Original Article

Barriers to Occupational Therapy Fieldwork Education in Iran: The Perspectives of Fieldwork Educators and Students

Abstract

Background: Clinical education is a vital factor in the process of learning in medical sciences universities. The aim of the present study was to explore the perspectives of fieldwork educators and students concerning barriers to occupational therapy fieldwork education in Iran. **Materials and Methods:** A qualitative research was conducted from May 2019 to April 2020 to address the study objectives. The data analysis was performed using conventional content analysis based on Graneheim and Lundman's approach. Purposive sampling was used to enroll 12 educators and 14 students of various backgrounds (physical disabilities-adult, physical disabilities-pediatrics, psychosocial-adult, and psychosocial-pediatrics) in the study. **Results:** The findings indicated that the main themes were related to fieldwork educators, fieldwork settings, educational planning, students, and educational regulation. **Conclusions:** It can be concluded that the perspectives of students and occupational therapy educators regarding the field of clinical education are not only important but also useful for the attainment of effective clinical education and the development of knowledge related to rehabilitation nursing education. Therefore, educational planners should develop effective programs based on these themes.

Keywords: Education, medical, nursing education research, occupational therapy

Introduction

Clinical education plays a critical role in the quality and advancement of professional practice. especially in undergraduate disciplines such as nursing, midwifery, physiotherapy, and occupational therapy.^[1] Different studies and professions have used different terms for Clinical education.^[2] In nursing, midwifery, and physiotherapy the most frequently used terms are "clinical education" and "clinical environment", but the most frequently used term in occupational therapy is "fieldwork education" and "fieldwork" environment.[1] Pashmdarfard quotes Kirk et al. in their study, observed that "the need to provide ongoing professional development for fieldwork educators, the need to develop tangible strategies in recognition of their contribution to fieldwork education, and the imperative for closer collaboration between universities and fieldwork educators" were the most important factors affecting the quality of fieldwork education in occupational therapy.^[3] In Iran, the field of occupational therapy) 4-year education) was established in 1971, and since 2006, its

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educational curriculum has been approved by the World Federation of Occupational Therapy (WFOT).^[4]

In the study by Rodger's et al., fieldwork educators, students, and fieldwork settings were the main components of fieldwork education in occupational therapy and other health care disciplines.^[5] Most of the studies regarding clinical education issues in Iran were performed in the nursing discipline.^[6,7] The study of rezaee *et al.* was the only study on the occupational therapy fieldwork education process in Iran.^[4] In their study, the three main themes of the importance of supervisors' management, deficits in the current curriculum, and challenges in the educational environment were identified. They suggested that further studies be conducted in this regard to clarify the experiences of supervisors and others involved in fieldwork education.^[4] Tasiran quoted Cohen et al. on suggesting that the best studies about education, especially clinical education process are qualitative studies.^[8] Individuals' viewpoints on clinical

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education as a subjective phenomenon have a socio-cultural background in the university and the educational system, and the qualitative study is the best way to clarify this phenomenon in a specific context.^[4] Therefore, to create efficient action plans for improving the quality of fieldwork education in occupational therapy and to introduce effective strategies for occupational therapy fieldwork educators, the essential first step is to identify what factors negatively impact the quality of fieldwork education from educators' and students' viewpoints using the qualitative study method. The second step is to make effective plans and take action. The present study was conducted with the aim to explore the perspectives of fieldwork educators and students concerning barriers to occupational therapy fieldwork education in Iran.

Material and Methods

To identify the barriers to fieldwork education in occupational therapy from students' and fieldwork educators' perspectives, qualitative research was conducted from May 2019 to April 2020. This study was a part of a Participatory Action Research (PAR) with the aim of promoting the fieldwork education quality of the educators of occupational therapy at Iran University of Medical Sciences (IUMS), Iran. As fieldwork education in occupational therapy is not widely known in Iran, before dealing with the planning phase in the PAR, it was necessary to identify the barriers to fieldwork education in occupational therapy. Therefore, in this study, we used the inductive conventional content analysis to identify the barriers to fieldwork reaining centers in Iran.

The inclusion criteria for the participants of this study were students who were at fieldwork level I and II and educators who had at least 1 year of experience in fieldwork education at Iran University of Medical Sciences. The participants of this study were 14 occupational therapy students and 12 occupational therapy educators (26 in total). To enrich the data, a maximum variation sample of the participants was selected using the purposive sampling method,^[9] in other words, students of different genders at different levels of fieldwork education and professors and educators with different work experiences were included in the study.

The data were collected through focus groups and individual semistructured interviews. There were four focus groups, including 1) a focus group of the students who studied at the first level of fieldwork education, 2) a focus group of the students who studied at the second level of fieldwork education, 3) a focus group of the students who finished their fieldwork education and had a master's degree, and 4) a focus group with the fieldwork educators who were also Ph.D. students. Moreover, six individual semistructured interviews were conducted with the occupational therapy professors who were fieldwork educators as well. As the professors did not have much free time, they preferred individual interviews over focus groups. The number of participants in the focus groups ranged from 4 to 8. The focus group interviews lasted 56-84 min (Mean = 71.25 min), and the individual interviews lasted 46-60 min (Mean = 45.07 min). The interviews were performed by the first and second authors and at the most convenient time and place for the participants (clinics, classes, or the Department of Occupational Therapy of the School of Rehabilitation Sciences). To formulate the questions, two steps were applied. In the first step, the open-ended interview questions were constructed by an expert panel including the research team members. In the second step, these questions were piloted in the first focus group with six students, and some modifications were made. After that, the modified version was distributed in the second, third, and fourth focus groups. Qualitative research has its own unique features, and the researcher acquires knowledge and gains experience while being involved in this type of research, and such learning evolves during the research process; thus, the pilot testing was not reported in a separate section and was mentioned as part of the study.^[10] The interviewer started the interviews with open-ended and general questions, for instance, "Would you please tell me about your experiences in fieldwork education?" and "What factors in your clinical practice do you think could disrupt the fieldwork education process?" The interviews were recorded using a digital voice recorder (MP3) and were subsequently transcribed verbatim.

The process of data gathering continued until data saturation was reached. Data gathering and data analysis were done simultaneously; in other words, immediately after an interview, the audio files were transcribed verbatim for further encoding and analysis. As the extraction of the codes and categorization of the codes started from the beginning of the study, sampling continued until the extracted codes from the interviews did not create new categories. The extraction codes of the last two interviews did not create any new categories, and duplicate codes were obtained. The data analysis was performed using qualitative content analysis in accordance with Graneheim and Lundman' approach.^[11] To this end, the audio files of the interviews and their verbatim transcriptions were reviewed several times to achieve a general perspective of the participants' comments. Afterward, the content of the interviews was examined several times by the first author. Then, the meaning units were extracted from the transcriptions and condensed. The condensed meaning units were considered as the primary codes. Subsequently, the primary codes were grouped based on their similarities and differences, and the categories and subcategories were formed. In this study, 198 codes, 12 subcategories, and 5 categories were obtained.

To ensure the trustworthiness of the data, the four evaluative criteria of Lincoln and Guba, including credibility, dependability, transferability, and conformability, were used.^[9]

In this study, the prolonged engagement of the researcher with the participants, interviews with both men and women, member check of transcriptions and the extracted primary codes by the interviewees, data analysis by a team of researchers, maximum variation sampling, and implementation of both focus groups and individual interviews were performed enhance the credibility of the data. To establish dependability, in every step of coding, the interview transcriptions, both the transcriptions and the obtained codes, were audited by three separate researchers who were familiar with qualitative analysis and were experts in the area under study, and their comments and suggestions were considered in data analysis. Transferability was ensured through maximum variation sampling and clear and transparent reporting of the data and results, which made auditability possible

Ethical considerations

This study was approved by the Ethics Committee of Iran University of Medical Sciences (IR.IUMS.REC.1399.659). Before participating in the study, all the participants were given sufficient explanation about the purpose and method of the study. In addition, a written informed consent was obtained from all the participants. The participants were also assured that the data was confidential and that they could leave the study at any time.

Results

The participants of this study were 12 educators (mean age = 39.33 years) and 14 students (mean age = 23.28 years). Other demographic characteristics of the participants are reported in Table 1. Based on the qualitative content analysis, 198 primary codes were extracted and then classified into 5 major categories and 12 subcategories based on their similarities and differences. The categories and subcategories are summarized in Table 2.

Fieldwork educators-related factors

The results of the study indicated that the most influential factors in fieldwork education are associated with educators. The personality traits of educators, the reluctance and disinterest of educators, different clinical training approaches of educators, and differences in clinical training skills of educators are the factors affecting the clinical training process in fieldwork education.

Personality traits of educators

Educators' low flexibility, low work commitment, inappropriate behaviors toward students in front of clients and their families, talking about irrelevant [unscientific] topics in fieldwork training, delay in fieldwork settings, the use of mobile phones, and other elements associated with the characteristics of educators are the factors that influence educators' training process and lead to students' dissatisfaction. "[...]. [...], instead of discussing scientific issues or sharing their experiences concerning their clients, some educators talk about other things" (Student 1).

"Most of the time, it was not important to our educator to teach us (the students) because he was checking his cell phone" (Student 3).

Reluctance and disinterest of educators

Lack of enthusiasm of educators for training students, the high workload of clinical training from educators' perspective, and other factors leading to educators' dissatisfaction with playing the role of educators in fieldwork education are among the main barriers negatively affecting the quality of fieldwork education. "[...] this job is overwhelming. That is why I do not like being an educator because it is a great burden and there is a heavy workload on me" (Educator 6).

Failure in educators' clinical teaching

The occasional review of students' logbooks and files by educators, educators' little attention to teaching students how to use evidence, inadequate instruction on the philosophy of occupational therapy in fieldwork training, educators' little faith in the top-down approach and

Table 1: Demographic characteristics of participants (Fieldwork educators=12, Students=14)										
		Age (year)				Clinical education experiences (year)			Gender	
		Minimum	Maximu	m 1	Mean (SD*)	Minimum	Maximum Me	an (SD)	Female	Male
Educator	(<i>n</i> =12)	27	57		39.33 (8.92)	1	28 11.	83 (8.85)	7	5
Student (n=14)	21	26		23.28 (1.26)	-	-	-	7	7
		Education level		Academic degree		Clinical education field				
	Graduat	ed Fieldwork	Fieldwork	PhD*.	MS (Ph.D.	Physical	Physical	Psychosoc	ial- Psycl	nosocial-
		Level I	Level II		student)	disabilities-adult	disabilities-pediatric	s adult	ped	liatrics
Educator	-	-	-	6	6	5	3	2		2
(<i>n</i> =12)										
Student	5	3	6	-	-	-	-	-		-
(<i>n</i> =14)										

SD: Standard Deviation, PhD: Philosophiae Doctor

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Table 2: Categories and Subcategories						
Categories: different barriers to Fieldwork Education	Subcategories					
Fieldwork educators	Failure in clinical teaching					
	Personality traits					
	Inadequate teaching skills					
	Reluctance and disinterest					
Fieldwork settings	Social environment					
	Physical environment					
Educational Planning	Failure in fieldwork education planning					
	Failure to implement the educational curriculum appropriately					
Students	Individual characteristics					
	Interest and willingness					
Educational regulation	Regulations of Occupational Therapy Departments					
	University regulations					

teamwork, students' evaluation based on clients' progress, and other factors related to educators' training approaches in fieldwork training can exert an influence on the clinical training process. "In fieldwork training, not all educators teach us how to use different evidence in clinical practice; supervisors should be trained and convinced to do so using evidence in clinical education" (Student 4).

Inadequate teaching skills of educators

The educators' lack of ability to transfer their knowledge and experience to students and the irrelevancy of their clinical occupation to the area they teach in clinical training are the most important barriers to clinical teaching in fieldwork education. "[...], our educator taught us the area related to children with physical disabilities, but had worked in the area of children's mentality, so he did not have enough information about the physical problems of children. [...]" (Student 9).

Fieldwork settings-related factors

Regarding the social environment of fieldwork education, there is a lack of workforce, ranging from service personnel (such as secretaries) to occupational therapists in hospitals and fieldwork centers, and there are a low variety and a small number of clients in some fieldwork centers. Concerning the physical environment of training centers, barriers related to space and training facilities in fieldwork centers impact fieldwork education. These barriers cause challenges for students and educators in the clinical training process.

Social environment

However, the low variety of clients referring to occupational therapy training centers, the low number of occupational therapy workforce at hospitals and education centers, and the absence of secretaries to receive clients in occupational therapy centers increase the workload of educators and students in fieldwork education. "We do not have a sufficient number of experts or occupational therapists at hospitals or centers affiliated with universities..., [...] we have a very low number of permanent workforce at hospitals [...]" (Educator 7).

Physical environment

The small space of fieldwork settings and the lack of equipment and facilities in some occupational therapy centers are also barriers to fieldwork education. "Occupational therapy settings of most hospitals are very small and there is a lack of facilities and equipment [...] (Educator 10).

Educational planning-related factors

Failure to implement the educational curriculum appropriately

If fieldwork educators fail to implement the educational curriculum appropriately, this may lead to students' dissatisfaction and decrease the quality of fieldwork education. In fieldwork training, it is necessary to lessen the gap between theory and practice to the extent possible so that students do not get the feeling that clinical training is the same as theoretical education. "Some points which should be taught in practice were provided theoretically in the classroom. We were repeatedly told that we were going to learn them in practice during fieldwork training, but when we started fieldwork, we were told that we should have known these points in advance [...]" (Student 11).

Failure in fieldwork planning

To take the most advantage of clinical training, plans should be made so that students experience maximum rotation among training centers, join multiple training centers, and gain the experience of dealing with numerous clients. "I could not join all hospital wards; I could not gain experiences from all the hospitals. My experience is not sufficient. I needed to see some other clients, but I could not" (Student 12).

Student-related factors

A majority of educators consider student-related factors to be the most important obstacles in the process of fieldwork education. Among them, students' individual characteristics and students' enthusiasm and interest in clinical practice are the major factors influencing the fieldwork education process.

Individual characteristics of students

The irregular attendance of students and the poor performance of some students in fieldwork training are among the factors challenging educators. "Some students join fieldwork just to pass the course and [...], he did not make any effort, and he was not an active person. [...]" (Educator 8).

Interest and willingness of students

Student's reluctance and lack of interest also demotivate educators and lessen their interest in training. "You know, I feel there has been a decline in students' interest in OT over the past few years. Generally, they did not like occupational therapy, [...] but it seems occupational therapy was not their real interest and choice" (Educator 5).

Educational regulation-related factors

Educational planning should be made in a way that not only are the educational goals of the education system met but also those involved in the system, especially educators are satisfied with the rules and regulations.

Regulations of occupational therapy departments

In the educational systems of most universities around the world, Ph.D. students, as educational assistants, are required to cooperate with their respective teaching departments in achieving the goals of clinical training.^[4] However, this may somewhat reduce their dissatisfaction with their obligatory role as an educator. "It seems those who are assigned to train us are forced to take this job [...]. In our fieldwork, our educator frankly says he does not like to be our educator, but the department forces him to do it" (Student 14).

Regulations of Universities

In Iran, fieldwork education mostly takes place in hospitals. The major policy of medical universities is to gain profits from hospitals. As occupational therapy does not make much money, authorities pay little attention to it. The lack of insurance coverage for occupational therapy in Iran and the lack of authorities' support for this profession have declined the employment of occupational therapists in hospitals and occupational therapy centers. "There is a point here, what is important to hospitals is to gain profits. Because compared to, for example, radiology, etc., occupational therapy does not make much money for them, [...] they say your ward [occupational therapy] is not a good source of income for us" (Educator 2).

Discussion

Clinical education is a key factor in linking theoretical

courses to practice and professionalism.[12] From the fieldwork educators' and students' points of view, the barriers to fieldwork education in occupational therapy in Iran include factors related to students, fieldwork educators, fieldwork settings, educational planning, and educational regulations. Today, attention to interdisciplinary interventions in rehabilitation has increased. Moreover, rehabilitation nursing is one of the important components in interdisciplinary rehabilitation and is closely related to the rehabilitation team, including occupational therapy. In countries that are developing their rehabilitation services such as Iran, there is a need to increase the level of education in interdisciplinary rehabilitation. Rehabilitation nursing knowledge also increases with a structured educational program related to rehabilitation, especially occupational therapy.^[13] Therefore, the findings of this article can be applied in the development of knowledge related to rehabilitation nursing education.

Numerous studies have identified educators as the most pivotal and significant component in fieldwork education in nursing and occupational therapy disciplines.^[4,5,7,14,15] Among the mentioned barriers, those associated with fieldwork educators are the most influential. Based on the standards of the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), the number of hours that occupational therapy students have to be active in fieldwork settings should be equal to or more than the number of hours they spend in theoretical courses.^[1] This indicates that educators play a very important role in preparing occupational therapy students for their profession, and educators have the most vital role in providing opportunities for students to put theories into practice and increasing students' knowledge, skills, and competence in clinical settings.

The other main finding of this study was that the fieldwork settings impact the fieldwork education process and cause challenges for students and educators. The WFOT suggests that students have fieldwork experiences in a wide variety of fieldwork settings rather than only hospitals.^[1] Sim *et al.* declared that the differences in multiple clinical training centers in developing countries, such as Iran, are a unique opportunity for students to gain a wide variety of clinical experience.^[16] They believe that the cultural, social, and economic differences of clients provide numerous learning opportunities for occupational therapy students.^[16]

Changes in some educational regulations by authorities and universities' greater attention to the provision of minimum facilities and equipment can partially resolve the problems related to fieldwork settings. Fieldwork educators are the main pillars in the development of educational planning and the enhancement of students' clinical experiences.^[4] The Department of Occupational Therapy can somehow make up for the lack of facilities and workforce in training centers. In their study, quoted by Saeedi *et al.*, Adib Haj Bagheri *et al.* found that educators deemed support structures in the education system as one of the most important components in improving clinical nursing education.^[15] Deficiencies in educational planning and the implementation of educational curriculums have been identified as important barriers to success in fieldwork education in several studies in nursing and occupational therapy.^[4,15,17] Kashani *et al.* found that empowering clinical educators in implementing educational curriculums before clinical training can positively impact the clinical education process of educators.^[18]

Rassouli *et al.*, in a review study on the challenges of clinical nursing education in Iran, found that the factors related to students, insufficient access to educators, the gap between clinical learning and practice, inappropriate treatment of medical staff by students and educators, insufficient facilities and equipment of the clinical environment, and unclear final evaluation process are the most affective on the clinical education process in Iranian nursing.^[19] The findings of this review study also showed that the barriers in the process of fieldwork education in occupational therapy and nursing are factors related to fieldwork educators, fieldwork settings, educational planning, students, and educational regulation.

The limitation of this study was that this study was qualitative and was performed among occupational therapists of Iran University of Medical Sciences, so its findings should be generalized with caution. The strength of this study was the diversity of the participants with different experiences in the field of occupational therapy fieldwork education. In addition, owing to the interdisciplinary training of rehabilitation, rehabilitation nurses can also use the findings of the study, but given that the study is qualitative research, caution should be exercised in this regard. It is suggested that a similar study be conducted with the participation of all members of the rehabilitation team, including rehabilitation nurses for the interdisciplinary applications of the findings in rehabilitation education.

Conclusion

The most significant factors affecting the quality of occupational therapy fieldwork education are fieldwork educators, students, fieldwork settings, educational planning, and educational regulations. Many of the identified factors are directly or indirectly related to educators. The findings of this article are also applicable in the development of knowledge related to rehabilitation nursing education. By developing strategies for educator empowerment in fieldwork education, we can increase the quality of fieldwork education more than ever before.

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Conflicts of interest

Nothing to declare.

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