

■ Original article

Characteristics of competent clinical instructors: a review of the experiences of nursing students and instructors

Roghieh Nazari¹, Eesa Mohammadi^{2,*}

(Received: 31 Jan 2015; Accepted: 27 Apr 2015)

Abstract

Background and Purpose: The competence of clinical instructors is regarded as the most significant factor in achieving training goals. Competence is not a single, uniform concept, and different definitions have been proposed by educational organizers including instructors and students. Therefore, this study was performed to review the experiences of nursing students and clinical trainers regarding the characteristics of a competent clinical instructor and explore the concept of clinical competence.

Methods: This qualitative study was performed on 22 participants including 12 nursing students and 10 clinical instructors. For data collection, open interviews were conducted and field notes were taken. The obtained data were assessed via content analysis.

Results: Based on the analysis of interviews, five major themes related to the competence of clinical instructors emerged. These themes were as follows: "the ability to establish effective communication", "instructor's academic status", "scholarly knowledge", "clinical competence" and "educational qualifications". Therefore, a competent clinical instructor should have a combination of these characteristics, which work hand in hand and affect each other.

Conclusion: Participants' experiences suggested that clinical instructors' competence is a multi-dimensional concept. Overall, a competent clinical instructor should have a "comprehensive perspective". As the results indicated, the emerging themes were not similar to those reported in previous studies.

Keywords: Clinical Instructor, Clinical Training, Competence, Nursing Education

Introduction

Nursing education has significantly improved in recent years. Practitioners and experts in this field aim to achieve its primary goal, i.e., training nurses who are professionally qualified (1). These experts strive to identify the contributing factors and modify educational systems in order to train nurses who can provide high-quality care for patients.

One of the most important factors affecting nursing education is students' clinical experiences or the quality of their clinical training (2-4). Clinical

education is regarded as the core of professional nursing training (5). Considering the fact that nursing is a practice-based profession, learning via clinical practice is an important component of nursing education (6).

Despite the wide range of investigations in this area, factors contributing to the effectiveness of clinical education have not been yet identified (1). Clinical instructors can improve the clinical practice of nursing students and educate competent

¹ Nursing Department, Mazandaran University of Medical Sciences, Sari, Iran

^{2,*} Corresponding author: Nursing Department, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran. Email: mohamade@modares.ac.ir

clinical practitioners. They also can provide learning opportunities by controlling different variables (6-8).

It is obvious that instructors must have the required competence and qualifications to efficiently play their roles (9, 10). This has led to the growing interest of nursing researchers in the competence and effectiveness of clinical instructors (1, 4, 11, 12).

Various studies have been conducted in this area. Some have introduced the quality of student-trainer relationship as the most important factor for an effective training and some have acknowledged the importance of knowledge and information, along with communication skills (1, 13, 14). However, there is still no consensus regarding the characteristics of a competent clinical instructor (15).

In a study by Ullian, an effective clinical instructor was introduced as an individual who can successfully perform his/her professional responsibilities as a nurse or physician, properly monitor students' performance, provide skill training as a teacher and be proficient in interpersonal communication (16).

On the other hand, according to a study by Davis, competent clinical instructors are accomplished researchers, who are capable of meeting their teaching responsibilities with the highest quality and establishing moral, professional and communicative relations with others (17).

Considering the importance of clinical training, Iranian researchers have paid particular attention to the criteria affecting the efficiency of clinical instructors in recent years and have evaluated some of their characteristics from the viewpoint of students and instructors (2, 4, 12). However, participants' experiences have been different in these studies.

Jouybari considered a competent clinical instructor as one with scientific and practical abilities, ethical codes and management capabilities (2). Also, Heshmati Nabavi introduced six characteristics for an effective clinical trainer including meta-cognition, providing attractive learning environments, communicative skills, clinical competence, personal characteristics and being a functional role model (4).

Although previous studies have introduced various features and criteria for effective clinical

trainers, no single, uniform concept of competence has been defined with regard to circumstances and participants' experiences. Since educational organizations, instructors and students have given different definitions of competence, further studies are required to identify competent instructors, based on experience.

Clinical competence is the main factor for effective clinical learning (18). Moreover, students' assessment of clinical competence and self-assessment by faculty members can provide important information about nursing education (19). Therefore, we conducted this study to review the experiences of nursing students and clinical instructors regarding the characteristics of competent clinical trainers. We also tried to define the concept of clinical competence.

Materials and Methods

Considering the aim of this study, i.e., introducing the characteristics of competent clinical instructors from the viewpoints of nursing students and trainers, content analysis was applied in this qualitative research. The participants included 12 nursing students and 10 clinical instructors, who willingly participated in this study after obtaining informed consents. The students had at least passed two semesters of apprenticeship and instructors had at least two years of experience in training (seven with MS and three with BA degree).

For data collection, two-way unstructured interviews were performed. The duration of interviews was about 45 minutes for instructors and 30 minutes for students. The researcher was present in the setting (four days a week as a clinical instructor) and thoroughly evaluated the observations and functions of trainers and students. The viewpoints of hospital officials were also included to enrich the data.

The researcher's long interaction with the participants and friendly research environment were of great help in gaining participants' trust and understanding the study environment. Interviews with the participants continued until reaching data saturation. Therefore, after the 20th interview, no

further information was gathered.

The study objectives were first explained to the participants, and the researcher performed interviews by asking a general question and inviting the participants to describe their apprenticeship experiences and their opinions about their clinical trainers. After receiving the answers, the researcher continued the interview by asking the following exploratory questions:

- What do you mean by that?
- How did you feel about...?
- Why was the trainer's behavior acceptable?
- What do you expect from your instructor?
- Why do you run this program or behave in such manner for training students?

The interviews were recorded and transcribed word by word on the same day and the transcripts were used as original research data. Data collection and analysis were performed simultaneously and continuously via content analysis (20). First, the transcripts were reviewed and coded, and then, the next interviews were performed.

The extracted codes, which were in fact the connotation of important statements by the participants about their experiences, were categorized in the same class, based on their similarities. Themes and abstract ideas were also extracted by comparing the categories and sub-categories (20).

For verifying the data and the extracted codes, the initial coding of each interview was validated or corrected by the interviewee. The list of all interviews and emerging classes was re-examined by the researcher's colleagues in order to increase the validity of the transcripts. Eventually, during a group session, the extracted classes were presented to five faculty members and verified according to their ideas and interpretations.

Moreover, sampling with maximum variance (i.e., including students and trainers with different educational levels from different groups and sections) increased the credibility of the study. The study was performed at Babol University of Medical Sciences after being approved by the Research Council and Ethics Committee of the university. The participants were voluntarily included in the

study (i.e., they were aware of the study objectives and were assured about the confidentiality of the data), and informed consents were obtained.

Results

Following the analysis of the data, obtained via interviews and field notes, 227 basic codes were extracted. After merging the overlapping codes, 93 codes finally emerged. After code analysis and classification, five major themes as the key elements for defining competence in clinical instructors were obtained. These themes were as follows: "the ability to establish effective communication", "academic status", "scholarly knowledge", "clinical competence" and "educational qualifications". These themes formed the main components of clinical competence.

Based on the understanding and experiences of students and trainers in this study, a qualified clinical instructor is one with a comprehensive perspective, i.e., having a combination of the introduced characteristics. In this regard, the participants said:

"A competent instructor is a role model. I mean he has an understanding behavior with the patients, students and even the environment." (Instructor 9)

"You know why our trainer was the best? He did not focus on only practical or theoretical tasks. He prepared our minds for methodological subjects by giving proper answers to our scientific questions."

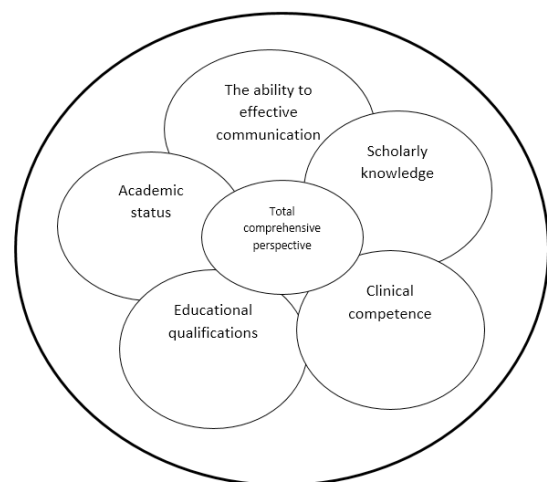


Figure 1. The main components of clinical competence in nursing instructors

He knew how to treat patients, doctors, nurses and students. Everyone counted on him; he was a real intellectual." (Student 7)

In the following section, we elaborate the extracted themes.

The Ability to establish effective communication

The extracted codes related to this theme implicated the instructor's ability to communicate effectively with the students and the staff and manage stressful situations. As all students pointed out, an unqualified instructor is the main source of stress in clinical environments:

"Mostly, it's the instructor's behavior that causes stress. I don't want to be afraid of my trainer; I want to learn something without being stressed or looking pale. I don't want to be worried about my instructor's bad behavior in front of other students or staff while I'm trying to do something." (Student 1)

While trainers try to set some boundaries in their communication with students, they know the value of appropriate behavior as an important factor in gaining students' trust. In this regard, one of the instructors said:

"Over the years, I've learnt that the first thing students need is a stress-free environment; this way, they'll feel more comfortable with their trainer, even if the trainer is not knowledgeable enough." (Instructor 6)

Participants believed that instructors are the communicative bridge between the students, staff and hospital departments. Trainers must gain the confidence of different hospital authorities in order to provide more real-life opportunities for the students:

"In sections where instructors don't have a good relationship with the staff, the personnel don't behave properly with the students or the trainer. So, students are constantly worried about being replaced by the personnel in their assigned tasks." (Student 11)

A qualified trainer is expected to control stress-inducing behaviors between students, staff, patients and patients' companions. Participants believed that clinical trainers should be familiar with students' emotional status and support them. Overall, the

characteristics of a competent instructor in stressful situations were as follows: respecting students in front of others, providing a peaceful learning environment and using encouragement instead of punishment. In this regard, the participants said:

"Sometimes, students make huge mistakes. I keep it to myself till I can find the right time to warn them. If we humiliate the students in front of others, they might be exploited in future and that's not something I want." (Instructor 2)

"Once, a nurse asked me to do something out of the hospital department, which was not part of my responsibilities. I didn't know what to do! I thought the nurse would embarrass me in front of my trainer if I didn't accept it, because I'd heard such things in other departments. On the other hand, if I accepted to do it, my instructor could blame me for not getting his permission. Finally, I decided to tell my instructor. Unlike other departments, he calmly talked to the nurses and they withdrew their request without getting upset." (Student 8)

Regarding the importance of an effective relationship between instructors and students in gaining patients' trust, one of the instructors said:

"If I scold my students in front of patients, it will be impossible to effectively communicate with them or help them do a certain task." (Instructor 9)

The instructor's academic status

The sub-classes of this theme included a set of specific characteristics required for an instructor, which emphasized the instructor's academic status. All participants acknowledged that a competent instructor is disciplined, lively, calm, committed, well-dressed, eager, active, sympathetic, good-tempered, modest, interested in new experiences, curious, self-contained, flexible, reliable and confident; they should also follow the rules and be good shrinks. With regard to instructors' discipline and vibrancy, participants said:

"We expect a trainer to accompany students at the department rather than being late for half an hour. A trainer should not be lazy or moody." (Students 2)

Regarding instructors' appearance, the students said:

"Some trainers wear high-heels and short trousers

and blame students for not wearing a suitable uniform!" (Students 6)

"The hospital personnel look up to us. Not only us, but also our faculty and university are of great importance. Our colleagues and students pay great attention to our appearance, as well as our behaviors, and copy us. This label on our clothes, which says "clinical instructor", makes us care about such issues." (Instructor 3)

With regard to being eager and dynamic, one of the instructors said:

"I was more satisfied and efficient at the neurology department, because I could have new experiences and do tasks I'm interested in; I am still learning." (Instructor 2)

With regard to the importance of being sympathetic with students, an instructor said:

"I've seen cases where the trainer had the required abilities. The students accepted him as a member of their own team and believed that he understands them well. So, such trainers are more successful in training students, while in cases where trainers separate themselves from the students, they might not be that efficient in training." (Instructor 8)

Another trainer stated some features of a competent clinical instructor by remarking some of his experiences as a student:

"In spite of being knowledgeable, our trainer was quite humble and modest. He was an unbiased observer; he wasn't just kind to me, but to everyone. I can say he touched our hearts!" (Instructor 1)

Regarding instructors' flexibility, the participants said:

"Some trainers are offensive, resentful, rigid and too disciplined. They don't even consider that students might have some personal problems in such a mechanical life. For instance, if you are once late for five minutes, they won't accept any excuses, even if something serious had occurred." (Student 12)

"Given the close relationships in clinical environments, students often talk to me about their personal and educational problems. I try to advise them, especially about educational laws and regulations which can be helpful for them." (Instructor 6)

"Some trainers are like psychologists. This is

good, as they understand who is trying to attract attention or is acting differently; such things are important to them." (Student 9)

Educational qualifications

This theme is related to the importance of clinical education, attracting students' attention prior to training, power of speech and conveying information, creating clinical learning opportunities, problem-focused training and promoting independence, critical thinking and unbiased, accurate assessment. Most participants agreed that qualified clinical instructors have such abilities or are dissatisfied with the inadequacies.

According to the researcher's field notes about the importance of clinical education, one of the participants said:

"Do you remember the last term? The trainer stood with his book in a corner. He didn't prescribe any medicines and avoided seeing patients with the students. But this semester, the trainer is spending most of his time with the patients and students. So, why did the students really learn during this term? Holding classes at university would be much better this way!"

Regarding the power of speech and the ability to convey information, one of the trainers said:

"I saw experts who couldn't speak well. They were professionally knowledgeable, but students and the personnel couldn't learn anything from them." (Instructor 1)

With regard to the trainer's ability to create learning opportunities, a student said:

"Former students said that if we went to department X, we would be bored stiff as we wouldn't have anything to do. They said that there were not many cases in these departments and we'd have to deal with some repetitive cases that nurses wouldn't even let us handle. But as we went there with a good trainer, we were so busy inside and even outside the department." (Student 10)

"Sometimes we have rare cases in the section or perform new procedures for the patients. I try to involve my students so that they won't have to deal with ordinary tasks every day." (Instructor 7)

Regarding the need for problem-based training, a

student said:

"At the hospital, it's better to ask students to prepare the materials they have learnt that day rather than ask them to be prepared for some tasks the day after; that way, we'll have the chance to learn something." (Student 1)

Regarding the importance of students' clinical independence, one participant said:

"Sometimes, trainers don't let us do the assigned tasks as we are not fast enough. So, when are we supposed to learn?! It's better to give the necessary instructions and let the students do the procedures." (Student 7)

Regarding trainers' ability to teach critical thinking, a student said:

"Trainers are different. We pass five terms of apprenticeship. We control serum drops and insert formula, without knowing the reason why! During the sixth semester, our trainer told us not to do anything without knowing the reason. She made us think about even routine, ordinary steps. Now that we can think critically about everything related to patients, treatment and observation, learning and nursing have become more interesting. Now, I know that nursing requires knowledge in all fields, even mathematics. If I'd been first trained that way, I would have become a physician by now (kidding)." (Student 10)

Regarding the necessity of proper, unbiased evaluation, one student said:

"In evaluation, trainers should not expect us to be as competent as an experienced nurse. I mean they'd better grade us with respect to our educational course and training; they shouldn't compare us with professional nurses." (Student 6)

"If I were an instructor, I wouldn't let trainers or trainees flatter each other or humiliate weak students." (Student 5)

Many students expressed that the trainers' incentives and power of speech are more important than their knowledge:

"The learning environment necessitates us to have a combination of experience and great theoretical knowledge. If you are weak in theoretical subjects, they'll underestimate and disregard your practical training." (Instructor 1)

As trainers stated, some of their colleagues care more about students' satisfaction rather than educational goals. As they stated:

"We'll never meet the educational goals if we try to keep students satisfied." (Instructor 5)

Clinical competence

According to participants' experiences, factors affecting clinical competence mainly included active and continuous presence at hospital departments, paying attention to patients, diagnosing critical conditions, direct involvement in clinical issues, work experience and proficiency and adapting with department facilities and shortcomings:

"I've seen some trainers who just tell students how to do something; I'm not like that at all; for instance, I use the suction catheter myself and do the procedure so that students can see how it is performed; then, I let them do it. This way, the department staff won't be concerned about the assigned responsibilities." (Instructor 2)

One of the trainers emphasized the importance of inclusive attention to patients:

"In one of the sections, students had difficulty communicating with a 36- or 37-year-old woman with hemorrhoid. She was hospitalized in a four-bedded room, with different clothes and bed sheets. My students and I entered the room and went over bed one, on which a 60-year-old woman with cholecystitis was lying. We checked the patient's condition and gave her the required training. While leaving the room, the young woman called us and started talking about her condition. As I told my students, we wouldn't have been successful if we'd directly gone to her. She was apparently different from others and we needed to do something indirectly to gain her trust. A good nurse should consider not only the disease, but also the patient." (Instructor 9)

Regarding the importance of trainers' ability in diagnosing critical conditions, a trainer said:

"Once a patient's condition deteriorated and I told a nurse about it, but she didn't pay that much attention and the patient was transferred to the ICU. When students see such things, they think that we are Gods of medical sciences, although we are

not." (Instructor 2)

About the importance of trainers' direct involvement in clinical tasks, participants said:

"Once I broke an angiocath and the trainer yelled at me in front of the personnel. I had never seen an angiocath in her hands. She didn't do anything, she didn't even touch the patients." (Student 7)

"As I recall, some instructors never used an angiocath themselves. Well, in that department, we were just theoretically trained and the personnel didn't let us do anything." (Student 3)

"Students expect their trainers to be ahead of others, to be proficient and capable of doing everything." (Instructor 8)

One of the trainers discussed a learning experience about clinical proficiency:

"I had a trainer who claimed that he could examine patients while the bedroom door was closed, as he could hear their steps. That's what I call an instructor." (Instructor 10)

With regard to the maximum use of department facilities, participants said:

"I often tell my students that there is always time to learn theoretical subjects, but there are things in the department which you may never see again. Sometimes, I take the students with me to other departments to show them interesting cases." (Instructor 2)

"The trainer told us to wear gloves during injections, while the head nurse asked us not to use that many gloves. When the trainer was informed, he discussed the problem with the Infection Control Department and the faculty and they provided us with enough gloves. Other instructors would have asked their students to work with the available equipments, which may be even wrong, sometimes." (Student 10)

Most participants acknowledged that competence is a major criterion for gaining the trust of department authorities and creating more learning opportunities for the students:

"The department staff trusted our instructor. She was authoritative and spent so much time with the students. When the staff wanted to do something, even specialized tasks, they first asked if her trainees were willing to perform the procedure. We realized

that they gave us more responsibilities because they trusted her. On the other hand, in other departments, the head nurse asked our trainer not to give room X to students since many things needed to be done for the patient or that the patient was severely ill. This meant that they neither trusted us nor the trainer." (Student 8)

"In departments where the personnel trust the trainer, they give students many responsibilities, even at a 24-bed department with critically ill patients." (Instructor 6)

Scholarly knowledge

Participants (especially students) believed that a competent clinical instructor is one with sufficient updated knowledge, regardless of the academic degree:

"Sometimes, nurses ask trainers to describe medication leaflets. Well, this is totally different from the time when trainers ask everything from the staff, even answers to students' questions." (Student 4)

"Once, while I was taking the night shift, I noticed some skin rashes around a patient's neck and head; nurses had diagnosed the condition as drug sensitivity, while after systematic re-examination, my students and I diagnosed the patient with shingles. When experts in infectious diseases confirmed our diagnosis, not only did the students feel proud of themselves, but also they trusted me more than ever." (Instructor 3)

Participants also believed that a competent trainer should be able to answer the questions of both students and the staff:

"When I answer the personnel's questions or try to resolve academic differences between the students and staff in a debate, I can feel that my students are satisfied and proud." (Instructor 5)

Trainers' proficiency in English language was one of the features of a competent trainer, acknowledged by a large number of participants. In this regard, one of the trainers discussed his experience as a student:

"He was a doctoral student whom I was really fond of. He was also fluent in English. Besides being a nurse, he used to teach us English, which was great." (Instructor 1)

"The students feel good when the staff ask us English

questions, especially about new medicines; this has happened to me several times." (Instructor 2)

Participants had conflicting opinions about the trainers' research activities. Some considered research as a necessary factor in clinical competence, while some regarded it as a cause of diversion from training goals and reduced qualification. Since not enough data were gathered on this issue and participants expressed conflicting experiences in this regard, we did not include it as a major theme. In this regard, the participants said:

"Mr. X is responsible for the Journal Club as one of the department's assignments. He judges the articles and teaches us how to perform research in clinical settings. If he wasn't a researcher himself, he couldn't have been such a good instructor. He always influenced us with his critical way of thinking and answered our research questions." (Students 8)

"Interest in research makes you and your students curious. For instance, when I explained infection control for the students in the ICU and reported the results of my own research, it greatly influenced them. They learned not to do anything blindly, but based on existing evidence." (Instructor 3)

"I don't like to be involved in research; honestly, it's just for having a higher academic status at the university." (Instructor 2)

"We have to write an article every year. Well, it's time-consuming and we don't have the time to review new reference books." (Instructor 7)

Discussion

The present findings showed that both students and trainers consider a qualified clinical instructor as one with a wholesome perspective, who possesses the introduced characteristics all together. In other words, a competent trainer should be capable of communicating effectively while having scientific, clinical and educational competence, as well as an academic status.

While previous studies noted the importance of success in multiple roles for an effective clinical trainer (12, 14, 15, 17), the reported findings were not in accordance with each other or the present results with regard to various dimensions

of competence. For instance, Davis mentioned success in educational, scientific and professional roles (17), while Ullian noted the importance of education, regulation, professionalism and effective communication.

Previous studies have put more emphasis on some abilities of clinical instructors. Jouybari considered the educational role and professional qualifications of trainers to be more important than their personal traits or communication (2), whereas in another study, students highlighted the importance of communicative patterns rather than educational management (21).

However, participants in our study greatly emphasized five major characteristics which worked hand in hand. The ability to establish effective communication was one of the characteristics of a competent clinical instructor, which reduced stress and provided more learning opportunities for the students. Moreover, the importance of communicative facilitators and environmental stress reducers has been highlighted in many studies (2, 4, 22).

Boor introduced student-instructor communication as an important factor in clinical learning and considered communicative skills as an inevitable criterion for performing high-quality, specialized tasks (17). Besides confirming this finding, Alavi introduced an effective clinical instructor as a scholar with a communicative approach (10). Although some studies have introduced intra-personal relationship as the first and most important priority for a trainer's efficacy (9, 23, 25), they are not homogeneous regarding the quality of communication and indicators for such relations.

Students participating in Buchle's study strongly felt that qualified clinical trainers are accessible and able to provide a secure, non-judgmental environment for the students (15), whereas Alavi introduced a friendly atmosphere as a significant component, which can lead to more interest and motive in students (12).

Jouybari also regarded communicative competence as an important characteristic, which encompasses the ability to establish a respectful, non-stressful educational communication, as well as understanding students and paying attention

to their individual differences (2). Such different perceptions of effective communication are influenced by cultural circumstances, student-instructor relation at different universities and the attitudes of the staff and officials towards students and nursing education.

Based on participants' opinions in this study, a competent clinical instructor is able to interact with the students and is capable of professional communication, especially to enforce cooperation and create more learning opportunities for the students. Beits regarded a clinical instructor to be responsible for creating and improving the learning environment (10). Heshmati introduced the ability to coordinate and cooperate with other health team members as one of the characteristics of a competent trainer (4).

Similar to the results of our research, the mentioned studies highlighted the importance of trainers' effective interaction for supporting and motivating students and managing tension in clinical environments. Our findings also indicated that one of the key elements of clinical competence is "scientific status". The main factors fitting this category include the trainer's personal features such as good work ethics, empathy, humility, discipline and fondness.

Students participating in Alavi's study believed that trainers' discipline can lead to more satisfaction and relaxation and thus more learning activities (12). Instructors and students in Buchle's study considered the educators' passion and interest to be even more significant than their scientific research (15). Likewise, Nehring named interest in nursing and teaching as the major characteristic of a qualified trainer (26).

Although these studies highlighted the importance of instructor's traits, none presented a comprehensive collection of these properties. However, our participants' experiences suggested that a combination of these personal characteristics make a clinical instructor a good role model for the students. These trainers can introduce nursing as an ethical profession and can train nurses who are interested in and committed to human values and beliefs.

Furthermore, our participants believed that a qualified clinical trainer should possess training competence. In other words, besides effective transfer of concepts and experiences to students, they should strive to train thoughtful nurses by creating learning opportunities and promoting problem-finding skills. Similarly, other studies have addressed the necessity of instructors' educational competence in their training roles.

Boor believes that clinical instructors should teach skills they are familiar with; in fact, these trainers have a unique perspective regarding clinical education and prioritize training to work (14). In this regard, Jouybari considered clinical competence as a component of management competence and described management, clinical leadership and planning as the trainer's responsibilities (2).

Moreover, Heshmati addressed the importance of critical thinking and interest in training, which lead to the trainer's use of novel, creative methods in clinical training and enjoyable learning experiences for the students (4). It seems that academic expectations, assigned clinical tasks, emphasis on certain methods of education and evaluation, and participants' awareness of new educational methods and clinical assessment have great impacts on the concept of clinical competence.

Undoubtedly, applying different novel teaching methods provides new learning opportunities for the students and makes clinical learning an enjoyable experience for the trainees (27). On the other hand, a competent clinical instructor with sufficient training qualification can bridge the gap between theoretical and practical learning in a real workplace and reduce stress in clinical environments (5, 28). These trainers help with the promotion of nursing as a regulated profession (29).

In the present study, participants mentioned unbiased evaluation as one of the important qualifications of a clinical instructor. Likewise, Boor, Ullian and Pazargadi addressed this aspect of trainers' ability (14, 16, 30). Such capabilities help educators monitor students' learning opportunities and practical activities and provide appropriate feedback at the right time. However, due to insufficient objectivity, clinical evaluation

has always been one of the instructors' concerns. This suggests the need for further studies on the use of modern methods in clinical assessment, which can objectify clinical training and provide proper feedback.

Based on the results of this study, clinical competence has been one of the determining factors for clinical qualification. Our participants believed that a competent trainer has an active clinical presence, pays inclusive attention to patients, has clinical experience and proficiency (especially in times of crisis) and is capable of providing learning opportunities for the students by using the available facilities.

Previous studies prioritized clinical competence to educational and scientific activities (15). Heshmati described a qualified clinical instructor as a competent nurse. He believed that nurses' competence depends on their institutionalized knowledge and that a trainer has more confidence if he/she has clinical ethics (4).

From Boor's point of view, qualified clinical trainers have the required knowledge and try to update their skills, besides being good role models (14). Although researchers have not given similar definitions for clinical competence (31), they believe that competence leads to more confidence in trainers as skilled, professional nurses and promotes learning by developing confidence in students (4, 32).

Instructors' competence, which is associated with gaining the confidence of Medical teams and patients, can also lead to more learning opportunities for the students. Content analysis showed that our participants accounted updated institutional knowledge, which is one of the main elements of clinical competence, as a trainer's scientific qualification.

Previous studies have confirmed the importance of instructors' level and quality of knowledge (particularly specialized knowledge) in different fields including theoretical subjects, training, research, communication, professional roles and work ethics (17). Even some studies have named proficiency and theoretical knowledge as the most significant characteristics of an effective trainer from the viewpoints of students and trainers (2, 6, 33).

Undoubtedly, when a clinical instructor has specialized, theoretical knowledge and the ability to explain the scientific basis of matters, nursing education system will become more efficient and credible. This highlights the need for selecting clinical trainers with higher academic levels, as well as paying attention to retraining courses for updating trainers' theoretical knowledge.

Conclusion

In this study, deep and concurrent investigation of the experiences of students and clinical instructors suggested that competence is a multi-dimensional concept. Overall, a qualified clinical trainer should have a comprehensive perspective. In other words, he/she should have five major characteristics: the ability to establish communication, educational qualifications, clinical competence, scholarly knowledge and academic status. The emerged themes were not similar to those reported in other studies. Such differences can be beneficial for administrators to use and empower clinical trainers by developing a competence-oriented system, planning in-service training and promoting their evaluation.

Conflicts of interest

There were no conflicts of interest in this study.

Author's contributions

R Nazari and E Mohammadi designed the study, analyzed the data and prepared the manuscript. Interviews was done by R Nazari.

Acknowledgements

We would like to thank the trainers and students for their friendly participation and cooperation. We also thank the Research Deputy of Babol University of Medical Sciences for the financial support and all the authorities and faculty members of Amol Nursing and Midwifery Faculty. We also extend our gratitude to Ms. Fariba Shoushtari for her sincere cooperation in performing this study.

References

1. Kally C. Students' perceptions of effective clinical teaching revisited. *Nurse Educ Today* 2007; 27(8):885-92. PMID: 17321013
2. Jouybari L, Sanagoo A. An effective instructor: A deep look at students and instructors' experiences and perspectives. *Strides Dev Med Educ* 2009; 6(2):119-28 (Persian).
3. Pollard C, Ellis L, Stringer E, Cockayne D. Clinical education: A review of the literature nurse education in practice. *Nurse Educ Pract* 2007; 7(5):315-22.
4. Heshmati-Nabavi F, Vanaki Z. Professional approach: The key feature of effective clinical educator in Iran. *Nurse Educ Today* 2010; 30(2):163-8.
5. Nazari R, Beheshti Z, Arzani A, hajiHossaini F, Saatsaz S, Bijani A. Stressor agents in clinical education of nursing students in Amol. *JBUMS* 2007; 9(2):45-50 (Persian).
6. Khan N, Shafi S, Akhtar S. Availability of clinical nurse instructor enhance the application of theory into practice in tertiary care hospitals (LRH, KTH, HMC), KPK, Peshawar, Pakistan. *Int J Innovative Res Dev* 2015; 4(1):293-7.
7. Ramezani T, Dortaj Ravari E. Characteristics of effective teachers and pertinent effective educational factors according to the teachers and students' point of view in schools of nursing, Kerman University of Medical Sciences. *Strides Dev Med Educ* 2009; 6(2):139-48 (Persian).
8. Elcigil A, Yildirim Sari H. Determining problems experience by student nurse in their work with clinical educators in turkey. *Nurse Educ Today* 2007; 27(5):491-8.
9. de Guzman AB, Ormita MJ, Palad CM, Panganiban JK, Pestaño HO, Pristin MW. Filipino nursing students' views of their clinical instructors, credibility. *Nurse Educ Today* 2006; 27(6):529-33.
10. Beitz JM, Wiel D. Analyzing the teaching effectiveness of clinical nursing faculty of full- and part-time generic BSN, LPN-BSN, and RN-BSN nursing students. *J Prof Nurse* 2005; 21(1):32-45.
11. Tang FI, Chou SM, Chiang HH. Students' Perceptions of Effective and Ineffective Clinical Instructors. *J Nurs Educ* 2005; 44(4):187-92.
12. Alavi M, Abedi HA. Nursing students' experiences and perceptions of effective instructor in clinical education. *Iran J Med Educ* 2008; 7(2):325-34 (Persian).
13. Lee WS, Cholowski K, Williams AK. Nursing students' and clinical educators' perceptions of characteristics of effective clinical educators in an Australian university school of nursing. *J Adv Nurs* 2002; 39(5):412-20.
14. Boor K, Teunissen PW, Scherpbier AJ, van der Vleuten CP, van de Lande J, Scheele F. Residents' perceptions of the ideal clinical teacher--a qualitative study. *Eur J Obstet Gynecol Reprod Biol* 2008; 40(2):152-7.
15. Buchel TL, Edwards FD. Characteristics of effective clinical teachers. *Fam Med* 2005; 37(1):30-5.
16. Ullian JA, Bland CJ, Simpson DE. An alternative approach to defining the role of the clinical teacher. *Acad Med* 1994; 69(10):832-8
17. Davis D, Stullenbarger E, Dearman C, Kelley JA. Proposed nurse educator competencies: development and validation of a model. *Nurs Outlook* 2005; 53(4):206-11.
18. AlHaqwi AL, van der Molen HT, Schmidt HG, Magzoub ME. Determinants of effective clinical learning: a student and teacher perspective in Saudi Arabia. *Educ Health (Abingdon)* 2010; 23(2):369.
19. Lovric R, Prlic N, Zec D, Puseljic S, Zvanut B. Students' assessment and self-assessment of nursing clinical faculty competencies: Important feedback in clinical education?. *Nurse Educ* 2015; 40(5):E1-5.
20. Sandelowski M. Whatever happened to qualitative description. *Res Nurs Health* 2000; 23(4):334-40.
21. Abedian Kasgari K, Pazandeh F, Shahhoseini Z. The characteristic of an effective clinical instructor from nursing and midwifery students, point of view in universities of medical sciences in Tehran. [Master Thesis]. Tehran: Shahid Beheshti School of nursing & midwifery; 2003 (Persian).
22. Ursano AM, Kartheiser PH, Ursano RJ. The teacher alliance: A perspective on the good teacher and effective learning. *Psychiatry* 2007; 70(3):189-94.
23. Shakornia A, Motlagh ME, Malaieri AR. Students' opinion on factors affecting faculty evaluation in Jondishapoor Medical University. *Iran J Med Educ* 2005; 5(2): 101-10 (Persian).
24. Gillespie M. Student-teacher connection: A place of possibility. *J Adv Nurs* 2005; 52(2):211-9.
25. Zani AV, Noqueira MS. Critical incidents in the teaching-learning process of a nursing course through the perception of students and faculty. *Rev Lat Am Enfermagem* 2006; 14(5):742-8.
26. Nehring V. Nursing clinical teacher effectiveness inventory: a replication study of the characteristics of 'best' and 'worst' clinical teachers as perceived by nursing faculty and student. *J Adv Nurs* 1990; 15(8):934-40.
27. Spurr S, Bally J, Ferguson L. A framework for clinical teaching: A passion-centered philosophy. *Nurse Educ Pract* 2010; 10(6):349-54.
28. Abazari F, Abaszade A, Arab M. Evaluation the rate and resource of stress in nursing students. *The Steps of Development in Medical Education* 2004; 1(1):23-31 (Persian).
29. DeLuca S, Bethune-Davies P, Elliott J. The (De) fragmented Body in nursing Education. In: Green B, Hopwood N, editors. *The Body in Professional Practice, Learning and Education*. New York: Springer International Publishing; 2015. P.209-25.
30. Pazargadi M, Ashktorab T, Khosravi S. Nursing students' experiences and perspectives on the clinical characteristics of instructors' in clinical evaluation. *J Nurs Educ* 2012; 1(1):1-13 (Persian).
31. Nesami M, Rafiee F, Parvizi S, Esmaili R. Concept analysis of competency in nursing: Qualitative research. *J Mazandaran Univ Med Sci* 2008; 18 (67):35-42 (Persian).

32. Wong S. Nurse-teacher behaviours in the clinical field: apparent effect on nursing student' learning. *J Adv Nurs* 1978; 3(4):369-72.
33. Zareeian P, Farahnegad Z. Opinion nursing students in

Jahrom University of Medical Sciences about characteristics efficiency teachers. 10th Congress on Medial Education. *Sabz J of MSE* 2009; 6:236 (Persian).