



## Faculty Members' Background Characteristics in Clinical Tutoring in Nursing Department: A Qualitative Study

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### Abstract

**Background:** Nursing education is part of a higher education system dealing with the lives of human beings, and paying attention to it is of particular importance. This study was conducted to identify the faculty members' background characteristics in clinical tutoring in nursing department.

**Methods:** The study was conducted using qualitative research approach. Data collection was performed using semi-structured interviews, extensive literature review and observation of the existing situation. Then, by specifying the various dimensions and items, the effective fundamental characteristics in clinical teaching of faculty members of the nursing department were determined.

**Results:** The three important and effective fundamental characteristics features or classes relevant to the findings of the data analysis in this study are as follows:

1. Faculty member's personal characteristics: Adherence to administrative, cultural and Islamic value - adherence to the principles of professional ethics - management ability - positive job and social attitude. 2. Faculty member's nursing professional characteristics: Having theoretical knowledge and practical skills. 3. Faculty member's tutorial characteristics: Observance of educational rules, ability to follow the principles of educational planning, ability to teach, ability to persuade and motivate students, ability to evaluate, research capabilities, teaching experience, professional ability and ability to develop professionally and scientifically.

**Conclusions:** Paying attention to the instructor as the most effective factor in clinical education and recognition of the challenges associated with this factor is very important and effective for improving the quality of clinical education. In this regard, the use of a correct and effective evaluation system is very important. Therefore, determination of the effective fundamental characteristics in clinical teaching of faculty members of the nursing department is necessary to improve the quality of education and ultimately improve the efficiency and effectiveness of the educational system.

**Keywords:** Clinical teaching, Faculty member features, Qualitative study, Clinical training.

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## Introduction

The main role of higher education is to train the specialized human resources needed by the society and to pave the way for the development of the country.<sup>1</sup> Therefore, improving the educational level of universities, including medical universities, leads to the creation of effective and needed labor force in society and improving the health of society<sup>2</sup> and paying attention to improving human resources in higher education,

especially faculty members, is of special importance and sensitivity<sup>3</sup> as faculty members play the most important role in student learning.<sup>4</sup>

Among academic disciplines, nursing plays an important role in promoting community health.<sup>5</sup> Nursing is a knowledge that is always associated with science and practice,<sup>6</sup> as it is known in many studies, nursing is considered as a performance-based profession.<sup>7</sup>

Clinical education forms the basis of a nursing education program and allows students to apply theoretical knowledge to care for the client in the clinical setting.<sup>8</sup> Clinical education is a process in which students gain experience by attending a patient's bedside and using their minds. Experience and logical thinking are needed to solve the patient's problems. This training is vital to the formation of professional identity.<sup>9</sup> Among these, the most important factor in clinical teaching and learning and the presence of nursing educators is clinical competence.<sup>10</sup> Clinical teachers should have sufficient knowledge, skills, and personal characteristics to know when and how to use them. In addition, knowledge of teaching and learning strategies in the field of teaching-learning principles provides a valuable opportunity for teachers and learners to address various aspects of patient care.<sup>11</sup>

For the past two decades, the effectiveness of nursing educators in clinical education has always been of interest to experts.<sup>5</sup> Numerous studies have pointed to the effective role of professors in the effectiveness of clinical education and consider it an important factor in motivating and self-confidence of students and ultimately improving the level of clinical education.<sup>12</sup> Cruz et al conducted a study on validation of nursing teacher characteristics and identified the validity and evaluated nursing teacher characteristics. The results of their study showed that the clinical training is essential for learning how to be a nurse, and a clinical nursing instructor is an essential element in this regard.<sup>13</sup> Haidarzadeh et al. (2011) showed that an effective instructor from the educators' point of view has two main characteristics of interpersonal (support of the instructor by officials and the incentive system) and intrapersonal (managerial characteristics, educational skills, moral characteristics, student emotional characteristics) and has a key intrapersonal feature from the nurse student's view.<sup>14</sup> Tavakoli Ghouchani et al. (2008) in examining the characteristics of effective clinical educator from the perspective of nursing and midwifery students, expressed individual characteristics, interpersonal relationships, educational skills and student evaluation.<sup>15</sup>

In 2016, the world health organization (WHO) published a book entitled "Nursing teacher qualifications" stating that a nursing educator should have eight characteristics: Theories and principles of adult learning, curriculum and implementation, nursing practice, research and documentation, communication, collaboration and participation of ethical-legal and professional principles, supervision and evaluation, management, leadership and support<sup>16</sup> and should have the required knowledge and skills.

Coolier (2017) conducted a study with the aim of identifying the characteristics and methods of measuring the effectiveness of the instructor.<sup>17</sup> Kirschling et al. (1995) conducted a study in Oregon school of nursing entitled "Evaluating the effectiveness of teaching". In this study, nursing students mentioned the five fields of knowledge and experience, use of appropriate teaching methods, communication methods, use of personal experiences and appropriate coping, respectively, as factors affecting clinical education.<sup>18</sup> In all studies, the teacher has been identified as the most influential factor in clinical education because the clinical educator is more than a role model but a leader in many aspects of student mental, physical, personality and psychological well-being. Therefore, paying attention to the coaching factor and examining and recognizing the challenges associated with it will be very important to improve the quality of clinical education.<sup>19</sup> Research conducted by the research team showed that nursing educators must have some characteristics to have optimal and effective clinical teaching, but in most cases, there is a kind of instability, doubt and uncertainty in determining these characteristics. Considering that different angles and the effective factors and elements for clinical teaching of nursing in the context of the country's health system are not well known, this study was conducted to determine and explain the effective field characteristics of clinical teaching in the faculty members of the nursing department in order to develop and improve the goals and quality of clinical teaching.

## Materials and Methods

The lack of precise and consistent characteristics that could cover all aspects of the nursing instructor's work while teaching in patients' beds led to the design of a qualitative study with a content analysis approach. Qualitative content analysis is a good way to study contextual issues.<sup>20</sup> Data collection in this study was aimed at explaining the effective field characteristics in clinical teaching of faculty members of the nursing department, including: Reviewing texts, in-depth and semi-structured interviews and observing and establishing Delphi sessions, final analysis and integration of results.

1. Reviewing texts: It included reviewing dissertations, books, articles, and evaluation forms available in nursing schools at medical universities. Conventional qualitative content analysis method<sup>21</sup> was used to analyze the data of the text review stage and Max QD10 software was used to manage the data.

2. Observation: After reviewing the texts, direct observation of how to teach clinical care of 10 nursing instructors was conducted by the researcher as an inactive observer in the clinical training environment and all cases of

observation were recorded. The use of the observation method in data collection was intended to enrich the data and achieve more accurate data in this area. In order to extract and analyze the data, by reviewing the notes from the observations, phrases and words that indicated the definition, characteristics and factors related to the research title, it was determined and categorized based on differences and similarities.

3. Interview: After the observation phase, a semi-structured in-depth interview was conducted with nursing professors. Participants included 19 teachers from different universities of medical sciences in the country, whose population and cognitive characteristics are shown in table 1.

**Table 1. Specifications participants demographics**

Cases	Characteristics	Sum	Total
Gender	Women	14	19
	Men	5	
Age	25 to 34	7	19
	35 to 44	2	
	45 to 55	10	
Education level	BA	1	19
	MA	14	
	Ph.D.	4	
Responsibility	Official faculty member	9	19
	Official non-faculty member	6	
	Faculty member, plan, military service	4	
Work experience	5 to 10	9	19
	11 to 20	2	
	21 to 30	7	
	Above 30	1	
Place of activity	Shahrud	11	19
	Other cities <sup>1</sup>	8	

Conditions for entering the study were having a degree in nursing, definite formal instructors, both faculty and non-faculty, working in medical universities of the country and having at least 5 years of clinical teaching experience.

Since there is no fixed criterion or law on the number of participants in qualitative research and data collection will be performed until the data is saturated.<sup>22</sup> In this study, after 16 interviews, no new class was extracted that indicated data saturation. Saturation is the repetition of information obtained and confirmed by previously collected data,<sup>23</sup> but three other interviews were conducted to ensure that the total number of interviews reached 19 with 19 participants and no participants were interviewed twice. In order to gather information in this research, the interviews were conducted individually, deeply and semi-organized in a quiet and secluded place and at a time that was suitable for the participants in terms of work. Prior to conducting the interview, the researcher provided the necessary conditions through the methods of building trust and obtaining permission to record the interview with the mp3 recorder.

Some sample study questions were:

- How do you act as a trainer in clinical setting?
- What characteristics should a coach have during clinical training in departments?
- How should a teacher perform during an internship or internship with students?
- Explain the important points that nursing educators should consider when teaching clinical?

-What do a faculty member in nursing care about in student education?

After each interview, at the earliest possible opportunity, the full text was first listened to carefully and then transcribed with the word software. The duration of the interviews was a minimum of 30 minutes and a maximum of 60 minutes with an average of 40 minutes. The same procedure was followed for all interviews. Spiegel et al.<sup>6</sup> believe that qualitative research requires the researcher to be immersed in information.<sup>24</sup> So, to ensure the accuracy and precision of the information, all information transferred to the paper was reviewed by listening to the recorded interviews. The manuscripts were also re-examined, which helped to understand key ideas and repetitive concepts. Then the semantic units were extracted as sentences or paragraphs from the interview statements and texts and the initial codes were extracted from them. MaxQDA software was used to organize the data and speed up the analysis. It was used to encode either the participants' words or a similar name that indicated the phenomenon. In the next step, the initial classification of the codes was done. Codes that were conceptually similar were classified as subclasses and were named for each subclass. With the advent of each new code during initial coding, that code was compared to other existing codes and placed under the category that had the most in common. During the process of continuous comparative analysis, the subclasses and related codes were constantly compared with each other and analyzed with the data. Then, under the same and related classes, they came together to form sub-classes,<sup>25</sup> and in the next stage, by merging the same sub-classes, the main classes were obtained.

In order to analyze the data of the interview stage, the conventional content analysis approach was used based on the Granhaim and Landmann algorithm (figure 1), which is a regular and objective research method to describe the phenomena and the researcher avoids using pre-determined classes and allows the classes to be extracted from the data.<sup>26</sup>

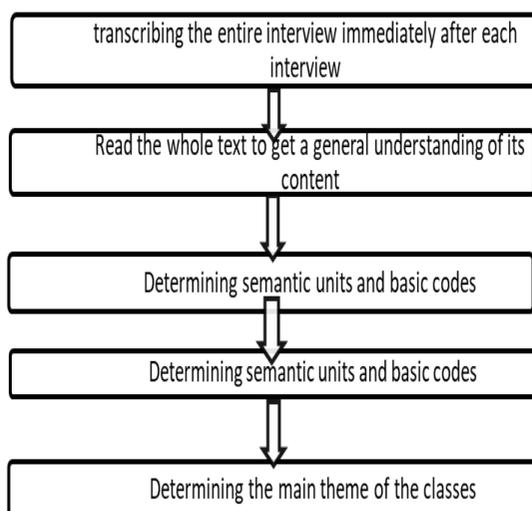


Figure 1. Conventional content analysis steps suggested by Granhaim and Landmann

After three stages of study, observation and interview, due to the lack of access to specific and key data in this research phase, Delphi method was used to obtain expert opinions in two sessions.

4. Delphi method: Delphi's method is the systematic method of extracting and overlapping the conscious judgments of a group of experts on a subject or question. In this interview, Delphi's first step in the interview process involved a central question: "In your opinion, what are the criteria for evaluating the clinical performance of nursing professors?" All those present at the meeting were asked, and in the second stage of Delphi, all the indicators obtained were put to the polls. The purpose of this phase was to select the indicators that were most important from the perspective of the participants, and finally, three effective field characteristics were identified in the clinical teaching of faculty members of the nursing department.

In this study, in order to ensure the accuracy and strength of the data, credibility, dependability, transferability, and Conformability, which are the criteria for scientific accuracy in qualitative research and have been proposed by Lincoln and Guba (1989), were considered.<sup>23</sup> In order to verify accuracy of the data, the criterion of credibility was used by using different promotion strategies. Variety of research participants in terms of age, gender, work experience and various job categories were among these strategies. Repeated data review was also used. The researcher also used sufficient time to immerse himself in the data, the subject of study and interaction with the participants, and the data obtained from the interview were reviewed by instructors and consultants after transcribing and coding. In order to determine the validity of the findings by the participants, the results of the analysis and coding codes obtained from the interview were provided to four interviewees who approved them.

To ensure accuracy in interpreting the data, the research findings were shared with people who had experience in qualitative research, and the necessary corrections were made based on their opinions. Regarding transferability, it was tried to describe all the details of the research, including the context of the study and the characteristics and experiences of the participants. Targeted sampling with maximum diversity also helps with data transferring. A detailed report on the reliability of the report was provided with full details of the research process, and all documents and evidence were safely stored to maintain "process-ability". In this study, by abandoning thoughts and assumptions, careful recording and writing of research and documentation process, non-bias and refraining from deep review of texts, as well as checking data with samples and data verification by experts were attempted to improve the research process. The research was approved by the ethics committee of Shahroud university of medical sciences. Explanations were given regarding the purpose and nature of the research, the voluntary participation, the right to withdraw from the research at any stage of the research, and the confidentiality and anonymity of the participants. Conscious written consent was also obtained to participate in the recording of the sound.

## Results

Data analysis led to the emergence of 62 subcategories, 15 categories and 3 main classes. The main classes that express the effective characteristics in the clinical teaching of faculty members of the nursing department include the faculty member's personal characteristics, faculty member's nursing professional characteristics, and faculty member's Tutorial characteristics, which are described below. Tables 2 to 4 show the categories and sub-categories of each of the main features.

Faculty member's personal characteristics are one of the most important issues in education, which causes each individual to adopt appropriate behavior in a given situation.<sup>27</sup> Individual characteristics with the four categories mentioned in the table indicate that directly or indirectly, by influencing the personality of teachers, it can play an important role in their clinical teaching.

Adherence to administrative, cultural and Islamic values: Administrative principles and rules are a set of do's and don'ts that determine how a person behaves in a social environment, and their existence is essential to achieving goals. Respondents state that "everyone knows I have a certain discipline and I teach students how to be when caring for a patient" (Interviewer No. 3) or "I wear the uniform that the faculty has set and I always try to be clean and tidy." I go to the ward regularly and ask my students to do the same." (Interviewer No. 8).

Adherence to the principles of professional ethics: Professional ethics is a set of rules derived from the nature of the profession and occupation that individuals voluntarily and in accordance with the call of their conscience and nature observe without external obligation. In this regard (interviewee No. 6) states: "I consider myself responsible for the students. When we work in the department, I consider myself responsible for the patients who are entrusted to us, and I tell my students to know that we are responsible for this disease during this period. It's up to us and we have to do the right thing."

Management ability: Management ability means deciding and coordinating material and human resources to achieve predetermined goals and participants No. 5, 11 and 14 believed that "Nursing teachers should be able to manage conditions and time in the clinical setting. For example, sometimes, there are no good conditions in the internship and we have to be careful that we don't waste time and solve all the cases and all the children can learn".

Positive job and social attitude: Attitude is a reflection of how a person feels about something or a subject that is reflected in his or her behavior. "The nursing teacher should be interested in her work and show this interest in her behavior to students and other staff," said Professor No. 8.

**Table 2. Faculty member's personal characteristics**

Main category	Categories	Sub-categories
faculty member's personal characteristics	Adherence to administrative, cultural and Islamic values	Administrative discipline, presence and absence, punctuality, office appearance, appearance beautification
	Adherence to the principles of professional ethics	Commitment and responsibility, mutual respect, criticality, patience, seriousness, justice, flexibility, secrecy, the power of correct judgment
	Management ability	Condition management, cooperation and partnership, interactions and communication, decision-making power, having independence
	Positive job and social attitude	Occupational, social

**Table 3. Faculty member's nursing professional characteristics**

Main category	Categories	Sub-categories
faculty member's nursing professional characteristics	Having theoretical knowledge	Have good theoretical knowledge, ability to combine knowledge and skills
	Practical skills	Clinical work experience, ability to perform proper nursing techniques, ability to solve problems

**Table 4. Faculty member's Tutorial characteristics**

Main category	Categories	Sub-categories
faculty member's Tutorial characteristics	Observance of educational rules	Regulations and guidelines, written training programs
	Ability to follow the principles of educational planning	Providing appropriate training programs, organize training programs, use time, divide work
	Ability to teach	Scientific ability and mastery, practical ability and mastery, providing lesson plans with emphasis on the importance and necessity of content, providing appropriate teaching resources, familiarity with new teaching methods, using appropriate teaching methods, using teaching aids and software, mastering technologies, nursing specialization (ventilator, pump syringe, etc.), appropriate teaching content, input behavior measurement, knowledge transfer ability
	Ability to persuade and motivate students	Paying attention to the characteristics of students, motivating students, involving students in practical activities. Expression and speech technology, creating learning opportunities (case report, journal club, etc.)
	Ability to evaluate	Self-assessment, student assessment, ability to receive feedback
	Research Capabilities - Teaching experience	Ability to do research, apply research results in education History of theoretical training, history of teaching internship
	Professional ability	Ability to supervise clinically, ability to guide, ability to manage and lead, ability to create a suitable learning environment
	Ability to develop professionally and scientifically	Individuals, colleagues, students

The faculty member's nursing professional characteristics with two floors is other important characteristics regarding the clinical teaching.

**Having theoretical knowledge:** Participants in the study believed that a professor of nursing should have knowledge and expertise on professional issues. "Every time I go, I try to have enough information about the part I want to pass on to the student and ... "(Professor 22 work experience).

**Practical skills:** The professor of nursing at the clinic needs to be proficient in the practical skills he is supposed to teach students. "The priority is with clinical work," Professor 9 said. "Before I start, I'll give a brief explanation. Then I'll do it myself. For example, once I do a muscle injection myself, then I give it to the students, and then if it's a problem, I'll guide them to work right."

Faculty member's tutorial characteristics are one of the most important features of this research, which consists of 9 classes.

**Observance of educational rules:** Participants in the study noted the importance of complying with regulations and guidelines for the ministry and the university, as well as the group's codified curricula, and stated that, "we need to pay attention to the group's defined training programs and move forward with the group at the same time "(Professor 29 work experience).

**Ability to follow the principles of educational planning:** The nurse in the clinic must have an educational program before doing anything. Professor No. 18 says in this regard: "I have a specific plan for each group. I go ahead with it, I define everything in advance, my goals are pre-determined, and I know what level I'm going to take the student to "(Master 24 work experience).

**Ability to teach:** The nursing teacher must always have the ability to teach properly with the needs of the community and educational programs. Professor No. 4 argued, "I create the right space for teaching, I try to make the training practical and so everyone participates, I use changing the tone, using the example, very practical training on the patient's bedside and anything else that can help" (Professor 6 work experience).

**Ability to persuade and motivate students:** Everyone knows that motivation is the key to learning. In this regard, one of the professors says, "During the internship, on the one hand, I talk about the goodness and reward of this field of work, continuing education and higher education for students, and in short, I encourage students because nursing is a very difficult job. On the other hand, I am reminded that every student who has an internship with me should do practical techniques at least once, and then I will encourage them, good or bad, and I will tell them about their problems" (Interviewer No. 2).

**Ability to evaluate:** In order to perform corrective measures, the professor of nursing in the clinic must continuously evaluate the student. Professor No. 17 says: "From the first moment, I start evaluating students' work. I don't just let them evaluate on the last day because I want them to gradually solve their problems and get better" (Professor 26 work experience).

**Research Capabilities:** Given that the world is on the verge of an information revolution, the study's participants acknowledged that "a nursing educator should not be the one to tell students only what is written in textbooks and magazines. His own specialization should be to conduct research with students and other colleagues, which will improve the scientific level and dynamism of himself and his students. Of course, not to forget and diminish the education and spend most of his time and energy in research" (Professor 29 work experience).

**Teaching experience:** Having previous experience of teaching and learning in a professor is very important in dealing with the target students, so that (Professor 22 work experience) stated that "depending on the level and semester of the student in each department, a coach should be chosen for them. The instructor is important from one department to another, for example, I have no problem in the infectious department and I can handle it, but if they tell me to go to the neurology department, and I will be bothered by the students myself."

**Professional ability:** The nursing instructor should be able to improve and enhance the learning process. In this regard, the participants stated, "It is difficult to be an instructor, you have to be a nurse and a teacher, and you have to be ready every day before, during and after the internships. When a student is doing something, I constantly check his student's feet and I make sure that the student is in different situations so that he can communicate with others, learn to coordinate with others, and finally learn a skill or other thing that will end well as a nurse" (Professor 17 years of work experience).

**Ability to develop professionally and scientifically:** The advancement of the nursing profession improves the educational system and also increases the social value of this profession. Confirming this, Participant No. 2 stated, "I am more or less constantly studying books, magazines, and the Internet. I participate in retraining and workshops, and even exchange information with nursing friends who work at other universities" (Professor 21 work experience). "Some of my colleagues say that the impact of my words on students is good. I constantly encourage students with their course to continue their studies. I moved my classrooms several times to attend student seminars and asked for new books" (Master 29 work experience).

## Discussion

By summarizing the findings of the present study along with similar findings regarding the concept of clinical teaching evaluation of nursing faculty members, we will summarize and discuss the findings of the study.

In this study, one of the categories that was obtained based on interviews with research and analysis samples was individual characteristics. Sharifinia et al. (2019), Ahmadnia et al. (2014), Cullier (2017) and Nahring (1990) were also among the researchers who emphasized the role of individual and personality characteristics of the nursing teacher in clinical education that was consistent with the findings of this study.<sup>28,5,17,29</sup> In this study, adherence to administrative principles and regulations related to appropriate clothing and appearance was one of the issues that the participants stated

that the professor of clinical nursing should pay attention to. Heidarzadeh et al. (2011), along with the present study, emphasized on the attention of the nursing professor on physical characteristics.<sup>14</sup> Sharifiania et al. (1397) also considered attention to appearance to be one of the characteristics of a good nursing teacher from the students' point of view.<sup>28</sup> Ghotbi and Nasrollahi (2017) in designing their questionnaire in line with the finding of the present study emphasized on observing the guidelines of professional appearance of the university by the nursing professor.<sup>30</sup> Consistent with this finding, Dubrovskaya et al. (2015) conducted a study entitled clinical practice patterns in nursing education and emphasized the need to develop ethical guidelines.<sup>31</sup> The south African nurses association (2005) and Heidarzadeh et al. (2011) cited ethics as one of the characteristics of a nursing professor.<sup>14,32</sup>

Communication is another sub-category of individual characteristics which is a dynamic process in which a person's thoughts and feelings are passed on to another person. In this study, communication with students, communication with others and cooperation with others were emphasized by the participants. In this regard, McAllister and Filin (2016) mentioned communication as one of the most important abilities of nursing educators.<sup>33</sup> In addition, other researchers such as (Siao 2017, Cullier 2017, Kikokawa et al., 2014, Lisel et al. 2000 and Sadeghian et al., 2016) also emphasized communication skills in nursing instructors in the clinic, which confirms the findings of the present study.<sup>17,34-37</sup> Participants in the study cited a positive job and social attitude (interest) as an important feature of the professor's clinical nursing career, which was less specifically mentioned in other studies. Among the limited researchers who have addressed this issue are Kikokawa et al. (2014) and Ashqali Farahani et al. (2013).<sup>34,38</sup> Adequate knowledge of the nursing profession and adaptation to the scientific progress of the world were other findings of this study that Siao (2017), Vital (2014) and also Salehi et al. (2004) acknowledged in their studies.<sup>36,39,40</sup> On the other hand, it was emphasized that in addition to having sufficient theoretical knowledge, the clinical nursing professor should have practical skills, i.e. be able to implement accurate and easy science and knowledge in practice, so that he can teach these skills to his students. In line with the participants in the present study, many researchers emphasized the mastery of nursing skills in clinical nursing (Sharifiania et al. 1397, Collier 2017, Ciao 2017, Farhadian et al. 2007, Adhami et al. 2001, Airbie 1994, Nahring, 1990) which were in line with the findings of the present study.<sup>17,28,29,36,41-43</sup>

In discussing the characteristics of the faculty member, the participants in this study considered another feature of the nursing professor to be the observance of the educational rules set by the ministry of health and medical education and the rules and regulations set in the faculty. Laws and regulations are a set of legal rules set by the legislature that determine how a person behaves in a social environment, and it must be stated that the existence of laws and regulations is essential to achieving goals. In the review of literature, there was no study in line with this finding. Future studies could be helpful in this regard.

Participants in the study believed that the professor of clinical nursing should have the necessary ability to teach and educate students and use appropriate teaching methods to achieve goals. Along with the findings of this study, Liesel et al. (2000) considered the use of various teaching methods based on the needs and characteristics of students as an important factor in the ability of teaching in clinical nursing.<sup>35</sup> Farrokhnejad and Pirdadian (2011), in line with the present study, stated that the professor of nursing should use educational technologies to transfer educational content to students in clinical departments.<sup>44</sup> Emphasizing the importance of teaching and learning skills, Ciao et al. (2017), along with the findings of the present study, stated that the nursing professor should work in the clinical workplace for students and guide them in performing their duties.<sup>36</sup>

Predicting an evaluation system in educational programs is of particular importance in order to achieve educational goals. In this study, the participants emphasized the importance of having the ability to evaluate themselves and the ability to evaluate students. Farhadian et al. (2020) also agreed with the present study that the professor of nursing should use clinical evaluation methods and use its results to improve students' learning.<sup>43</sup> Bifeto (2016) also stated that the nursing teacher should evaluate the clinical learning environment and identify the factors influencing learning.<sup>45</sup> Reisler et al. (2003), Abdolsamadi et al. (2012), Jafari Golestan et al. (2007) also emphasized the need for self-assessment.<sup>46-48</sup> In agreement with the findings of the present study, Vitaly (2014) and Arfai (2012) stated that one of the capabilities of the professor of clinical nursing is to continuously evaluate students and provide feedback to them.<sup>39,49</sup> Imaniyehpour et al. (2012), Arfai (2012), Ghotbi and Nasrollahi (2017) and Noel (2015) also emphasized in providing feedback.<sup>30,49-51</sup>

Among the types of scholarship, educational scholarship (teaching-learning scalar chip) leads to the promotion of learning. Participants in the study believed that teachers needed to access relevant practical or fundamental content appropriate to the relevant field of specialization. In this regard, Farrokhnejad and Pirdadian (2011) in evaluating the quality of teaching-learning process mentioned the importance of research activity<sup>44</sup> and one of the themes of Sharifiania et al.'s study (1397) was also research knowledge.<sup>28</sup> McAllister and Flynn (2016) and Kamyra (1996) also mentioned the skills and characteristics of nursing, research and research professors.<sup>33,52</sup> Experience and teaching experience is one of the most important factors that researchers have considered to be effective in the performance of clinical teaching of nursing educators.

Some of the participants in this study also insisted on it. Zarei et al. (2014) also acknowledged that in general, students were more satisfied with the training by instructors who had clinical experience and considered the training of these teachers more effective and suggested the selection of clinicians with more clinical experience to increase the quality of student education.<sup>53</sup> Rahimi (2005) also mentioned the poor and insufficient clinical experience of the instructor as one of the most important obstacles to clinical nursing education,<sup>11</sup> and also Ali Afsari et al. (2017) and Ciao (2017) confirmed this finding in their research.<sup>36,54</sup>

Participants in the study stressed that the professor of clinical nursing should have professional abilities such as the ability to guide, manage and lead, clinical supervision and create a suitable learning environment. Kikokawa (2014), Gardelf et al. (2014) and Rene et al. (2008) stated that one of the tasks of a nursing professor in the clinic is to monitor student activities.<sup>34,55,56</sup> The study of Bifito et al. (2016), Jozi et al. (2013) and Najafi et al. (2011) and Vahidi et al. (2006) confirmed other cases of professional competence.<sup>45,57-59</sup> In this study, most of the participants emphasized on the ability of professional development and scientific progress under the teacher characteristics of faculty members, and this was also done by McAllister (2016), Ashgali Farahani et al. (2013), Del Aram et al (2012), and Ravanipour et al. (2014).<sup>33,38,60,61</sup> Mousavizadeh et al. (2016) have also stated that formal education system and teachers can have the most positive or negative impact on the professional development of nurses.<sup>62</sup> The findings of Mortuja et al. (2004), Rene et al. (2008) and Asadzadeh Monir et al. (2009) were also consistent with the findings of this study.<sup>55,63,64</sup>

Professional ethics and proper and strong communication with students and other members of the treatment team are important personality traits of a nursing professor. The clinical nurse professor is responsible, committed, critical, serious and interested in the nursing profession and student learning, and establishes a close relationship with the student and has a high level of cooperation with the education and treatment team. In the clinical setting, the nursing professor respects the rules and establishes order, and is a role model for students entering and exiting and observing appropriate appearance. The nursing professor has the scientific ability and practical skills and the ability to teach and transmits this knowledge and skills to the student in effective ways. To ensure the achievement of educational goals, the student's work is constantly monitored and evaluated, and the student is provided with appropriate and timely feedback so that he or she is aware of his strengths and weaknesses and strives to strengthen his/her strengths and correct his/her weaknesses.

Lack of direct use of nursing students' experiences is one of the limitations of this study and only their opinions were used in reviewing the texts, so it is suggested that the experiences of nursing students be considered in related studies.

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## Conflict of Interest

The authors declare that they have no conflict of interest.

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