








# Explaining the status of clinical nursing education: a content analysis study in Iran

*Explicando el estado de la educación en enfermería clínica: un estudio de análisis de contenido en Irán*

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## Abstract

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**Introduction:** Challenges and problems of clinical nursing education are the most important factor in determining the quality of nursing students' education. Frequent assessment of the quality of nursing education without considering the existing challenges is an ineffective activity in analyzing the situation of nursing education.

**Objective** This study aimed to explain the status of clinical nursing education at Jahrom University of Medical Sciences in Iran.

**Methodology:** A qualitative design based on the conventional content analysis approach was used. This study was conducted at the X University of Medical Sciences in 2018-2019. Data were drawn from 10 semi-structured focus group interviews with 110 nurses, head nurses, instructors, and students. Purposeful sampling was performed. The time and place of the interviews were chosen according to the participants. The inter-

views were analyzed by Graneheim and Lundman method by MAXQDA software.

**Results:** 626 in-vivo codes, 46 primary codes, 8 subcategories (lack of attention to the evaluation process, non-participative evaluation, low staff educational cooperation, ineffective instructors, non-educational clinical space, student educational deficits, student drown in the clinic, non-participatory planning), and 3 main categories (planning challenges, implementing challenges and evaluation challenges) were obtained.

**Conclusion:** Educational leaders must shift to three areas; democratic planning, wise implementation with frequent monitoring, and the use of modern clinical evaluation methods (Based on the participation of learners and other stakeholders).

**Keywords:** clinical education, nursing, educational challenges, Iran

## Abstracto

**Introducción:** Los desafíos y problemas de la educación clínica en enfermería son el factor más importante para determinar la calidad de la educación de los estudiantes de enfermería. La evaluación frecuente de la calidad de la educación en enfermería sin considerar los desafíos existentes es una actividad ineficaz en el análisis de la situación de la educación en enfermería.

**Objetivo** Este estudio tuvo como objetivo explicar el estado de la educación en enfermería clínica en la Universidad de Ciencias Médicas Jahrom en Irán.

**Metodología:** Se utilizó un diseño cualitativo basado en el enfoque de análisis de contenido convencional. Este estudio se realizó en la X Universidad de Ciencias Médicas en 2018-2019. Los datos se obtuvieron de 10 entrevistas de grupos focales semiestructurados con 110 enfermeras, enfermeras jefes, instructores y estudiantes. Se realizó un muestreo intencional. La hora y el lugar de las entrevistas se eligieron según los participantes. Las entrevistas fueron analizadas por el método de Graneheim y Lundman por el software MAXQDA.

**Resultados:** 626 códigos in-vivo, 46 códigos primarios, 8 subcategorías (falta de atención al proceso de evaluación, evaluación no participativa, escasa cooperación educativa del personal, instructores ineficaces, espacio clínico no educativo, déficits educativos de los estudiantes, estudiante ahogado en la clínica, planificación no participativa) y 3 categorías principales (desafíos de planificación, desafíos de implementación y desafíos de evaluación).

**Conclusión:** Los líderes educativos deben cambiar a tres áreas: planificación democrática, implementación inteligente con monitoreo frecuente y el uso de métodos modernos de evaluación clínica (basado en la participación de los estudiantes y otras partes interesadas).

**Palabras clave:** educación clínica, enfermería, desafíos educativos, Irán.

## Introduction

Nursing as an academic discipline using special knowledge and skills provides services to healthy and sick people in various centers. The purpose of nursing education is to create critical and creative thinking, self-directed learning, improve mental and motor skills, time management ability, increase self-confidence, good communication, and prevent student passivity<sup>1</sup>. Clinical education is considered the first source of learning and shaping the professional identity of medical students. Clinical education is an important part of the nursing curriculum that aims to engage nursing students with the skills required by the nursing profession<sup>2</sup>.

Clinical education is shifting from patients' bedsides to classrooms and even corridors or conference rooms of hospitals, and estimates show that the time spent in a patients' bedsides varies between 15-25%<sup>3</sup>. One of the most important challenges in clinical education is the gap between theory and practice<sup>4</sup>.

Some studies have addressed anxiety in the clinical environment, fear of mistakes, and evaluation by the instructors<sup>5</sup>.

Numerous studies have been conducted to assess the status of clinical education of nurses; some of them have assessed clinical education as good and some as poor, due to the use of different tools, with different approaches or from the perspective of different groups of instructors or students<sup>6</sup>. Improving the quality of clinical education requires a continuous review of the current situation, identification of strengths, and correction of weaknesses. Therefore, recognizing the main problems requires a series of appropriate research based on the field and stakeholders. Therefore, the present study was designed and conducted to explain the status of clinical nursing education.

## Background

Importance of paying attention to nursing clinical education in the Iranian context

From the beginning, nursing education has started in schools. Clinical education has been accompanied by theoretical principles and has progressed. The history of clinical education in nursing was attributed to before the beginning of classical nursing education. In 1870, the first nursing school was opened in Iran. Nursing education in Iran changed over the years until the first nursing faculty was established in 1960 and it has continued so far<sup>7</sup>. By reviewing more than 3000 articles, all of which have described the situation of clinical education in Iran and the world, it can be concluded that today we are a long way from reaching ideal conditions.

According to the nursing curriculum in Iran, every nursing student must spend more than 3,000 hours in clinics and hospitals. In other words, they spend 50% of their education time in a clinical environment. In several studies in Iran, only 50% of students considered clinical education to be appropriate. Unfortunately, this important subject has not been considered a priority in Iranian research. Thus, the present authors sought to answer the following question: How is the situation of clinical nursing education? How are their students, instructors, nurses, and head nurses' perspectives and experiences about clinical nursing education? Therefore, as the main Iranian research on this subject, this study aimed to explain the status of clinical nursing education.

## Materials and Methods

### Design

A qualitative design with a conventional content analysis approach was used to collect data and analyze the status of clinical nursing education of Iranian instructors, students, nurses, and head nurses in X University of Medical Sciences (2018-2019).

### Participants

In this study, perceptions, experiences, feelings, attitudes, and opinions of 110 participants (26 instructors, 43 students, 35 head nurses, and 6 nurses) about the challenges and problems in clinical education were collected by conventional content analysis. Participants were chosen by using purposive sampling.

Sampling was accomplished over sixteen months, i.e. from September 2018 to December 2019.

Inclusion criteria for instructors were at least two years of clinical nursing education experience. Inclusion criteria for nurses and head nurses were bachelor's degree or higher in nursing and at least five years of clinical work experience. Inclusion criteria for nursing students were final-year nursing students studying in the bachelor's program.

Potential study candidates with mental disorders, a history of drug addiction, and academic failure were excluded. Selecting participants from various settings (X hospital, X hospital) and maximum variation sampling (age, gender, interest in educating students, quality of clinical performance, clinical teaching experience, clinical background) helped the authors capture a wide range of perspectives and experiences.

### Data Gathering

Ten focused group discussion (FGD) (three instructors, three students, three head nurses, and one nurse) by semi-structured interviews was carried out with the enrolled participants. All the interviews were conducted in a calm and private environment. The mean of interviews was  $63.42 \pm 22.18$  minutes. The time of the interview was based on the mental and physical condition and tolerance of each group. The interviews started by asking the core question, "how is clinical nursing education?" and the following explorative questions were asked, based on the participants' answers to enrich the information. For example, "How do you assess the clinical education status?", "What needs to change in clinical education?", "How would you describe this change?", "Can you tell me what happens when you...?" Or "Please tell me" And "What do you mean?". The interviews were conducted in Persian by the first author, recorded, and transcribed verbatim. To collect the data precisely, besides recording the interviews, field notes were also taken.

### Data Analysis

Interviews were recorded and transcribed in Word 2010 software after listening to them several times. Then analyzed by Graneheim and Lundman's method by MAXQDA (2014) software. The interviews were transcribed verbatim and were read through them several times to make sense of the entire transcription. The text was separated into meaningful units and was condensed for clarity and brevity. The condensed meaning units were abstract and were labeled with codes. Codes were sorted into subcategories and categories based on constant comparative analysis to examine similarities and differences. Main categories as the expression of the latent content of the text were extracted<sup>8</sup>.

### Trustworthiness

The trustworthiness of the results was obtained with the main criteria suggested by Lincoln and Guba<sup>9</sup>. Credibility was maintained through peer checking, member checking, and prolonged engagement in the fieldwork, and immersion in interviews and field notes (16 months). Prolonged engagement in the faculty and education field (more than 18 years of clinical and educational background for authors) helped increase the participants' trust in the researchers. The maximum variance of

the sample enhanced the credibility of the research. Bracketing, peer checking, and researchers move back and forth from collection to analysis the data and back again helped dependability. The dependability of the data was assessed through data triangulation by selecting different spaces (hospitals, faculty) and different individuals (with different ages, gender, education, and position). Also combining the data collection methods (interview and field note) provide a better understanding. Confirmability was conducted by prolonging engagement, sampling to maximize variation, and providing an audit trail. Moreover, clear explanations were provided about participants' characteristics, study setting, sampling, data collection, and findings to ensure transferability.

### Ethical Considerations

The Ethics Committee of Jahrom University of Medical Sciences approved this study (IR.JUMS.REC.1395.091). The objectives of the study were explained to the participants. Their participation was voluntary, and they had the right to leave the study. The location of the interviews was determined to be in a quiet place offering privacy and comfort. Participants declared their approval to participate via signing a written consent form. Before each interview, participants gave verbal permission to keep a written record.

## Results

### General Characteristics of the Participants

The age of participants ranged was from 21 to 55 years ( $30.30 \pm 5.16$ ). The mean work experience was ( $10.45 \pm 6.67$ ) (Table 1).

**Table 1: Demographic characteristics of participants**

Variables		M±SD	N (%)	
Instructors	age	36.64 ± 7.66		
	work experience	9.65 ± 8.85		
	gender	Male		11(42.30)
		Female		15(57.70)
	Level of education	BSc*		0(0)
		MSc**		21(80.76)
PhD***			5(19.24)	
Nurses	age	27.34 ± 4.54		
	work experience	8.43 ± 4.70		
	gender	Male		0(0)
		Female		6(100)
	Level of education	BSc		6(100)
		MSc		0(0)
PhD			0(0)	
Head nurses	age	35.45 ± 6.33		
	work experience	13.28 ± 6.45		
	gender	Male		0(0)
		Female		35(100)
	Level of education	BSc		35(100)
		MSc		0(0)
PhD			0(0)	
Students	age	21.78 ± 2.11		
	gender	Male		21(48.83)
		Female		22(51.17)

\*BSc: Bachelor of Science \*\*MSc: Master of Science \*\*\*PhD: Doctor of Philosophy

## Main categories

After conducting 10 FGD with 110 participants, 626 in-vivo codes of 46 primary codes, 8 subcategories, and 3 main categories were obtained containing planning, implementation, and evaluation challenges (Table 2).

Main categories	Subcategories
Planning challenges	Non-participatory planning
	Student drowns in the clinic
Implementing challenges	Student educational deficits
	non-educational clinical space
	Ineffective instructors
	low-staff educational cooperation
Evaluation challenges	Non participative evaluation
	Lack of attention to the evaluation process

### Planning challenges

The planning challenges consist of non-participatory planning and student drowning in the clinic. Participants cited issues such as staff, students, and instructors' non-participation in planning. They mentioned that non-participatory planning would lead to not using the existing capabilities in the university to improve the quality of education.

### Non-participatory planning

Non-participatory planning consists of personnel not participating in the planning, instructors' low participation in planning, students' low participation in planning, and Lack of attention to clinical capabilities. All Participants mention that the participation of all stakeholders in educational planning is low. In other words, it does not exist at all.

They do not see us in planning, they do not read our opinion, they do not care what we say, they cut and sew themselves without knowing what happens is, the ward is full or not.... (A head nurse with 12 years of experience).

... There is no time to leave with the education program. For example, I will be absent only if my life is in danger. Well, they all take shifts for me, for example, something like the stuff I need to pass (A nursing student at 7 semester).

### Student drowns in the clinic

Some of the subcategories showed that the student drowns in the clinic, because of the instructors who are not related to the clinical wards, low attention to the quality of student attendance, the unclear job description of the student and, the variety of instructors at bedside teaching. It also confuses a large number of instructors and different educational approaches and student evaluations.

... Nobody comes to ask what this intern was like. Because was not important for teachers. No one asks us about the interns, whether they were good or bad. How did they work, was the quality of their work good? Only in front of the student, they say it was in the ward. Is it on time today? I do not think it's right (A nurse with 9- years of clinical practice).

... What are the duties of the supervisors appointed by the faculty (instructors)? Do they also have job descriptions? They only check students one time (A head nurse with 15-year clinical practice).

### Implementation challenges

Implementation challenges consist of the four sub-categories as student educational deficits, non-educational clinic space, ineffective instructors, and low staff educational cooperation.

### Student educational deficits

Regarding the student educational deficits, we can mention such things as low readiness to perform independent care and educational activities, lack of attention to educational rules, lack of attention to hospital rules, low educational responsibility, low professional commitment, low educational motivation, and low ability to communicate with patients and staff.

... Students do not on time; they do not introduce themselves at all. They all work with a mobile phone in the ward. They do not get up and do not respect their instructors. We do not expect this from them. I tell them not to teach you, nursing is like an army system, you have to respect your superiors and listen to them. They are not good at dealing with staff either. That means they cannot communicate with staff (A head nurse with 19-year practice).

... The students themselves do not really care. They think that an internship is a passing course that allows them to get their degree and go home. We are holding conferences; we have created a logbook. However, they still do not want to participate in their own education. These activities are not very effective either. (An instructor with 18-years of clinical education background)

### Non-educational clinical space

Regarding the non-educational clinical space, subcategories such as the low proportion of students to educational space were not related wards, lack of conference rooms, long time and low training in the clinic, Inadequate support for education in hospitals, Neglect staff training activities, and repetitive activities were obtained.

... Regarding space and policy on educational spaces, we really do not have a free and standard conference room in any of the hospitals. How many instructors do we have? We have interns and internships, we have different instructors, but there is not enough space. We are wasted in education.... (An instructor with 11-years of clinical education background).

... One of the problems of clinical education is related to the educational space. The educational space of hospitals cannot meet our needs. For example, in previous months we went to a ward where only eight patients were. Now we are in a ward where the operating room technician students, Anesthesia technician students, and nursing students educating together (An instructor with 8-years of clinical education background).

### Ineffective instructors

Ineffective instructors' subcategories were unrealistic evaluation, unmotivated instructor, lack of attention to student's er-

ror, low coordination between staff and instructor, low clinical literacy, unmotivated communication with the student, instructors undesired to bedside teaching, low coordination between instructors, lack of attention to lesson plan, the low adaptation of theory courses to the clinic, ineffective notification sessions and low instructors support for staff.

Instructor ... she is not able to teach us. She came directly from the master class. She even says that she has not worked for an hour in the hospital or the ward. Well, how can she teach me this? Now she does not know anything about patients and devices, especially new devices. Because she does not know anything about the hospital, does not want to round with me. She is afraid that I will ask her a question that she cannot answer. However, she does not clinically round with me. Instead of that, she is stuck to my form and attendance to the ward (A nursing student at 8 semesters).

... You ask the educational supervisors, should the student rest or not? Their answers are different. You tell one of them that we are not satisfied with the student, he/she did not work, he/she plays with his mobile phone, one of them said... there is no problem, let them go, they are tired, or they are not well, they are not well. Tomorrow another supervisor says no, it is not like that at all, they have to work, and they have to do everything. Well, their work is not clear. Their routine is unknown (A nurse with 8 years of clinical practice).

### **Low-staff educational cooperation**

Regarding the sub-category of low-staff educational cooperation, codes such as educational forced labor by staff, student rejection, and low staff compliance with standards, improper communication with the patient, instructor, and student, eventually impaired learning motivation in students by staff were obtained.

... Sometimes nursing care is very time-consuming, dirty and the staff does not like to do such as an electrocardiogram (EKG), infectious dressings, and genital area dressing. They delegate the work to the students. Then the educational supervisor is forced to intervene. The student complains that I came at 12 o'clock; they told me to take all the EKGs until 7 p.m. The staff sits down, and students have to work, without supervising or teaching. The questions that the students ask them to say we do not have time, go, and ask your instructor. AIDS and tuberculosis patients are given to students without informing them for taking a sample (An instructor with 5 years of clinical education).

... I have a lot of work in the hospital ward, and then I will make time for someone (student) that nobody else understands and does not know that I taught the student. This educating has no privilege for me. Whether I taught or not, who cares. When nobody asks me at all how this student did his work, behavior, and, skills, why should I leave time? (A nurse with 15 years of clinical practice).

### **Evaluation challenges**

In this subcategory, the codes of non-participative evaluation, lack of attention to the evaluation process were shown.

### **Non-participative evaluation**

The non-participative evaluation contains codes of low staff participation in evaluation, low participation of students in evaluation, and low coordination of instructors in evaluation.

... Nobody comes to ask us about the student's job, does not read our opinion. The instructor comes, sits down, and leaves. Finally, we are the ones who work with the students in shifts. Nevertheless, I do not know how they grade... they do not ask us. They do not give a form to us to grade a student (A nurse with 18 years of clinical practice).

... Students always protest their grades. The X student left the ward. Why his grade higher than mine is? Sometimes we follow up and see that he says correct, but the instructor gave him a good grade. It is not clear. The instructors who have the least presence in the wards give the highest score to the interns. They have the least attention to the student's performance in different shifts (A head nurse with 22 years of clinical practice).

### **Lack of attention to the evaluation process**

Regarding the sub-category of lack of attention to the evaluation process, the instructor's concern about student evaluation, low monitoring of instructors' performance, and not in-person evaluation was obtained.

... Only, come and be attending, nobody checks the quality of clinical work and your clinical and nursing knowledge, nobody asks how you behaved or whether you had a challenge in the ward or not (A student in 8 semester).

... When you catch a student for his absence or the quality of his work or behavior, he is stuck to evaluate the instructor. Well, instructors are worried that this is the beginning of their work and that their evaluation scores will go down. Their future is ruined. They have to interact with the student (An instructor with 3 years of clinical education).

## **Discussion**

Planning challenges from the participant's point of view was one of the main categories of the interview's output. Some studies have cited such an issue as a moral weakness and injustice in educational planning. In other words, the "lack of democracy in education" or the lack of a democratic view by education officials is a very important shortcoming that should be considered. Of course, this is also expressed in other studies<sup>10</sup>.

The drowning and abandonment of students in the clinical environment are significant. Students are confused between the demands of the instructors and the demands of the clinical nurses. Therefore, leaders and e instructors must be determining the student's duties to prevent student confusion. Various reasons have been mentioned in this issue, such as the inconsistency between theoretical courses and clinical work and the lack of clarity of internship goals<sup>11</sup>. Regarding the challenges of implementing, a review of other studies conducted in quantitative and qualitative methods reveals that the challenges expressed are not specific to the research context. These problems can reduce student motivation<sup>12</sup>.

In most studies, participants describe the quality of teaching as an effective factor in the active learning process. Research showed that the first factor in education quality is communication, the second factor is teaching method and the third factor is individual personality. As in the present study, the results of a study by Iranian studies showed that underestimating students and unfair communication were the violent behaviors that decrease learning motivation<sup>10</sup>.

Years of college are stressful for most nursing students. Nursing students need to gain information in a wide range of areas in a short period of time, which can lead them to stress, anxiety, and frustration. Today, one of the biggest challenges of the medical education system in our country, like other countries, is the reduction of students' academic motivation. It causes great economic, social, cultural, and political damage annually<sup>10,13</sup>.

In other studies, the lack of clear job descriptions in the clinical wards, lack of coordination between theoretical learning and practical work, and lack of welfare facilities for students has been mentioned as the most important problems of clinical education. Despite, special attention has been paid to communication in different courses, but the inability to communicate with patients and staff is one of the problems that all participants, mention for students.

Non-educational clinical space, the low proportion of students and educational space, lack of related wards, and lack of conference rooms in hospitals, are problems that have been confirmed by various studies<sup>12,14,15</sup>. The atmosphere of an educational system is the main factor in the effectiveness of the educational system. The positive educationally clinical atmosphere makes the student's self-concept strengthened, has a positive view of his ability, can live happily, and motivated. Educational planning will disrupt if not enough attention is paid. Such as this research, evidence reveal that the implementation of educational plans is not in a way that fosters creative and critical thinking in students, so they are not able to apply their knowledge in clinical situations. Besides, there is no appropriate psychological support from instructors in clinical settings<sup>3,16-18</sup>.

The results of a study reveal that lots of procedures, lack of time, poor monitoring and there was no plan for clinical training<sup>12</sup>. The results of the present study were the opposite, meaning that the students have a lot of free time in the clinic. According to the above results, considering the selection of appropriate clinical wards, the availability of conference rooms, and considering the appropriate time of clinical education should be considered to improve the existing conditions.

About ineffective instructors can say, in a situation that the instructor has the low ability and motivation cannot promote the motivation of learning in students, he can never train motivated and capable students. In some studies, students cited indicators such as lack of knowledge, low level of skill, and inflexibility of instructors as obstacles to success. Students expect their instructors to encourage them, ask questions, and give them feedback on how to perform clinical activities<sup>19</sup>.

In this study, it was stated that there is low coordination between instructors in the clinic, but other studies have also ex-

pressed a point especially techniques that are not uniform. The low willingness of instructors to attend the clinic is a profound issue in nursing education. Feelings of inequality with other colleagues, the high workload of nursing educators in clinical education, participation in various committees, and acceptance of administrative responsibilities are the stressors that have caused them to avoid clinical education.

One of the subcategories obtained in this study is the lack of attention to the lesson plan. Various reasons have been cited for this, such as inconsistencies between theoretical courses and clinical work, as well as unclear internship objectives. Clinical experience is always a complementary part of nursing education that prepares nursing students so that they can practice them as well as they know the clinical principles (theory). Students' problems and concerns, the distance between education and practice, anxiety in the clinical environment, fear of error, and evaluation by the instructors<sup>20</sup>.

There is a critical sense of distance between theory and practice in nursing students. They find themselves wandering between the demands of the instructor and the clinical nurses. They are in a different clinical situation and are unable to objectify their theoretical knowledge. The reasons for the gap between theory and practice can be the unpreparedness of instructors, lack of support and supervision of instructors in the departments, insufficient time to update instructors to work in the clinic, multiple roles of instructors, insufficient instruction of instructors on students' clinical work, the lack of clinical guidance in wards or ambiguity, the theory education is more colorful than clinical education<sup>21,22</sup>.

The low-staff training cooperation can be due to the low staff-to-bed ratio and the lack of training responsibilities for staff and the lack of participation of hospital officials in student education, which the world science today recommends solutions such as preceptorship to eliminate these problems<sup>23,24</sup>.

Evaluation is one of the major concerns of nursing students in clinical education. Students' performance evaluation is one of the most important and sensitive components in the teaching-learning process and is one of the basic elements of any curriculum. Although Torabizadeh and Moradi studies have expressed similar problems in clinical evaluation. Scientific sources state that using the OSCE, MINI-CEX DOPS test is very useful<sup>25,26</sup>.

In most Iranian studies, assessment of the quality of clinical evaluation is reported at a moderate or poor level<sup>27</sup>. The biggest problem in this area is the lack of relevance of evaluation to clinical situations. Failure to use appropriate evaluation methods and lack of a precise and objective criterion for evaluating student practical skills has always been an important problem for instructors. Also, the use of traditional evaluation methods. Therefore, there is a need to review clinical evaluation methods<sup>28</sup>.

## Conclusion

Improving the quality of clinical education requires continuous review of the current situation, identification of strengths, and correction of weaknesses. In this study, it was found that if the current trend continues, the university should be expected to face a major problem in the field of health and nursing in the coming years. Therefore, it is necessary that educational managers in three areas of planning in a participatory manner, wise implementation, and frequent monitoring of the program, according to the opinions of students and staff and the use of modern clinical evaluation methods, with a participatory approach (real and active presence of staff, Head nurses and peers) to take steps to create an educational revolution.

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