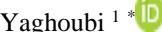


Review Article

Evaluation of Challenges and Benefits of Preceptorship Model in Nursing Clinical Education: A Review Study

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Abstract

Background & Objective: The preceptorship model is a training and learning approach, evaluation of benefits of challenges of which can contribute to the improvement of education quality and training of efficient nurses. The present study aimed to review the challenges and benefits of the preceptorship model in nursing clinical education.

Materials & Methods: This study was conducted as a narrative review. To select articles, Farsi databases such as Magiran, Google Scholar, SID, and Barakat Knowledge Network System using keywords of "preceptorship", "nursing education", "challenge", "preceptor", and "nursing student" were searched. In addition, databases of Google Scholar, Scopus, Science Direct, PubMed and Web of Science were investigated applying keywords of preceptorship, nursing education, nursing student, challenge and preceptors. Inclusion criteria were Farsi and English articles published up to 2020 with no time limits, access to full texts of the articles and relevance to the research objective. In the end, 10 out of 160 extracted articles were considered appropriate and entered into the study.

Results: In this study, the challenges of the preceptorship model were related to preceptors (high workload and insufficient time for education), preceptees (students' lack of desire for direct care and lack of motivation) and the education atmosphere (insufficient support by school managers and poor correlation between theory and clinic). On the other hand, the benefits of the preceptorship model were related to students (reduced clinical errors and development of nursing skills) and education (ensuring compliance with the policies and procedures of the organization and targeted internships)

Conclusion: According to the results of the study, despite the numerous barriers to the implementation of the preceptorship model, it has many benefits. Therefore, our findings could help clinical instructors and nursing education authorities eliminate the challenges of the implementation of the model, which increases the quality of students' clinical education.

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Introduction

Medical science is an integration of knowledge and skills, and nursing is one of its most important components (1). In fact, nursing is identified as the first-line part of healthcare and a large part of professional forces involved in the provision of healthcare services (2). In addition, practice-based professional nursing is an integral factor for the improvement of community health (3, 4). Society needs a professional, skilled and efficient workforce (5); in this regard, nursing education plays a fundamental role in the provision of efficient forces to meet the community's needs (6). Accordingly, the main mission of nursing schools is to train and

nurture competent and skilled nurses, who can meet the health-related needs of the society with sufficient knowledge (2, 5, 7, 8). In this discipline, the education program encompasses two theory and practical education modes (5, 9). Clinical education will provide the opportunity to use one's theoretical knowledge in real settings and improve one's skills and experiences (1, 4, 10-12). Students form their professional identity during internship and apprenticeship courses and can achieve autonomy, self-efficacy, self-confidence and self-belief (13, 14). In fact, clinical education is an essential and inseparable part of the educational program of the nursing discipline (15). Moreover, clinical education

is more important than theory education (16) since it involves a major part of nursing education. In other words, it is a complementary part of education. During practical education, everything a student has learned in classrooms turns into practice. Furthermore, practical education has an undeniable effect on nurses' individual, professional and skill progresses and prepares them for taking responsibilities in clinical settings in the future (18,3,6,10,17). On the other hand, students claim that most of their stress and problems are related to clinical education (14, 19, 20). Therefore, it could be expressed that any kind of weakness and shortage in clinical education decreases healthcare services' quality and quantity, thereby reducing community health. Meanwhile, the higher the quality of clinical education, the higher the health of the community (2, 21). Today, the common model in our country is clinical education under the supervision of university faculty members, which, according to faculty members, students and nurses themselves, is considered inadequate (20). On the other hand, even knowledgeable students get confused in a clinical setting at times (22), and studies show that newly graduated nurses lack clinical competence (23). Therefore, the search for and assessment of novel techniques to improve the quality of clinical education are of paramount importance (24, 25). Mentorship, peer-to-peer clinical training, clinical education colleague, mastery and preceptorship are examples of common clinical training methods (5, 8, 23, 25, 26). Since 1393, the implementation of new methods of clinical education in nursing schools is gradually being formed after the revision of the nursing curriculum. The use of skilled and experienced clinical nursing in the training of nursing students in a process called preceptorship has opened a new horizon toward clinical learning. The premise of such a view is that working alongside competent and experienced nurses will enhance students' learning (26).

In fact, the preceptorship educational model is a teaching-learning method, in which the main objective is to teach problem-solving skills to students and improve their competence in this regard (27). A literature review revealed that multiple foreign studies have mentioned the positive effect of the preceptorship model (28-30). However, despite the importance of evaluation of this education model in the increase of clinical nursing education quality, no review study has comprehensively and completely examined the benefits, challenges and related strategies in the implementation phase of the nursing education system so far. Therefore, it seems crucial to conduct review studies in this area. With this background in mind, the present study aimed to review the challenges and benefits of the preceptorship model in nursing clinical education.

Materials and Methods

This study was conducted as a narrative review. To find articles, we searched Farsi databases, such as Magiran, Google Scholar, SID, and Barakat Knowledge Network System using keywords such as "preceptorship", "nursing training", "challenge", "preceptor", and "nursing student". In addition, Google Scholar, Scopus, Science Direct, PubMed, and Web of Science were searched applying keywords of nursing student, preceptors, challenge, nursing education, and preceptorship. To adjust the review question, population, interventions, comparison, results related to the objectives and field of study (PICO) were considered. After completion of the search in each section, the studied articles were sorted based on the year of publication. Following that, the abstracts of the articles selected based on the research objective were assessed. In order to increase the validity of the results and control data entry bias, the search process, selection of studies and decision-making on entering or constructing the study and evaluation of the full text of the articles

were performed by two independent searchers, and the entire process was overseen by a third party.

The inclusion criteria were Farsi or English articles published up to 2020 with no time constraints, relevance to the research objective and access to the full text of the articles. On the other hand, review studies were excluded. In the end, more than 160 articles were extracted and evaluated based on the inclusion criteria. To select articles, they were first entered into two screening stages; in the first stage, the titles and abstracts of the articles were assessed, and duplicates and those articles that did not have a complete text or were not related to the research objective were excluded. In the end, 10 articles were considered appropriate and were entered into the study (Diagram 1 shows the extraction of articles). To combine the data, a summary of the main findings of each study was prepared. Due to the different methodology of the reviewed studies, the narrative approach and the method of summarizing the themes were used to combine the data, and the similar results of the studies were classified into themes according to the purpose of the study. Accordingly, we were able to recognize the challenges and benefits of the preceptorship model based on the extracted articles.

Result

Following the article search and screening stage, a total of 10 studies were entered into the review study, three of which were conducted in Iran and the rest were performed in Saudi Arabia, Ireland, Malawi, Canada, Jordan, Norway, and the United States. In addition, eight articles were quantitative and two were qualitative studies (Table 1). According to the results, challenges of the preceptorship model were related to preceptors, preceptees and the training atmosphere (Table 2). On the other hand, the benefits of the preceptorship model were related to students and education (Table 3). Extensive educational readiness and more educational and organizational support for the role of the preceptor, development of national standards for the preparation of preceptors and clinical education and learning based on research findings, the need to facilitate clinical and academic cooperation, commitment, students' willingness to provide direct patient care, the appointment of a preceptor throughout the clinical course, student-centered teaching techniques, giving the student the opportunity to practice, the nurse's awareness of the student's expectations and practical level were among the solutions presented based on the challenges in the studies.

Table 1: Characteristics of the extracted studies (number = 10 studies)

Author	Year	Place	Title	Type of Study	Research Tools	Challenges, Benefits and Solutions
. McSharry et al (31)	2017	Ireland	Clinical teaching and learning within a preceptorship model in an acute care hospital in Ireland; a qualitative study	qualitative	Semi-structured interview	Challenge: Insufficient time for education due to the large workload of Perceptors, overconfidence in students 'abilities and participation in clinical practice with minimal guidance, lack of strong relationship between Perceptor and student, lack of understanding of the need to use educational strategies that improve students' knowledge The complexity of the training competencies required for the role of perceptors

Continue of Table 1: Characteristics of the extracted studies (number = 10 studies)

Phuma et al (32)	2017	Malawi		qualitative	Semi-structured interview	Solution: Extensive educational readiness and more educational and organizational support for the role of the preceptor, development of national standards for the preparation of preceptors and clinical education and learning based on research findings Challenge: Lack of positive atmosphere for clinical learning, lack of interaction and friendly and receptive relationships, lack of student support and guidance
Rambod et al (27)	2016	iran	Using preceptors to improve nursing's clinical learning outcomes: A Malawian students' perspective	Quantitative (descriptive-analytical)	Clinical Facilitation Questionnaire	Challenge: Lack of positive atmosphere for clinical learning, lack of interaction and friendly and receptive relationships, lack of student support and guidance
Omer et al (33)	2015	Saudi Arabia	Satisfaction of nursing students with preceptor supervision in clinical education	Quantitative (descriptive-comparative)	Self-management questionnaire (self-administered) Bayer roles and Responsibilities	Solution: The need to facilitate clinical and academic collaboration
Löfmark, et al (34)	2008	Norway	Roles and responsibilities of nurse preceptors: perception of preceptors and preceptees	Quantitative (descriptive-cross-sectional)	Clinical Nursing Facilitation Questionnaire (Nursing Clinical Facilitators Questionnaire(NCFQ))	
Heydari et al. (6)	2012	iran		Quantitative (semi-experimental)	Clinical Skills Assessment Checklist contains 77 items	Advantages: Easy access to the preceptor, giving the opportunity to do things independently to the preceptor, reminding the patient's safety and comfort tips by the preceptor while working Benefits: Protecting patients from clinical errors, Supporting skills development while ensuring safe work, Ensuring compliance with organizational policies and procedures
Madhavanpraphakaran et al(35)	2011	Oman	Nursing students' satisfaction with supervision from preceptors and teachers during clinical practice	Quantitative (descriptive)	Researcher made Questionnaire	Advantages: Students' satisfaction with the supervision of university professors and preceptors, more favorable supervision by university professors Benefits: Protecting patients from clinical errors, Supporting skills development while ensuring safe work, Ensuring compliance with organizational policies and procedures
Barker (36)	2008	America	The effect of perception program on clinical skills of undergraduate nursing students	Quantitative (descriptive-analytical)	Review reports, conversations and experiences of preceptors	Solution: The need for cooperation between university professors and preceptors in clinical education Benefits: Improving students' communication, care and cognitive skills
Aein et al(24)	2012	Iran	Preceptors' Perceptions of Clinical Nursing Education	qualitative	Semi-structured interview	
Vandenberg et al(37)	2013	canada	Becoming a super preceptor: A practical guide to preceptorship	Quantitative (descriptive)	Questionnaire with open questions	

Table 2: Challenges of the Perspective Model

Challenges related to the preceptor	Excessive workload, insufficient time for teaching, high confidence of students in Perceptor, lack of understanding of the need to use educational strategies, complexity of competence, lack of support and guidance of students, feeling of Perceptor fatigue, insufficient opportunity to evaluate students
Challenges related to students	Students 'lack of interest in direct care, students' lack of interest and motivation, lack of a strong relationship between the perspective and the student
Challenges related to the educational atmosphere	Insufficient support from school administrators, poor correlation between theory and clinic, lack of positive atmosphere for clinical learning

Table 3: Benefits of the Perspective Model

Student-related benefits	Reduce clinical error, develop skills while ensuring safe work, student satisfaction, more student cooperation, sense of security, sense of belonging to the nursing department, defending student rights, gaining independence
Benefits related to education	Ensuring compliance with the policies and procedures of the organization, targeting internships, trapping training opportunities, gradual acceptance of the model, fair evaluation

Discussion

According to the results of the present study, the challenges of a preceptorship program are multidimensional, some of which are related to the preceptor and others are related to students and the educational atmosphere. Meanwhile, the preceptorship model's benefits are related to students and education. Most previous studies pointed out the heavy workload of preceptors and insufficient time for training (31, 8-35). The education process includes a set of learning and training opportunities. According to preceptors, students were mostly involved with the routine tasks and had no desire for patient care and more professional tasks. This led to a loss of a large number of learning opportunities (31). On the other hand, these opportunities are sometimes lost due to the busy schedule of preceptors as nurses. In addition, preceptors declared that they often fail to play the role of a teacher due to the high workload as a nurse (6, 37-38). Other challenges were high workload, insufficient time for education, exhaustion of preceptors, insufficient time for student assessment, and lack of interest to help students, limited time, increased workload, job burnout, parallel planning and equipment shortage. This

shows that preceptors' problems with nursing students emerge in various similar locations (38-43). Another problem was lack of relationship between preceptors and students (31, 32). Meanwhile, Heshmati Nabvi et al. emphasized the establishment of relationships between clinical nurses and instructors to increase nursing education quality, which also increases students' learning opportunities (44). From preceptors' perspectives, students prefer to help only with simple and routine tasks. They always wait for their preceptor to start nursing care and then help them. They are not willing to communicate with patients (35, 37).

Another challenge was insufficient support of school managers and a lack of support and guidance of students by preceptors, which is in line with the results obtained by Ebu-Enyan in Ghana (45). In addition, students' lack of interest in direct care and lack of motivation were other challenges in this regard. In a number of studies, preceptors mentioned that students sought to spend the time specified for education in the hospital and were not willing to learn (35, 37). Moreover, Ebu-Enyan pointed out unwillingness to learn, lack of observance of instructions, absence and lack of doing the work during clinical training as challenges

in this respect (45). In a study by Wafika et al., evaluation was recognized as one of the responsibilities of preceptors. While preceptors neglected this concept, preceptees were extremely concerned about this matter, such that incorrect assessment of preceptees would discourage them from learning (31-33). A significant number of studies expressed the lack of an educational goal or the existence of a goal disproportionate to the student's level as an important obstacle in this educational model. In a research by Fuma et al., preceptors specified goals that fit each preceptee, which increased students' motivation to achieve their education goal (6, 31p

-33, 36). Luffmark et al. evaluated nursing students' satisfaction with the supervision of university teachers and preceptors. According to their results, students were highly satisfied with the supervision of teachers and preceptors. However, their satisfaction of teachers' supervision was higher, compared to preceptors. This study also pointed to the inadequate experience and lack of self-confidence of the preceptors in their ability to support students to express the barriers of the perspective model, which shows that the experience and little knowledge of the nurse reduce the quality and satisfaction of this model (26, 35). Clinical education is considered sufficient when it gives the student the ability to work independently. To realize this issue, it is necessary for the student to do the work independently after being trained with the support of the preceptor so that they can do the work even in the absence of a nurse. Some preceptees, however, mentioned that preceptors do not allow them to work independently (28, 29).

Another important obstacle of the preceptorship model mentioned by Aein et al. was the lack of acceptance of the model by non-receptors. In Iran, the lack of cooperation between the health-treatment team and inappropriate communication between medical staff and students during the internship in the field has been one of the problems

reported by nursing students. According to the results, the model could increase students' belonging to the treatment group provided that the model is implemented accurately (24). To reduce these obstacles, some measures could be taken such as holding briefings on familiarity with the preceptorship model for students to increase their knowledge of their roles and responsibilities in this model, consulting with nurses to choose the right nurse preceptors, holding workshops on teaching methods and increased self-confidence of nurse preceptors, holding meetings for nurse preceptors in order to get acquainted with their duties and responsibilities in this model and head nurses' support of nurse preceptors in cases of increasing their workload in the ward.

The benefits of the preceptorship model were related to students and education. In this regard, some of the benefits of the preceptorship model were decreasing clinical error, developing skills while ensuring safe work, student satisfaction, higher student cooperation, sense of security, sense of belonging to the nursing team, defending student rights, gaining autonomy, ensuring compliance with the policies and procedures of the organization, developing targeted internships, trapping training opportunities, gradual acceptance of the model and fair evaluation. Various studies have also found the preceptorship course useful for nursing due to facilitating the acquisition of skills and the ability to change careers by nurses. A strong preceptorship is also essential for a clinical profession because it fills the gap between theory and clinic (46, 47). Preceptors provide more learning opportunities for students, compared to the team supervision approach, which increases students' satisfaction because it allows them to identify their learning needs (45).

One of the major drawbacks of the current research was the lack of access to the full text of some of the articles in the first search stage. Despite its many benefits, the preceptorship model in clinical

education was associated with some challenges, recognition and elimination of which would be a great step toward increasing the quality of clinical education.

Conclusion

According to the results of the present study, the challenges of the preceptorship program were multidimensional, some of which were related to the preceptor and others were related to students and the educational atmosphere. On the other hand, the benefits of the preceptorship model were related to students and education. It is suggested that these challenges and benefits be used by nursing education managers and clinical instructors to implement the preceptorship model in clinical training. The outcomes of improving students' clinical education quality will increase the clinical competence of trainees. Given the low number of studies performed on the preceptorship model in clinical education, especially in Iran, it is recommended that more qualitative studies be performed on this concept to determine the benefits and challenges of the model. In addition, future studies can increase the level of abstraction of themes.

Conflicts of interest

There is no conflict of interest in the present study by the authors.

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