

# Pharmacophore

ISSN-2229-5402

Journal home page: <http://www.pharmacophorejournal.com>



## EXPERIENCES OF INSTRUCTORS ABOUT COMPLEX SITUATIONS IN CLINICAL EDUCATION: A PHENOMENOLOGICAL QUALITATIVE STUDY

Zohreh badeyeh peymaye Jahromi<sup>1</sup>, Leili mosalanejad<sup>2\*</sup>, Ali Dehghani<sup>1</sup>,  
Saeed abdollahifard<sup>3</sup>

*1.Nursing Department, Nursing and Paramedical School, Jahrom University of Medical Sciences, Jahrom, Iran*

*2.Educational Development Center, Jahrom University of Medical Sciences, Jahrom, Iran*

*3.Medical Student, Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Iran*

### ARTICLE INFO

**Received:**

03<sup>th</sup> Jun 2017

**Accepted:**

29<sup>th</sup> Nov 2017

**Available online:**

14<sup>th</sup> Dec 2017

**Keywords:** *clinical education, instructors, experience, clinical situation.*

### ABSTRACT

Clinical education can be considered as the learning facilitating activities in the clinical environment. Effective clinical education is multi-dimensional, because in some situations, educational opportunities find a complex situation.

This study aimed to explore experiences of professors about complex situations in clinical education.

This study was a qualitative phenomenological approach. Participants were nursing and clinical instructors of Jahrom University of Medical Sciences. Data were collected using focus groups or individual interviews which was done through the objective-based approach on some faculty members from different nursing and clinical groups. All interviews were recorded and written word by word. Interviews were listened again by the researcher and the manuscripts were reviewed. Qualitative content analysis was used in the content analysis.

After analysis of results based on content analysis, 112 primary codes were extracted. Then the primary codes were merged in two main categories and seven themes. Individual factors, including the themes of individual features and the interpersonal communication and organizational factors include the themes of clinical environment and conditions, policy and educational structure, the gap between theory and practice, the role of instructors and evaluation.

attracting and using effective and capable clinical instructors and familiar with the psychology of learning, respectful and trusting relationship with students, trying to ensure facilities and equipment of clinical environment, monitoring and localization of education policy, cooperation between universities and clinical environments to reduce the gap between theory and practice can help eliminate the complexities of clinical education and to a large extent remove the problems facing clinical training.

Copyright © 2013 - All Rights Reserved - Pharmacophore

**To Cite This Article:** Zohreh badeyeh peymaye Jahromi, Leili mosalanejad, Ali Dehghani, Saeed abdollahifard, (2017), "Experiences of instructors about complex situations in clinical education: a phenomenological qualitative study", *Pharmacophore*, 8(6S), e-1173201.

### Introduction

Medical education is part of the higher education system that is dealing with human life and considering its qualitative and quantitative aspects is of particular importance and must be done in such a way that meet the demands of the changing society given the rapid advances in science and technology (1). On the other hand, this training should be done with a more

**Corresponding Author:** Leili mosalanejad, Educational Development Center, Jahrom University of Medical Sciences, Jahrom, Iran. Email: [saedparsa2012@gmail.com](mailto:saedparsa2012@gmail.com)

different approach than the others training because knowledge about learning style can be effective in organizing the learning environment, the interaction between teachers and students and the content teaching and learning process (2).

Clinical environment is the main center for training medical students and clinical experience is an essential part of the educational programs in universities that creates an opportunity for instructors and students that by creating a participatory status, students are better prepared to function effectively as a clinical staff (3).

Clinical education can be considered as the learning facilitating activities in the clinical environment which aims to make significant changes in the student to do clinical cares; so that at the end of the course students should be able to perform various learned skills with the necessary competency (4).

The clinical education is the most favorable learning process in which students acquire skills by attending on the patients and incrementally and using acquired experience and logical reasoning are prepared for solving patient problems and his treatment and care (5). Clinical field is a unique opportunity that many educational purposes are achieved that the most notably is the development of professional competence (6). But clinical education is the most forgotten one and this field has defects more than other training fields (5).

Effective clinical training is multi-dimensional, because in some situations, educational opportunities find a complex situation (7). A complex situation is a situation that is perceived by the person complex and difficult. It is important to understand it and confirm that each individual has different abilities, backgrounds and experiences that influences his perception of the various positions and what each person might perceive as a complex situation may not be understood as a complex situation for someone else (8).

In the study by Suplee et al., (2014) that was done in the United States of America with the participation of nursing clinical professors, clinical education difficult situations that educators face and need to manage them were training very anxious and very ready students, students who can easily meet clinical goals and students with poor calculation skills (9). Alavi in the study conducted to evaluate the students' experience from effective clinical training concluded that factors that affect the educational situations are related to cases such as clinical environment, students' preparation and factors related to personality and behavioral traits of the trainer and his theoretical and practical skills (7). In another study, the results indicated the potential for learning in practice, facing with the challenges of real work, clinical education and professional challenges in the future (10). Other factors such as lack of interest and motivation in students can also be pointed out (11).

According to the different obtained results and given the barriers and limitations in the clinical environment that can reduce the effectiveness of clinical education, further research in this area is important. It is clear that identifying the issues of clinical education to solve the problems has a significant role in training efficient and qualified people. Therefore, researchers are trying to identify and specify complex educational situations and explain the experiences of instructors, help managing such situations. Talking about such experiences can develop more ideas about how we can control and manage such a similar situation in the future. So understanding the experiences of instructors about complex training situations in practice is necessary to provide effective solutions. Given that clinical education problems are studied mostly by quantitative methods and there are few qualitative studies in this area, the qualitative approach is used to achieve reality and deep understanding of the experiences and views of the participants. This study aimed to explore experiences of professors about complex situations in clinical education.

## **Materials And Methods**

The method used in this study is qualitative phenomenological approach that was conducted in 2015. Study population were clinical and nursing professors of Jahrom University of Medical Sciences. Inclusion criteria were tendency to participate in the study and having at least three years of clinical training.

Data collection :

Data were collected using semi structural interview that was done through the purpose sampling on some faculty members of nursing and clinical groups. During this process, specific individuals expressed their opinions, and then content analysis was done based on their experiences .

In individual interviews, general questions that had open and commentary answers were designed as an interview guide. Sample questions for the interview include: What is the complex situation in clinical education? What complex situations you encounter in clinical education? What factors is the complexity of clinical education dependent on? The sampling method in this study is based on objective. Sampling was continued based on inclusion criteria and gradually and until data was saturated. The interview lasted for 45-60 minutes. Allowed participants and ensured confidentiality, interviews were recorded using digital devices. During the study, a specified code was used instead of participants' names to respect the principle of confidentiality in this research. All interviews were recorded and written word by word. Interviews were listened again by the investigator and manuscripts were reviewed.

**Data analysis :**

In the content analysis, qualitative content analysis was used. This method through systematic classification process, extracted codes and categories directly and inductively from the raw data. In this method, the key concepts and hidden patterns were extracted from the data content and data was collected and analyzed simultaneously. In this method, the basic codes were extracted from meaning units and then codes were divided into conceptual categories and key concepts based on

the similarities and differences to the subclasses. Standards of accuracy in the content analysis are expressed by validity, transferability, reliability and confirm ability.

#### Rigor:

To determine the validity, strategies such as participants' revision and partners' review were used. To assess participants' revision, in addition to restoring speech and experiences of participants, the full text of the codes and classes were given to 5 instructors familiar to qualitative research and their comments were used in modification or confirmation. For peer check, the full text along with codes and classes were held by two faculty members and the opinions of two experts in the field of qualitative research were used.

#### Ethical consideration :

To comply with ethical requirements, while creating an intimate atmosphere in the group, it was tried to gain their consent to participate in the group. After reviewing the presented comments and documents, at first two colleagues studied separately the expressed content and then while adapting them to each other, from the resulting content, areas and sub-areas were identified and the whole complex was analyzed. Participants' approval was also used here to increase the reliability of the method and presented after the final conclusion.

#### Results

After analysis of results based on content analysis, 112 primary codes were extracted. Then the primary codes were merged in two main categories and seven subcategories (theme): the main classes are clinical education complex situations including individual factors and organizational factors. Each class contains several subclasses that are listed in Table 1.

**Table 1.** Categories and subcategories of interviews with participants about complex situations of clinical education

themes	Subthemes
Individual factors	individual features
	interpersonal communication
Organizational factors	clinical environment and conditions
	policy and educational structure
	gap between theory and practice
	role of instructors
	evaluation

#### Individual factors

Individual factors include themes of individual features and the interpersonal communication. Many participants believed students' individual characteristics, such as motivation and intelligence, preparation for entry into the clinical setting, their knowledge and attitudes as well as the features related to interpersonal communication like relationship between students and instructor, student communication with medical staff and patients and communication with other students and problems associated with them in creating and promoting effective clinical training complex situations.

**One of the participants said about the personal characteristics of students:** "Students who become routine, come to training classes and return and scientific problems do not matter for them and in practice they like to adapt themselves with routine work not scientific and basic ones while the aim of clinical training is to improve the quality of performance" (participants 12, instructor with 5 years of teaching experience).

**Another participant said about ethics and individual motivations of students:** "A student who is not motivated and we want to involve him in the scientific issues and patient, even if the student suppresses himself and shows no psychological conflicts, the reluctance and individual spirits will be seen in clinic and often create problems, problems like reluctance that starts from student life and is also reluctance in the workplace, how we should engage him with patients, training and commitment to work" (participants 6, assistant professor with 8 years of teaching experience).

**Another participant said about interpersonal communication:** "We do not work on communication and psychological problems of bedside, that is one should work and assess on bedside psychologically because it is the first social experiences of students who enter into the bedside, on one hand doctor, intern, extern and resident and on the one hand, different categories of personnel, and on the other hand patients and their relatives, people and patients are of different genders that students have problems associated with them" (participants 5, instructor with 7 years of teaching experience).

#### Organizational factors

Organizational factors include the subclasses of clinical environment and conditions, policy and educational structure, the gap between theory and practice, the role of instructors and evaluation. Participants expressed various organizational factors can affect creating complex clinical training situations. One of these environmental factors and clinical conditions includes the busy clinical environment, large numbers of students, diversity of situations, lack of cooperation between the health care team, interference of clinical staff in education and so on.

**One of the participants said in this regard:** "I saw many times what I tell students, students goes to the personnel and check what I said in a way that I cannot see to check if I'm right or not, because somewhere he saw the personnel are very successful, he doesn't look the way, he just watches the result" (participants 20, instructor with 23 years of teaching experience).

**Another participant said about the large number of students:** "A clinical difficult situation that we face in the operating room is the large number of students. For example, when we want to divide students if all are in the operating room, the surgeon would be angry and we will be ashamed that there are too many students around the patient and the patient may become infected" (participants 7, assistant professor with 10 years of teaching experience).

**An organizational factors involved in creating complex clinical training situations is policy and educational structure of the university. Participant said in this regard:** "I know the current clinical education a defective body. The reason is that they deal with the patient sectional and is not ongoing, if we limit wards in the definitions of curriculum. If we limit the illnesses that the general nurse worked with them but we get the opportunity to repeat and practice" (participants 12, instructor with 23 years of teaching experience).

**One clinical instructor said about the gap between theory and practice which is another organizational factor involved in complex situations of clinical training:** "The students love to learn the routines from staff, than scientific issues because it is easier and requires no scientific basis, as a result he will be away from the instructor. For example, I told a student to pour the ranitidine injection into micro set, he saw that the IV personnel shot, he did the same and the patient suffered a severe bradycardia and just was close to cardiac arrest" (participants 14, instructor with 3 years of teaching experience).

**Also another contribution in this regard, said:** "For example, in arrhythmia interpretation, students should learn the definition and specifications of every single arrhythmia but in bedside and actual situation, two arrhythmia may face and create a new situation, the new situation is complex and students say when the simple ones are like that, what the complex situation would be. So what is necessary in our training is to teach part by part and in detail and close the training to the practice" (participants 6, assistant professor with 8 years of teaching experience).

Other organizational factor contributing to the complex situation of clinical education is the role of instructors. Many participants believed that instructors and their role (knowledge, communication, preparedness and clinical skills, etc.) can affect the complexity or facilitating clinical education situations.

**One of the participants said in this regard:** "Instructor's decision making what is good for student now and which is preferred and is useful for students and working with which patient if the two patients are important and how to divide energy by the instructor is very important" (participants 13, instructor with 5 years of teaching experience).

**Another participant said about the importance of orientation of clinical instructors:** "Student may not know the instructor well, the instructor may not know the ward well, the ward may not know the two well, and that the professor may not have the ability of a scientific presentation, may not be familiar with clinical education practices that each could create a major concern and challenge in clinical training situations" (participants 15, instructor with 5 years of teaching experience).

**Other organizational factor influencing the clinical education situations is evaluating students. One of the participants said about the evaluation and necessity for equity in training students:** "The cooperation of hospital management is weak, situation and facilities of our hospitals are not very suitable for clinical teaching and the medical students can use these facilities more and I as a nursing student, should not, because an expert supports him and someone with master's degree or doctorate in nursing supports me. While it should not be like that and educational assistant should provide the clinical environment equal for students" (participants 11, instructor with 6 years of teaching experience).

## Discussion

Given that clinical education is a complex process that is influenced by many variables and factors, understanding problems is the first step to reduce them. Identifying problems in clinical education of students and trying to fix it improve the achievement of educational objectives and training skilled people and improving the quality of health care services (12).

Themes resulted from data analysis in this study consist of individual factors with individual features and interpersonal communication and organizational factors with environmental themes and clinical conditions, policies and educational structure, the gap between theory and practice, the role of instructors and evaluation and educational justice.

Ironside (2010), with the implementation of a national plan, classified and summarized the barriers to effective clinical teaching in five main factors including lack of high quality clinical environments, lack of qualified faculty members, students- faculty ratio, problems related to student numbers, the negative sampling of clinical environment and being exposed to different clinical environment of students which have different are working policies (13) which is consistent with the study.

Confirming the above results, Salimi et al., (2012) wrote training and learning medical sciences at different levels requires a developed educational program, qualified instructors, suitable learning environment and required equipment and technical facilities which the above factors interact and affect each other (12). Clinical professors in medical group at Boston University of Medicine (2008) considered challenges of clinical teaching as time constraints, job demand like that professors have other clinical, research and administrative tasks while they are asked to teach, training unpredictability most of the time

and difficulty to prepare, engage with students at multiple levels, factors associated with patient, such as a short hospital stay, too sick patients or not having the tendency to teach, lack of incentives and rewards for teaching and the clinical physical environment problems (14). That in complex situations like many others is consistent with the present study. So emphasizing different clinical groups, similarity of the results of internal and external studies is an evidence to identifying the main problems that is agreed by everyone and is very important to study and solve them.

About the content of individual characteristics and interpersonal relationships, in the study by Rahimi and Ahmadi (2006), individual factors such as lack of interest and motivation of students in the clinical environment are mentioned as the most important obstacle for clinical education (11) that according to instructors, the conflict between students and clinical learning environment that instead of attraction, is more repulsive, is among the factors that lead to student low interest and motivation (10). Lash et al., (2006) wrote in this regard, students in the clinical areas for reasons such as loneliness and working alone to meet their learning needs, not having enough experience in providing patient care and being a stranger in clinical workplace are mistreated by the health department personnel and this can overshadow their clinical learning motivation (15). Since the loss of motivation and interest of students cause many problems in terms of education and health system, special attention to this issue is very important.

In other research, the clinical faculty considered staff inappropriate treatment with students as an obstacle for clinical education. In some studies, the role of health care workers is considered negative and in terms of students, nurses and medical staff had no proper cooperation with students (11). Students disrespect by staff and lack of support from the instructor when necessary (16) are the important communication issues that can be considered as a complex situation and affect the effectiveness of clinical education. In the study by Moghimi et al., (2014) lack of a proper relationship between instructors and students has been a major hurdle. Instructor ability in communication and consultation with student can facilitate learning and ultimately increases the feeling of satisfaction in students (17).

In the study by Supple et al., (2015) clinical instructors reported positions that were prepared for managing them as working with students with learning difficulties, physical disabilities, managing students with emotional problems and with educational problems (9). However, sometimes some wrong behaviors of student arises from his dissatisfaction and lack of a good fit between student learning styles and clinical instructor styles or clinical unit features (18). In fact, lack of awareness of instructor about behavioral science and psychology, particularly the psychology of learning cause to face difficulties in transferring knowledge and skills in bedside. It seems that preparation in clinical instructor and necessary training to them with a psychological approach, psychology of learning and communication skills can greatly help them to manage the created situations.

Rahmani and Leinster (2008) wrote though all the doctors are usually well prepared for their clinical role, but few of them have been trained for training roles. Simply it is assumed that professionals who have graduated from medical schools and colleges can automatically start teaching a day after graduation (14).

According to clinical instructors, emphasizing clinical environment was evident. Clinical environment can be different in the field of learning and teaching. The suitability of the learning environment in terms of physical status, facilities, instructor and staff are the requirements of good education, an environment with a good cooperation between people and leads to effective learning (4). Unfavorable clinical situations and conditions in accordance with the theoretical principles are the barriers to knowledge transfer in bedside (19). In other studies, the lack of educational spaces (20), lack of facilities and oldness of educational centers, lack of cooperation between the instructor, student and personnel, lack of cooperation of hospitals with training programs, lack of proper communication by doctors, head nurses and staff with students, the rule of physicians governorship in training centers and forcing to perform the duties of personnel (16) are listed as the most important problems in clinical education (10, 21).

It should be noted that the problems and deficiencies in the fields of education and especially clinical education, perception of discrimination in the enjoyment of facilities of wards and poor evaluation and deficiencies in planning play an important role in the denial of access to educational goals. These issues can lead to students' reluctance to their field and lead to reduction of their self-esteem (22).

It is necessary to take measures about the facilities and amenities of students in the clinical setting to provide better welfare facilities, like the use of self-service in hospital, a favorable climate to change clothes and relax, especially on night shifts in hospitals and training centers for students (20).

Since the clinical training environment and policies governing it are decisive factors in motivating students to learn that strengthen behaviors to learn better and academic achievement, attempt to address these challenges is the most important subject (23).

About the educational policies in line with the results of this study, Abbaszade et al., (2013) wrote in their study that the intended time for trainings is not enough and there is no coordination between the different wards that sometimes their number is high and constantly wards are changed and sometimes confuse student. Due to the lack of proportionality in the means and facilities for training students and low capacity of ward compared to the number of students, clinical training practitioners should identify factors affecting the quality and quantity of education and solve negative and disincentive educational factors (10).

Clinical instructor is a crucial element in the planning and obtaining clinical experience that by creating favorable conditions for realization of the goals of clinical education is the most basic element because he can make up for the shortcomings and inadequacies of educational facilities, or, conversely convert the best condition to the worst and unattractive environment with being unable to connect emotionally or lack of academic ability (24). Clinical instructors should have enough knowledge and skills and special features and know when and how operate them. In addition, knowledge of instructional strategies and knowledge in the field of teaching – learning principles provides an opportunity for instructors and students to various aspects of patient care (11). Particularly in the first experiences of students' dealing with clinical setting and working in it, the potential for error is high; (25). This issue becomes more significant. Effective clinical instructor should also have sufficient ability to communicate effectively with students, staff and patients and should be experienced and up to date. Clinical professor as the beginners of this process is expected to have sufficient expertise. (10). Sand-Jecklin (2009) states that clinical instructors should have behavioral characteristics such as positive role models for students, providing constructive feedback, having an open mind, having the supportive and encouraging behaviors (26).

Another theme was the gap between theory and practice. Research indicates significant difference between theoretical courses taught at university and their use in practice (22, 27). Oermann et al., (2009) wrote the gap between theoretical knowledge that is taught in the classroom and clinical practice has long been of interest to teachers and students (28). Cunningham (2015) in his research entitled "Management of clinical teaching through understanding key principles" considers reducing the gap between theory and practice as one of the fundamental keys in clinical education (29). The gap caused students to meet conflicts between expectations and realities in the workplace and show adverse reactions in the physical and mental aspects (20). Clinical trainers should aim to liaise between theoretical knowledge and clinical skills (30). The conflict in adjusting training needs with the educational objectives makes the condition favorable for the gap between education and practice - the gap between education and practice is a challenge that despite causing many problems in the process of training can be an agent of profession change and development (31).

Teachers in the study by Elliott et al., (2013) emphasized on the standardization of education by revising course content according to the needs of society and correspondence of the content of theoretical education with goals (32). In another study, the need for consistency between what is taught and what is done in clinical practice has been pointed out (22). In the study by Elahi et al., (2014) entitled "explaining the experience of instructors and head nurses about facing with a gap between theoretical education and practice", nursing instructors based on their experience considered education engineering factors, meritocracy and professional participation in the development of the gap between theoretical and clinical training effective (31).

### Conclusion

Clinical education is per se a complex concept that encompasses several dimensions. Based on the results of this study, clinical education complex situations have both individual and organizational contexts. In this regard, attracting and using effective and capable clinical instructors and familiar with the psychology of learning, respectful and trusting relationship with students, trying to ensure facilities and equipment of clinical environment, monitoring and localization of education policy, cooperation between universities and clinical environments to reduce the gap between theory and practice can help eliminate the complexities of clinical education and to a large extent remove the problems facing clinical training. Lack of attempt to manage complex situations will hurt the active learning of the students and cause the weakness in basic clinical information and experiences of students as future medical staff.

### Acknowledgment

This paper presents the results of a research project approved by the Jahrom University of Medical Sciences, Ethics Committee code of JUMS.REC.1394.149. Hereby, the authors give their thanks to all instructors who participated in the study, and appreciate the help of the Vice-Chancellor of Jahrom University of Medical Sciences who arranged for financial support of this project.

### References

1. Azzizi F. Medical Education: Challenges and visions. 1st ed. Tehran, Iran: Health Ministry; 2003.
2. karimi Mooneghi H, Dabbaghi F, Oskouei F. and Vehvilainen Julkunen K. Learning Style in Theoretical Courses: Nursing Students' Perceptions and Experiences. Iranian J Med Edu 2009; 9: 41-54.
3. Wotton K, Gonda J, Clinicians and student evaluation of a collaborative clinical teaching model, Nurs Education in practice 2004; 4(2): 120-127.
4. Elcigil A, Yildirim SH. Determining problems experienced by student nurses in their work with clinical educators in Turkey. Nurse Educ Today 2007; 27(5): 491-8.
5. Fasihe Harandi, Soltani Arabshahi K. Investigate the situation of the input and process of clinical education at Iran University of Medical Sciences. Payesh 2003; 2(2): 127-132
6. Moonaghi HK, Mirhaghi A, Oladi S, Zeydi AE. A Journey across an Unwelcoming Field: A Qualitative Study Exploring the Factors Influencing Nursing Students? Clinical Education. Health Science Journal. 2015.

7. Alavi M. Nursing Students Experiences From Effective Clinical Education. *Journal of Sabzevar Faculty of Medical Sciences*. 2006; 13(3) :27-33
8. Carol Wood. *Dealing with difficult situations in your teaching*. Westminster Exchange, University of Westminster, 2009.
9. Suplee PD, Gardner M, Jerome-D'Emilia B. Nursing Faculty Preparedness for Clinical Teaching. *J Nurs Educ*. 2014 ;53(3):S38-41.
10. Abbaszade A, Borhani F, Sabzevari S. Nursing Teachers' Perception of the Challenges of Clinical Education and Solutions: A Qualitative Study. *J Qual Res Health Sci* 2013; 2(2): 134-45
11. Rahimi A, Ahmadi F. The Obstacles and Improving Strategies of Clinical Education from the Viewpoints of Clinical Instructors in Tehran's Nursing Schools. *Iranian Journal of Medical Education* 2006; 5(2): 73-79.
12. Salimi T, Khodayarian M, Rajabioun H, Alimandegari Z, Anticchi M, Javadi S, Namjoo Z. A survey on viewpoints of nursing and midwifery students and their clinical instructors at Faculty of Nursing and Midwifery of Shahid Sadoughi University of Medical Sciences towards clinical education during 2009-2011. *Journal of Medical Education and Development*. 2012; 7(3): 67-78
13. Ironside PM. Clinical education in prelicensure nursing programs: Findings from a national survey. *Nursing Education Perspectives*. 2010;31(4):264.
14. Ramani S, Leinster S. AMEE Guide no. 34: Teaching in the clinical environment. *Med Teach* 2008; 30(4): 347-64.
15. Lash, A.A. Özen Kulakaç, F. Buldukoglu, K. Kukulu, K. Verbal Abuse of Nursing and Midwifery students in Clinical Settings in Turkey. *Journal of Nursing Education* 2006; 45(10):396-403.
16. Aein F, Alhani F, Anoosheh M. The Experiences of nursing students, instructors, and hospital administrators of nursing clerkship. *Iran J Med Educ* 2010; 9(3): 191-200.
17. Moghimi M, Mohammad Hossini S, Karimi Z, Moghimi MA, Naimi E, Mohammadi S, Behrooz M. [Obstacles of Clinical Education and Strategies for the Improvement of Quality of Education in Yasuj University of Medical Sciences]. *J Res Dev Nurs Midwifery*. Autumn & Winter 2014.
18. Burns C, Beauchesne M, Ryan-Krause P, Sawin K. Mastering the preceptor role: Challenges of clinical teaching. *Journal of Pediatric Health Care*. 2006; 20(3): 172-183.
19. Weaver C, Warren J, Delaney C. Bedside classroom and bench: collaborative strategies to generate evidence-based knowledge for nursing practice. *International Journal of Medical Informatics*. 2005; 74(11-12): 989-99.
20. Rassouli M, Zagheri Tafreshi M, Esmaeil M. Challenges in clinical nursing education in Iran and strategies. *Journal of Clinical Excellence*. 2014;2(1):11-22.
21. Joibari L, Sanago A. An Effective Instructor: A deep look at students and instructors' experiences and perspectives. *Strides Dev Med Educ* 2009; 6(2): 119-28.
22. Valizadeh L, Fathi Azar E, Zamanzadeh V. The Relationship between Learning Characteristics and Academic Achievement in Nursing and Midwifery Students. *Iran J Med Educ* 2008; 7(2): 443-50.
23. Farideh Niknam, Asghar Tanomand, Farahnaz Abdollahzadeh. Evaluation of Environmental Barriers in Clinical Education in Viewpoints of Instructors and Nursing Students. *Educational Development of Jundishapur* 2014;5(2):
24. Midgley K. Pre-registration student nurses perception of the hospital-learning environment during clinical placements. *Nurse Educ Today*. 2006; 26(4):338-45.
25. Peyrovi H, Yadavar-Nikraves M, Oskouie SF, Berterö C, Iranian student nurses' experiences of clinical placement, *Int Nurs Rev*. 2005; 25:134.
26. Sand-Jecklin, K. Assessing Nursing Student Perceptions of the Clinical Learning Environment: Refinement and Testing of the SECEE Inventory. *Journal of Nursing Measurement*. 2009; 17( 3): 232-46.
27. Haghania F. Active Learning: An Approach for Reducing Theory-Practice Gap in Clinical Education. *Iranian Journal of Medical Education*. 2012; 11(9):1179-90.
28. Oermann MH, Saewert KJ, Charasika M, Yarbrough SS. Assessment and grading practices in schools of nursing: national survey findings part I. *Nurs Educ Perspect* 2009; 30(5): 274-8.
29. Cunningham J, Wright C, Baird M. Managing clinical education through understanding key principles. *Radiologic technology* 2015;86(3):257-73.
30. Laverty M. Supervision of student in the practice setting policy statement. *Nurs board Tasmania* 2005; 9(5): 1-7.
31. Elahil N, Alhani F, Ahmadi F. Professional partnership: nurses' experience of theory- practice gap in nursing education. *Jne* 2014; 3(1): 21-31
32. Elliott L, Kennedy C, Raeside R. Professional role identity in shaping community nurses' reactions to nursing policy. *Journal of Nursing Management* 2013; 1-9.