Original Article

ICU Students' Experiences of an Effective Clinical Instructor: A Phenomenological Study

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Abstract

Introduction: Improving the quality of clinical education requires a continuous review of the status quo, recognition of strengths and weaknesses, as well as correction of these weaknesses. Besides, the experiences of ICU students can be useful in removing such weaknesses. The objective of the present study was to investigate the personal experiences of nursing students about the characteristics of an effective clinical instructor and to explain the concept of "effective instructor" in clinical education.

Methods: This qualitative study was conducted based on van Manen's phenomenology. Using purposive sampling, 12 nursing students working in the intensive care unit of Qazvin University of Medical Sciences were selected and studied. The data were collected by conducting in-depth semi-structured interviews. All interviews were recorded and then the related codes and themes were extracted using van Manen's analysis method. The validity and robustness of the study were obtained through attention to the four axes of validity, trustworthiness, reliability, and generalizability.

Results: The transcripts of the interviews were analyzed and conceptual codes were extracted. After analyzing the data, 12 categories, 51 subcategories, and 5 themes were extracted. The extracted themes included *scientific and practical competence, communicator and clinical coordinator, professional behavior guide, theoretical-clinical mediator,* and *fair evaluator.*

Conclusion: Based on the findings, the participants in this study emphasized the key role of the instructor in creating a suitable context for professionalization. They acknowledged that an instructor with good personality traits, speaking skills, management, appropriate clinical competencies, effective professional communication, and a realistic evaluation can train qualified students to work in the country's healthcare system.

Keywords: Clinical education, Effective Instructor, Phenomenological study

Introduction

Clinical training environments are different from other educational settings. Coordination of the three elements of patient, instructor, and student makes the learning and teaching process more complex in such environments since guaranteeing patient safety and satisfaction is a concern for both

the instructor and students and students are one of the main components of clinical education (1) and serve as the core of various institutions and organizations in the future (2). Assessing students' perceptions and interpretations of clinical education can highlight their strengths and weaknesses in clinical settings and contribute to promoting educational planning and quality (1). Clinical education is one of the most important parts of the education process in different medical departments, including nursing departments, as much of professional learning is completed in clinical settings (3).

Clinical teaching is one of the most important components of vocational education programs. In nursing, as in other medical fields, clinical teaching has a very close association with the client (2). Clinical education can be described as a facilitating learning activity in a clinical setting where the clinical instructor and the student are equally involved and aim to make measurable changes in the student's ability to perform clinical care (3).

Medical science students, especially nursing students, in addition to problems common with other students such as being away from family and having economic problems and a large number of courses, are exposed to mental pressures and stressful environments (hospitals, emergency wards, etc.) and have to deal with patients' problems during their academic studies (4-6). Checking the patient's clinical condition is an important responsibility of intensive care nurses and an essential component of their professional competence (7). In addition to the above responsibilities, nursing students, because of disciplinary and occupational requirements, apart from theoretical approaches, also need a specific type of clinical training (practice, simulation, attendance in the workplace, and clinical functions) (8,9). One of the basic skills these students will learn during their studies is clinical decision making (4).

One of the important places in the hospital is the intensive care unit in which nurses need to acquire specific clinical skills to perform their duties. To provide high quality clinical intensive care, nurses must gain knowledge of how to use clinical skills. Nursing students should be able to provide clinical intensive care services after graduation. This is only possible through the collaboration between the health care team and the nursing instructors (10).

One of the important things that distinguishes intensive care nurses from other nurses is the fact that ICU nurses need extensive knowledge of scientific and practical nursing theories to best meet their patients' needs. After graduation, nursing students must be able to provide a variety of services in the intensive care unit, thus, the transition from the student role to the professional role is an important step during the nursing career. Nursing students are expected to enter the clinical setting soon after graduation and be able to provide safe care to their patients following their care needs. The constant criticism of colleges and universities is that these centers do not adequately prepare students for nursing careers, and this problem results in the underdevelopment of knowledge and skills needed in line with today's rapidly changing technology (11).

In their study, Salimi et al. (10) concluded that the overall clinical skill of senior nursing students in ICUs was favorable but skills in the coronary care unit (CCU) were lower than the other two wards. Azizzadeh et al. (11) showed that the highest mean score of clinical skill was gained by nursing students in the neurological intensive care unit and the lowest mean was scored by the students in the hemodialysis ward. Zehni et al. (12) studied the achievement of clinical goals by nursing students of Kurdistan University of Medical Sciences and showed that the achievement of clinical goals in the dialysis ward was favorable and in the CCU and ICU was moderate.

Therefore, the effectiveness of clinical teaching and clinical environment features has been the focus of many nursing researchers in the world (13). Accordingly, teachers should train their students in a way that they gain problem-solving skills and be able to manage and solve treatment problems while adhering to classical principles such as client-centeredness and adopting a holistic approach (14). Hemati et al. stated that the concepts of student experiences included teacher experience, inadequate use of educational tools, teacher preparedness for teaching and presenting up-to-date materials, establishing communication, and classroom management (2). Shahoei et al. reported that the main concepts/themes of students' clinical education experiences included facilitating factors (instructor performance, student satisfaction, and pre-clinical training) and learning inhibiting factors (lack of environmental amenities and facilities, lack of consistency in educational planning, and the behavior of healthcare staff) (3).

Clinical education can easily cover half of the instructors' teaching activities, hence, instructors must both have a role model and know the clinical education perspective, and seek to guide nursing

students toward that professional quality perspective (15). Promoting the quality of clinical education requires constant review of the status quo, recognition of strengths and weaknesses, strengthening of effective factors, and elimination of weaknesses. Accordingly, the use of students' ideas and views as the most important element of education can be the starting point for future programs (16). Students, as recipients of professional teacher services, are the best source for identifying effective and efficient characteristics of their teachers (17). Moreover, an in-depth understanding of the experiences and ideas that nursing students present, on the one hand, will help researchers to examine educational issues and problems more closely and, on the other hand, will help educational planning authorities to formulate more successful educational programs (2).

It is clear that educated and efficient human resources are the most important asset of any nation and the training of efficient individuals is the goal of any educational system, especially the higher education system. Furthermore, the economic, social, and political development of each society depends on its expert human resources. Even though there are several studies on clinical education and instructor characteristics, no qualitative study has yet provided an in-depth examination of ICU students' experiences of the concept of an effective instructor. Therefore, the present study took a qualitative phenomenological approach to provide a deep understanding of ICU students' experiences of what characteristics make an effective instructor.

Methods

This qualitative study adopted an interpretive phenomenological approach to understanding the experiences of nursing students of an effective clinical instructor in intensive care units. The participants in this study were junior and senior nursing students who were undergoing traineeship in intensive care units of healthcare training centers affiliated with Qazvin University of Medical Sciences. In this study, 12 students who were selected through purposive sampling took personal interviews. The inclusion criteria were being junior and senior students studying at the bachelor's program in nursing and having no hearing and speech problems. The sampling process continued until data saturation. The required data were collected through semi-structured interviews. In addition to the interviews, unstructured observations were also made, and items that either confirmed or denied the participants' statements were recorded. To this end, unstructured observations were used during the

semi-structured interviews to record the participants' behaviors, nonverbal communication, appearance, facial expression, and eye contact. The observations were recorded during the interview if possible or immediately after the interview. These additional data were used when transcribing the interviews and performing content analysis.

These interviews were conducted from November to December 2018. To begin the interview and to gain a comprehensive understanding of the phenomenon under study, each participant was asked to share their experience of an effective clinical instructor in the intensive care unit. The following questions were asked according to the descriptions provided by the participants:

1. Given that you have completed different training programs and worked with various instructors, what are the characteristics of an effective instructor?

2. What factors facilitate the effectiveness of the instructor in clinical education?

3. What factors hinder the effectiveness of the instructor in clinical education?

A total number of 12 participants were interviewed from 30 to 45 minutes during 1 or 2 sessions. Although all interviews were conducted by a single researcher, all of the interviews were reviewed by all researchers in this study. After each interview, the recorded data were reviewed several times immediately after the interview, and then the interviews were transcribed verbatim on paper. The transcribed data were then reviewed while listening to the tape recorder. This was done to increase the accuracy of the transcribed data which were used as the raw data source of the study for subsequent content analysis. Unstructured observations were also used during the semi-structured interviews to record the participants' behaviors, nonverbal communication, appearance, facial expression, and eye contact. The observations were recorded during the interview if possible or immediately after the interview. These additional data were used when transcribing the interviews and performing content analysis. The collected data were analyzed based on van Manen's phenomenological activities (18,19). van Manen introduced six methodological themes that serve as a practical approach to hermeneutic phenomenology. The six steps suggested by van Manen are:

1. Turning to the nature of lived experience

2. Investigating experience as we live it

3. Reflecting on the essential themes which characterize the phenomenon

4. Describing the phenomenon in the art of writing and rewriting

5. Maintaining a strong and orientated relation to the phenomenon

6. Balancing the research context by considering the parts and the whole

The above six steps form the basis of the qualitative part of the present study. Max van Manen's first two steps describe the researcher's ongoing involvement with the phenomenon under study, the design of the research questions, the selection of participants, and data collection. The third to sixth steps of van Manen's methodology are directly related to data analysis.

In initial coding, 125 codes were extracted. In the process of further analysis and comparison of the data, the number of codes was reduced to 103 codes. Finally, the concept of an effective clinical instructor was operationalized into 12 categories and 5 themes. The accuracy of the findings was checked based on four criteria including validity, trustworthiness, reliability, and generalizability (20,21). To increase the acceptability of the findings, the researchers had sufficient and close interaction with the participants. The interview manuscripts were reviewed and revised by the participants and the extracted codes were reviewed by external reviewers and supplemented and corrected by peer reviewers. The reviews conducted by participants and external observers aimed to ensure and increase the trustworthiness of the data. It should be noted that the researcher observed all ethical considerations, including the confidentiality of the collected data.

Results

In the present study, 12 male and female participants (4 males and 8 females), aged 21 to 26 years, undergoing different training programs in medical centers were taken in-depth and semi-structured interviews (Table 1).

Initially, 125 codes were extracted and which were reduced to 103 after deletion and merging. After analyzing the data, 12 categories, 51 subcategories,

and 5 themes were extracted. The extracted themes included *scientific and practical competence, communicator and clinical coordinator, professional behavior guide, theoretical-clinical mediator,* and *fair evaluator.*

The most important characteristic of an effective instructor according to the students' experiences was *scientific and practical competence* which was subcategorized into *clinical skills, sufficient knowledge, and acting as a motivator* (Table 2).

1. **Scientific and practical competence:** It was the first extracted theme in this study which was subcategorized into *clinical skills, sufficient knowledge,* and *acting as a motivator.*

Like many medical fields, nursing requires theoretical and clinical training. Some nursing education planners consider clinical education the most important part of nursing education. Among the various factors influencing education, the role of the clinical instructor as the initiator of the education process in complex clinical settings is undeniable (1). Clinical instructors who have sufficient clinical expertise and skills along with modern teaching skills can be effective in promoting students' attitudes and skills in clinical settings (13). The quality of clinical educations depends largely on the characteristics and performance of instructors. Accordingly, one participant stated: *"We should see self-confidence and authority in the instructor. For example, when we are doing venipuncture, the instructor tries to stop us because the instructor himself is stressed"* (Participant 10). In recent years, effective clinical education has attracted the attention of many researchers. Previous studies examining the views of students and instructors reported that student guidance requires the identification and application of effective behaviors in clinical education and the instructor is the most important means for student success in clinical practices (20). One of the participants in this study pointed out: *"The instructor must do something to challenge us so that we can demonstrate our knowledge and skills. The instructor should play a motivating role and create interest in students who do not like their field of study"* (Participant 7).

Table 1. Participants' demographic characteristics

Demographic data								
	Gender		Marital status		Academic status		Wards		
	Male	Female	Single	Married	Junior	Senior	CCU	ICU	Hemodialysis
Frequency	8	4	9	3	6	6	5	4	3

Table 2. The characteristics of an effective clinical instructor

No.	Theme	Categories	Subcategories
1	Scientific and practical competence	Clinical skills	Clinical experience Self-confidence in the clinical practice Working without fear and stress in the clinic Skills in managing critically ill patients Having authority and autonomy Not wasting the training time with theoretical discussions
		Sufficient knowledge	Active participation in conferences Having awareness about various diseases Having state-to-art and efficient knowledge
		Acting as a motivator	Creating interest Identifying students' talents and capabilities Promoting creativity Incentivizing students Having the students work in the ward without being afraid of the instructor Challenging the students
2	Communicator and clinical coordinator	The bridge between students and staff	Communicating effectively and respectfully with the staff Not giving feedback before the staff
		The bridge between students and patients,	Building the patients' trust in students Not giving feedback at the presence of patients
		The ability to interact with students	Having good speaking and communication skills Establishing friendly communications with students Providing respectful remarks Providing nonverbal reactions Mutual understanding Not reporting mistakes at the presence of other students Learning from mistakes
		The supporter of students	Defending students' rights Paying attention to student's welfare Valuing students
3	Professional behavior guide	Strengthening responsibility	Acting as a leader Providing a coherent plan during the training course Promoting students' autonomy Training teamwork skills Improving the spirit of cooperation Having continuous supervision
		Having a respectful personality	Being punctual Being a good listener Being good-tempered Being patient Having an organized appearance Attending the clinic with prior preparation and knowledge
4	Theoretical-clinical mediator	Experience transferor	Creating a link between theoretical courses and clinical practices
5	Fair evaluator	Objective evaluation	Not recoding behaviors at the presence of students Assigning lower scores to less important issues Assigning higher scores to clinical works than theoretical discussions
		Creating educational justice	Informing students about evaluation tools and criteria Avoiding comparing students Giving the right to protest to students Not evaluating students' clinical performance based on their theoretical grades

2. Communicator and clinical coordinator: The second theme derived from the qualitative data was a *communicator and clinical coordinator,* which included 4 categories and 14 subcategories. The categories included *the bridge between students and staff, the bridge between students and patients, the ability to interact with students,* and *the supporter of students.* According to a participant, *"The instructor must have a commanding presence and an authoritative voice. Some instructors cannot communicate well with the staff in the ward"* (Participant 4).

3. Professional behavior guide: The third theme extracted from the data was the professional behavior guide, which was divided into two categories: *Strengthening responsibility and having a respectful personality.* Concerning this theme, one participant stated: *"The instructor must have a prestigious responsibility. Some instructors are not neat and well-ordered in appearance at all and are not punctual and come to the clinic without preparation"* (Participant 6).

4. Theoretical-clinical mediator: The fourth theme was the *theoretical-clinical mediator,* which contained a single category: *Experience transferor.* Foreign studies have reported a gap between theoretical and clinical education due to a lack of clinical settings, lack of coordination between clinical settings and educational institutions, and lack of clarity on the role among instructors, curriculum planning, and the clinical performance of instructors, and staff (14). According to one of the participants, *"The instructors are either just focusing on theories or purely clinical practices. An effective instructor should be able to link what students have learned theoretically with what is practiced in the training sessions"* (Participant 3).

5. Fair evaluator: The fifth theme emerged from the data was a *fair evaluator,* which was subdivided into the two categories: *objective evaluation and creating educational justice.* From the standpoint of the students, an effective instructor should make a fair evaluation. Accordingly, one participant stated: "Instructors usually give a good grade on the training test to the students who have a good performance on theoretical courses or they assign a high score to some items such as wearing the hijab" (Participant 7). Another participant stated: "Some instructors don't have a checklist to score students and they score them arbitrarily, and if we make any complaint, they get angry and say this is a fair assessment of our performance and the assigned score is not changed" (Participant 9).

Table 1 presents the participants' demographic characteristics.

Table 2 shows the characteristics of an effective clinical instructor from the participants' perspective.

Discussion

This study aimed at explaining the experiences of ICU students of an effective clinical instructor. The results showed that the scientific and practical competence of the clinical instructor is one of the most important themes of clinical education from the perspective of the students. A study by Peyman et al. showed that the clinical instructor's skills and practice were among the most important strengths of clinical education from the students' point of view (22). Shahoei et al. also suggested that the performance and clinical skills of the instructor can facilitate the clinical education process (3). Hanifi et al. showed that the academic and practical competence of the instructor was effective in motivating students' clinical education (23).

Educational scholars believe that clinical instructors have a significant impact on the quality of clinical education and can make clinical experiences enjoyable for students, thus, it is necessary to further study factors affecting the motivation of clinical instructors to engage them more effectively in educational and therapeutic settings and clinical education by emphasizing their valuable experiences. Clinical instructors have a significant impact on enhancing the quality of clinical education and can make clinical experiences enjoyable for the students (22).

The findings of the present study showed that communicator and clinical coordinator was the second themes of clinical education from the students' point of view. In their study, Hemmati Maslakpak et al. acknowledged that the instructor's communication skills in clinical education lead to the effectiveness of clinical education. They argued that the clinical instructor's interpersonal and communication skills are effective in clinical learning (24). In their study, Alavi et al. showed that an educational program leads to better learning when it is implemented in a more communicatively efficient and friendly environment. The authors also believed that instructors with higher communication skills have more abilities to convey concepts and experiences and can create a more suitable atmosphere, resulting in greater motivation and interest in students (25). Heravi et al. stated that one of the disadvantages of the nursing education system is

the lack of effective communication between instructors and clinical wards (26).

The findings of this study showed that the third theme of effective clinical education was a professional behavior guide, which included strengthening responsibility and having a respectful personality. Accordingly, Nikbakht et al. acknowledged that professionalization in nursing is synonymous with adequate knowledge in the field along with experience and independence in practice and the provision of comprehensive and systematic care. Instructors become professional when they have sufficient knowledge and experience, and the chances in applying them in practice. In sum, a clinical instructor must possess knowledge, experience, and independence in practicing and delivering comprehensive and inclusive care. They can also develop a sense of responsibility and professional behavior in students by entrusting the management of patients and the ward to the students (27).

In their study, Karimi et al. reported that attention to student morale, understanding their psychological needs, and providing emotional support increased as a result of enhanced student learning and professional development (1). In the study by Imani et al, most students (91.7%) stated that respect for students is one of the characteristics of an ideal clinical instructor (28). Similarly, Shokohi et al. stated that one of the influential characteristics of a clinical instructor is the respectful behavior and encouragement of students to learn (29). Besides, Mirmohammadi Meybodi et al. stated that speaking and behaving politely and respecting students, as well as paying attention to student feedback can enhance the quality of education (30).

The findings of the present study suggested that the fourth theme was the interaction between clinical theories and practices, which covered instructors as experience transferors. Accordingly, Elahi et al. pointed out that one of the problems of nursing education is the large gap between theory and clinical practice (31). Valizadeh et al. pointed out the challenge of the gap between theory and practice, stating that this gap is related to basic science lessons, teaching methods, number of credits, the content of courses, and offering impractical materials to students (32). In the same vein, Tolley suggested that developing clinical theories (theories drawn from clinical settings) can eliminate the gap between theory and practice (33). Scully suggested that re-examining the relationship between theory and practice and thinking in the real clinical environment by clinical theorists can fill this gap. Scully pointed out most clinical instructors play an important role in both theoretical and clinical education, therefore, having the power of integrating academic knowledge with clinical nursing practice in ensuring the applicability of the theory in clinical practice is a key issue to ensure the qualifications of nursing instructors (34). In the present study, the participants also pointed to having clinical expertise and the ability to combine theoretical and clinical issues as one of the competencies of clinical nursing instructors.

The fifth them emerged from the data in the present study was the fair evaluator, which was subdivided into objective evaluation and creating educational justice. According to Parsh et al., having effective evaluation ability is one of the important features of clinical instructors (35) and since this is a subjective assessment and is mostly based on observation, it may vary from person to person, which is difficult to overcome and that clinical instructors should be able to provide evidence of student competence and make a more realistic assessment (36,37). In another study on educational justice dimensions, Sanagoo et al. reported that a fair review and correct assessment of students can considerably influence their satisfaction with clinical education (38).

According to the results of the present study, the characteristics of the clinical instructor are closely related and none can be considered separately. An internship trainer with the right personality traits, good speaking and management skills, appropriate clinical competencies along with effective professional communication, and a realistic evaluation can train qualified students to serve the country's healthcare system. Based on the results of this study, participants' experiences can provide a clear view of the competencies required by a clinical instructor. Considering the very effective role of nursing instructors in student education and the integration of theory and clinical courses as well as the establishment of self-esteem and independence in providing safe care to patients, especially during the internship as the last opportunity to prepare before entering the practical profession, and taking into account the objectives of the internship, it is recommended that due to the lack of an independent training system for developing effective trainers, a comprehensive nursing instructor training system be developed in Iran to provide the aforementioned qualifications and to minimize related problems. Having a traineeship preparation and improvement

system should always be considered by nursing authorities and managers. More importantly, having a continuous evaluation and feedback system can ensure that these qualifications are acquired by clinical trainers. Constant attention to the maintenance and progress of clinical instructors can lead to the correction of weaknesses in the system, which can be helpful for students as recipients of services.

One of the limitations of this study was that it was bound by temporal and spatial conditions. Moreover, the number of participants was small. Therefore, it is recommended that further studies be conducted on larger samples.

Conclusion

Based on the results of this study, the participants' experiences provided a clear perspective on the characteristics of an effective clinical instructor, such as personality traits, scientific and practical competencies, and his/her ability in management, professional communication, and evaluation. Given the crucial role of clinical instructors in training effective and efficient staff for the healthcare system and lack of an independent training system for clinical instructor training to achieve the

mentioned clinical competencies, the development of an effective training system seems necessary. Nursing education managers and authorities should always pay attention to such a system in their plans. More important than education, it is the continuous evaluation of clinical instructors that needs to be taken into account to identify strengths and weaknesses in clinical education, to improve the quality of clinical education, and to enhance the clinical performance of students.

Acknowledgments

Conflict of Interest

The authors declared no conflict of interest in this study.

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