make students independent so that they become involved in A-to-Z activities of the ward. As long as students work under the direct supervision of the instructor, they will not deeply be involved with the ward’s activities independently*” (Instructor 2). And “*The positive point about internship is students’ growing independence where they will increase their communication skills with patients, staff, and ward head nurse*” (Instructor 4).

Barriers to effective clinical education

Another key theme emerged in this study was the presence of barriers to effective clinical education. The categories of this theme include experiential learning by working in the ward, factors undermining scientific learning, focus on routine-oriented work, ineffective educational planning, nurse mentors’ superficial knowledge, and communication barriers.

Experiential learning by working in the ward

According to participants’ statements, especially those made by students, placing the responsibility of supervising students on the ward and a lack of direct supervision by instructors can influence clinical education while serving as a deterrent. In this regard, students and instructors said, “*During internship, evidence-based performance is of great importance. Unfortunately, this is diminished when responsibilities fall on wards. This very gap between theoretical and clinical education is a challenge of internship period where the ward takes on the responsibility of supervising students*” (Instructor 3). “*The major defect is that we are entrusted to the ward. The instructor once shows up at the beginning of the class and once at the end! It seems as if everyone thinks internship is an end to education*” (Student 4).

Factors undermining the scientific learning

Since internship mostly focuses on practical work experience, there is not enough time or opportunity for a careful study of a patient’s medical history in a scientific way nor for the study of clinical cases. On the other hand, students are not strong enough in their basic knowledge and skills. These two are among factors undermining the scientific learning. Many participants acknowledged the existence of these factors, they said, “*I think students have problems doing practical work, they say they haven’t been taught the procedures according to standard methods which rooted in freshman years when there was little time to perform the basic procedures because of throng of students in each group*” (Instructor 3). “*Overwhelming workload in the ward, insufficient time to study common cases, limited time for library research, and poor concentration on learning are among the problems for in-field students*” (Student 16).

Focus on routine-oriented work

Being engaged in routine-oriented tasks and performing repetitive procedures, students feel that internship solely

Table 1: Information of participants

Participant	Age	Sex	Grade	Educational year/ work experience
Student	22	Female	BSc nursing	Semester 7
Student	21	Female	BSc nursing	Semester 7
Student	21	Female	BSc nursing	Semester 7
Student	23	Female	BSc nursing	Semester 7
Student	35	Female	BSc nursing	Semester 7
Student	37	Female	BSc nursing	Semester 7
Student	21	Female	BSc nursing	Semester 7
Student	21	Male	BSc nursing	Semester 8
Student	22	Male	BSc nursing	Semester 8
Student	32	Male	BSc nursing	Semester 8
Student	28	Male	BSc nursing	Semester 8
Student	22	Male	BSc nursing	Semester 8
Student	21	Male	BSc nursing	Semester 8
Student	35	Male	BSc nursing	Semester 8
Student	21	Female	BSc nursing	Semester 7
Student	22	Female	BSc Nursing	Semester 7
Student	21	Female	BSc Nursing	Semester 7
Student	27	Female	BSc Nursing	Semester 7
Student	21	Male	BSc nursing	Semester 7
Student	22	Male	BSc nursing	Semester 7
Student	21	Male	BSc nursing	Semester 7
Student	21	Male	BSc nursing	Semester 8
Student	22	Male	BSc nursing	Semester 8
Student	35	Female	BSc nursing	Semester 8
Student	27	Female	BSc nursing	Semester 8
Instructor	33	Female	Master of science	6
Instructor	32	Female	Master of science	5
Instructor	30	Female	Master of science	3
Instructor	36	Female	Ph.D.	9
Instructor	39	Female	Master of science	18
Instructor	37	Female	Ph.D.	15
Instructor	39	Male	Ph.D.	15
Instructor	37	Male	Master of science	11

Table 2: Main themes and categories related to challenges of in-field nursing clinical education

Unit of meaning	Categories	Themes
Learning new things, learning through clinical rounds, and integrating practical experiences with scientific knowledge	Demands for diverse clinical learning methods	Lack of effective clinical education facilitators
Support for students, introducing nursing models, and admiring nursing profession and discipline	Setting professional values	
Foster students' independence: Authorizing them to do ward activities	Focus on autonomy-based education	
Strengthening their motivation		
Targeting their internship		
Placing the responsibility of supervising students on the ward	Experiential learning by working in the ward	Barriers to effective clinical education
Lack of direct supervision by instructors		
Focuses on practical and experiential work	Factors undermining scientific learning	
Nor enough time and opportunity for a careful study of patient's medical history in a scientific way		
Engaged in routine-oriented tasks	Focus on routine-oriented work	
Performing repetitive procedures		
Having no plan for the number of students	Ineffective educational planning	
Repeating in-field course credits		
Department chairs' inability to plan educational contents		
Took no heed of providing scientific information nor integrating it into practical activities	Nurse mentors' superficial knowledge	
Unable to perform comprehensive medical examination on patients		
Nursing students as labors in the wards		
All medical errors made in the wards and their associated problems were attributed to nursing students	Communication barriers	

focuses on routine-oriented work and repetitive measures. This reduces students' motivation in studying new things. Such feelings have been reflected in the following statements: *"When in the ward, we are asked to do a number of routine-oriented tasks like checking vital signs, removing catheters, etc., which will take 2 – 3 h of our time and therefore we will not literally learn anything. There is no use changing our wards either, because they all ask us to do such routine-oriented and repetitive tasks."* (Student 1). *"The only experience we gain during internship is that we turn into routine-oriented task doers in the end"* (Student 6).

Ineffective educational planning

Defects in clinical education planning were another category to which most participants referred. They discussed some challenges including, having no plan for the number of students, repeating in-field course credits, and department chairs' inability to plan educational contents. One of the clinical instructors said, *"Teaming up a large number of students and scheduling internships for the whole week, will certainly leave both instructor and students exhausted, hence reducing educational quality"* (Instructor 6). A student also said, *"We expect to have specific duties and responsibilities, not to turn a blind eye to theory, to be taught things like how to examine and follow-up patients, instead of making us participate in a series of repetitive, lengthy, useless workshops"* (Student 8).

Nurse mentors' superficial knowledge

Another challenge emerged in this study was nurse mentors' superficial knowledge. Participants, especially students, reiterated that ward nurses who appeared to be their mentors were mostly focused on empirical clinical practice

and took no heed of providing scientific information nor integrating it into practical activities. They are also unable to perform comprehensive medical examination on patients. In this regard, a student pointed out, *"Some nurses with whom we work do the clinical tasks as a matter of routine and at times regardless of meeting the standards (such as medication errors, etc.). This reduces both the quality of care and our motivation in learning"* (Student 18).

Communication barriers

Most participants also discussed communication challenges. They believed that nursing staff and other health-care professionals regarded nursing students as labors in the wards. They also noted that all medical errors made in the wards and their associated problems were attributed to nursing students. In this regard, Student 5 said, *"Hospital staff always look down on us as a servant or a valet who has come to the ward to do the routine-oriented tasks and then go home! And if we do something contrary to their wishes, they won't let us work there anymore."* A clinical instructor also stated: *"Any problem coming up in the ward is blamed on the student. This is certainly one of our challenges in the ward"* (Instructor 7).

DISCUSSION

The findings of this study revealed the in-field challenges of both nursing students and clinical instructors while teaching and learning. Lack of the effective clinical education facilitators was one of the themes derived from the participants' experiences in this study. Participants referred to facilitators such as diverse learning methods, setting professional values, and focusing on autonomy-based

education. Consistent with these findings, Shahsavari *et al.* reported that increasing the clinical skills of senior students through short-term retraining courses at the Skill Lab reduced their anxiety before starting their internship and thus facilitated effective learning.^[26] Participants considered throwing support to student, introducing nursing models, and admiring nursing profession as subcategories of “setting professional values.” Findings from other studies also confirm this result.^[27,28] Consistent with our finding showing the need for autonomy-based education, the results of another study in Iran showed that the clinical education atmosphere in Iran does not generate motivation for critical thinking among students so that they are not able to enhance their independence and critical thinking skills effectively.^[29]

This study found “barriers to effective clinical education” as another theme where participants believed that assigning just the ward (tasks) to students and not offering clinical instructors’ direct supervision could be a deterrent to effective clinical education. Hasanpour-Dehkordi and Shohani reported a variety of supervision and monitoring types from students’ perspective.^[30] Participants of Bazrafkan and Kalyani study also believed that there was insufficient support from clinical instructors, hence a reduction in their motivation for learning and performing educational activities.^[31]

“Factors undermining scientific learning” was another category of the abovementioned theme. Participants in this study stated that there was not enough time or opportunity for them to study patient medical history in a scientific way due to a focus placed on routine-oriented and experiential work.

On the other hand, students suffer from weaknesses of knowledge and skills and therefore scientific learning is not achieved. Several studies showed that high workload and low time to benefit from consultation and guidance of clinical instructors to realize educational goals were important challenges of internship.^[30,32-34] Students reported that there was no difference between internship and other apprenticeship programs they had already experienced because they had to do repetitive and routine-oriented tasks during their clinical program. Other studies also confirm this result and suggest that clinical education program must undergo major revision.^[30,35] Pourghane also found that, among students’ unpleasant experiences was performing repetitive tasks while attending patient bed. Similarly, they highlighted the necessity to revise the clinical education program.^[36]

In regard to ineffective educational planning, participants in this study believed that there was no plan for the number of students in each team; internship course credits were repetitive and also department chairs were not competent enough to plan educational contents, which all were among challenges lying in internship. This finding is consistent with the results of other studies.^[16,17,37] For example, in their study, Abbaszade *et al.*, identified the category of “ineffective planning and executive barriers to acquiring clinical skills.”^[38] Furthermore, Pournamdar *et al.* reported students’ dissatisfaction with clinical education planning (76.8%).^[39] Hasanpour-Dehkordi and Shohani also demonstrated that the presence of a large number of students and their dispersal in different wards would lead to a situation where the clinical instructors would not achieve their educational goals during internship.^[30] Another challenge discussed by participants in this study was nurse mentors’ superficial knowledge. Research shows that clinical nurse mentors play a pivotal role in preparing students for clinical nursing.^[40] In a study conducted by Abedini *et al.*, 59 senior undergraduate midwifery students included in the study to identify clinical education problems. 35.6% of these students stated that there were few experienced instructors in clinical education placements.^[41] Other studies have, by the same token, suggested that nurse mentors needed more knowledge, efficiency, and skills in training students.^[42,43]

Communication barriers were regarded as a category in this study. Most participants believed that a lack of successful communication between members of the treatment team and nursing students could reduce their motivation and dampen their enthusiasm for clinical learning. In line with this finding, O’Mara *et al.* stressed that clinical environment was unsupportive where staff played the role of “negative learning models.”^[16] Students participating in Bazrafkan and Kalyani study also complained about being rejected by staff and their unpleasant manner.^[33] Also, in qualitative study, one of the categories extracted was disrespectful interactions, which included bullying, uncivil behaviors, and violence in the clinical setting.^[44]

Limitations of the study

The study was conducted in two schools of nursing and midwifery in Qom and Kashan Universities of Medical Sciences; therefore, the findings should be interpreted in the light of this context.

CONCLUSION

Based on the findings, this study concludes that diverse learning and educational methods applied to train

independent students in the process of acquiring in-field nursing clinical skills can lead to an effective clinical education atmosphere. It is therefore necessary that health-care and education policymakers direct particular focus toward employing experienced clinical instructors; eliminating barriers to motivation, learning, and communication; expanding collaboration between instructors and clinical placements; and improving the educational environment.

Clinical training as facilitators of learning in the clinical environment requires the participation of faculty, clinical instructors, students, and medical staff. Moreover, the paper has addressed the potential problems which are related to the nursing students, instructors, and clinical setting.

This study focused on the internship challenges confronted by nursing students and clinical instructors of Qom and Kashan Universities of Medical Sciences during internship nursing period, and therefore it is recommended that future research be carried out on the viewpoints of students, instructors, and clinical nurses of other medical universities of Iran. Such studies will help and guide policymakers and health-care planners. It is also recommended that such challenges be studied from the standpoint of clinical nurses and clinical and educational department chairs.

Conflicts of interest

There are no conflicts of interest.

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