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Occupational Therapy Students' Perception and Experience of an Effective Clinical Teacher

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ABSTRACT

Background: Clinical education provides an opportunity for students to acquire necessary competency in the clinical education wards (CEWs) through applying knowledge in a controlled clinical setting. Different Studies have reported that from the students' point of view, clinical teachers' competence and virtues are the most important factors for facilitating clinical education. This study was conducted to understand the viewpoints and experiences of second-year occupational therapy students of a competent clinical teacher.

Methods: In this study, a qualitative content analysis method was utilized. Focus groups were formed in two stages with the participation of five students. After focus group meetings and data analysis, individual interviews continued to acquire data saturation. The codes were extracted based on meaning units.

Results: Five hundred twenty-one open codes were extracted which were classified into 25 subcategories and three main categories. The interviewees enumerated many different characteristics for an effective clinical teacher.

Conclusion: From the perspective of second-year undergraduate OT students, an effective clinical teacher has specific personal and professional characteristics. Proper planning in OT departments consistent with the goals and content of theoretical as well as clinical courses, plus selecting the right people with sufficient clinical experience who are interested in different areas of OT may improve clinical teacher efficacy.

Introduction

Spencer defines clinical education as an educational process that is usually associated with patient involvement and mainly focuses on patients as well as their problems. During clinical teaching, students who are attending the clinic gradually acquire clinical skills and prepare for solving patient problems. The clinical education wards (CEW) encourages students to use creative thinking skills to solve problems and provides an opportunity for the student to transform their theoretical knowledge into the cognitive and motor skills necessary for patient care.

Indeed, the purpose of clinical teaching is to train clinical problem-solving skills and ultimately to acquire clinical competence [1, 2].

Clinical education in occupational therapy (OT) as with many clinical disciplines in the medical sciences, is a core component of undergraduate training programs enabling students to gain the necessary competence to enter professional life and to gain professionalism [3]. The process of clinical education includes variables whose understanding cause improvement of this process. Clinical education seems to be underestimated, despite its importance [4, 5].

Iranian OT curriculum has been approved by the World Federation of Occupational Therapists in 2006 [6] and requires students to have at least 1000 hours of clinical training during their undergraduate education. Currently,

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students must complete their sixth semester in one of the centers for children or adults with psychiatric disorders after completing theoretical and clinical observation courses. Clinical training is provided in rehabilitation centers, hospitals, or clinics under the supervision of universities [7].

A study by Rezai et al. in 2014 revealed that the concepts of clinical teaching, clinical education, educational environment, and educational curriculum are the main factors influencing the clinical education experience of OT students [4, 5]. Further, Taheri et al. found that the most important factor for facilitating clinical education in students' viewpoints was the positive characteristics of clinical teachers [8].

Given that few studies have been conducted in the field of OT clinical education in Iran and none of them have directly addressed the viewpoint of OT students of the factors influencing clinical teacher performance, the researchers intend to examine the viewpoint of OT students about an effective clinical teacher.

Methods

In this study, qualitative research, Grenheim's methodology, and content analysis method were used. Grenheim's qualitative content analysis is a type of research method used to subjectively interpret the content of textual data. Indeed, this method is an objective and systematic research method for describing and exploring a phenomenon [9]. Thus, it allows the researcher to test theoretical topics by analyzing information and to enhance his/her understanding of them [10].

For data collection, semi-structured, in-depth interviews were conducted in the focus group consisting of five second-year (fourth-semester) OT students of Shiraz University of Medical Sciences. The focus group was formed in two stages, one week apart, in a quiet class of the Faculty of Rehabilitation Sciences. Informed concent was obtained from the participants and ethical approval was granted by Shiraz University of Medical Sciences.

Interviews were conducted at the end of the second semester of the 2017-2018 academic year. At this time, students were completing the OT clinical observation course for children and adults with psychiatric disorders. For the purpose of this study, purposive typical sampling was done on a voluntary basis.

All students had the experience of attending two psychiatric clinics for children and adults for the clinical observation course. Individual interviews were conducted by the researcher for 65 minutes in the first session and 45 minutes in the second session in a classroom in the faculty of rehabilitation sciences of Shiraz University of Medical Sciences.

This study used an interview guide about the experience of second-year OT students in relation to effective clinical teaching in OT clinics. Study topics: 1. Students' beliefs, values, attitudes, knowledge, and experiences about effective clinical teaching in OT 2. Difficulties, problems, or barriers from their point of view. 3. Suggested expectations and solutions regarding the study subject.

The interviewee's expressions and comments were recorded with their permission through an audio recorder, after which the interviews were transcribed and typed.

To follow the research principles, colloquial phrases and sentences of the interviewees were written in a form of formal language. In this study, in order to follow ethical considerations, the participants were informed about the purpose of the project, and interviews were recorded with the verbal consent of the participants.

The following were introduced to the participants as important ethical points.

(A) The information obtained in the interviews will not be used without the participant's consent.

B) Participants will be assured that their statements will be confidential and will not be used against them.

(C) The interviewer will use interviewees' statements accurately without interpretation or judgment.

In order to maintain the validity and robustness of the study, research questions were asked in differernt ways to reduce the likelihood of participants providing false information.

Since the data collection method used in this study was in-depth interviewing, it was tried to perform interviews without bias in order to gain sufficient information, such that, if another researcher in the same situation or similar situation repeats the process, he would obtain similar responses. In the next stage, after two focus group sessions and data analysis, individual interviews with the same participants were used to complete the information. At each stage, after transcribing and typing the interviews, a qualitative analysis of the interview texts was performed immediately. Individual interviews continued until data saturation, such that no new codes and classes emerged and the previous categories were fully and accurately the result of the participants' deep insights and experiences.

Data were analyzed using MAXQDA10 software. In order to analyze and interpret the information obtained in this study, the initial codes were extracted after verbatim transcription and typing of the focus group interviews as well as individual interviews.

Manuscripts and initial codes were provided to the interviewees to ensure any misunderstandings, enhancing transparency, and to improve the validity of the research.

Some changes were made based on the participants' views. During the open coding step, the data were broken down into components, then compared to find similarities and differences, and afterward the main concepts in each line were coded. Codes were extracted from the meaning units derived from the description of the participants. The classification must be such that each item is in one category only. Next, the initial codes and classifications of the previous step were compared and similar codes merged conceptually to form subcategories, categories, and main themes.

To ensure the reliability of the data analysis, the researcher asked each participant about their opinion on whether the final and comprehensive description of the findings reflects their experience or not. If participants deleted or added content, it was included in the final text of the data. To ensure validity, the opinions of colleagues were also used (Expert Check). The data of the research were reviewed by two experts in qualitative research in the OT department.

Results

The participating students included four women and

one man. The mean age of the group was 21.2 years, with a standard deviation of 0.7. In the initial coding step, 521 open codes were extracted, which were categorized into 25 subcategories and three main categories. The final obtained concept was the influencing factors on the efficacy of clinical teacher's performance in the second-year clinical observation course. The classification results of this study are presented in Table 1.

The interviewees considered the effective clinical teacher in OT to be a person who has appropriate personal abilities including focusing on professional activity while ignoring personal problems, self-knowledge, power of expression, patience, motivation, and cheerfulness. Further, in the professional dimension of OT, he shall have internalized his profession as a part of his personality. He should also consider the need to pay attention to individual counseling in the psychiatric ward and the need for enlightenment regarding the capabilities of the OT major to help clients.

Appropriate communication to induce a sense of reliance, the need for the physical presence of the teacher and providing the necessary guidance, the need to facilitate the conditions for gaining experience matching theoretical information, attention to professional guidance before treatment, use of theoretical training in the clinical department, the need for sufficient effort to justify the role of OT in the psychiatric ward for other medical personnel, the need to pay attention to the physical factors of the educational environment, ability to guide and discover students' latent talents, encourage students to write goals and treatment plans, the need for adequate guidance and advice for students, permission to students to communicate with clients in the clinical observation course, as well as the need for evaluation of students capabilities are other important issues. Also, the interviewees cited no proper control over the selection of clinical teachers, the need for appropriate theoretical training in the years before clinical training, the need for accurate acquaintance with professional identity before the clinical course, plus lack of seriousness and explanation of clinical observation training program by the department as influential factors on the performance of the clinical teacher in OT clinics.

In this study, the main emphasis of second-year OT students was on "the need for adequate guidance and admonition of students" by the clinical teachers with 16 meaning units assigned to it. This sub-category claimed the most meaning units in the students' conversations to themselves.

The students stated that in some cases their learning from observing private clinics was much higher than that of newly graduated clinical teachers working at the university and trainee students one year ahead of themselves. Accordingly, student No. 1 stated, "When I go to private clinics I gain more up-to-date information". Student 5 stated, "We are becoming the same exactly. We learn everything by experience and do not know the philosophy of treatment." Student No. 1 said: "When the trainee tells me that the clinic is crowded, leave the clinic, since I do not see anything and the teacher does not tell me anything about it too and the trainees themselves do not have much specific information, I learn nothing. Besides, "If I go and stand outside, why should I come here for a clinical observation course?!"

The next highlighted topic was "the Need for enlightenment about the power of the OT major to help clients" with thirteen meaning units. Student 5 said: "I mean teacher's own inner experiences. For example, when we are talking to a mentally ill person, we understand that we can help and we have the feeling of helping others and get satisfied. If the external conditions are bad, I'll do what I can. It helps me, but if I don't know what I'm doing, I get involved in things like saying that OT is not a good name for our major and things like that. So I can't do my job well.

The next highlighted sub-category was "lack of proper control over the selection of clinical teachers" that has nine meaning units in the study. Student 1 stated, "Should a teacher have sufficient experience or not?!" Student number 3 said: "For example, if after graduation I go to the OT department and I want to be a teacher in the psychiatric ward, at least I should have worked in this field for a year or six months to get acquainted with the different kinds of psychiatric disorders." The students' discussions were mainly related to their request for not hiring recently graduated OT students to work as clinical teachers.

The next sub-category was the clinical teacher's "motivation and vitality" with seven meaning units assigned to it. Student number [5] stated that "one cannot always expect others to be energetic. A man may not be well one day, but not that he would not be well all the sessions he has clinical observations course with us.

The next highlighted sub-category with seven assigned meaning units included "lack of seriousness and outlining of the clinical observation curriculum by the OT department". Student No. 1 said: "After the end of a patient session, we should be able to talk to the patient for about 15 minutes.

The next highlighted sub-category with five meaning units devoted to it was, "the need for appropriate theoretical education in the years preceding clinical education". Student No. 2 commented: "Teachers must be knowledgeable and experienced so that the senior year students do not come and say that our major is not so much different from other majors. They probably don't know that important courses in our major start from semester five". This student statement indicated that the theoretical courses related to OT in pediatric and adult psychiatry wards are much less important to senior students compared to OT courses in physical disorders. That goes back to the lack of proper education in the early years about justifying students regarding these courses.

The next important category was "internalizing OT" with five meaning units. Student No. 1 mentioned, "Can you teach someone something unless you believe in it?" Other subcategories in this study claimed less meaning units to themselves and are presented in Table 1.

Discussion

In this study, the final obtained concept was the factors influencing the clinical teacher's performance in the second-year clinical observation course. Sub-categories of lack of proper control over the selection of clinical teachers, the need for appropriate theoretical training in the years preceding clinical education, the need to get acquainted with professional identity before the clinical

Table 1: Classification of data

Concept	Category	Sub-category	Meaning units
Factors affecting the effectiveness of clinical teachers' performance in clinical observation course	Clinical management and educational factors unrelated to CEWs	Lack of proper control over the selection of clinical teachers	Student No. 2: ...Unfortunately there is not very good control over the selection of teachers in the clinical setting Student No. 1: The teacher must have some experience of working with different kinds of patients and have complete clinical experience. The clinical setting is very different from theoretical classes. For example, I heard that the teacher who is teaching us has just been graduated. Student No. 4: It seems that some teachers are forced to teach. They do not teach with interest and dedication, or maybe they think they are wasting their time at the university. They never ask the students what you are doing with the patient right now.
		The need for appropriate theoretical education in the years preceding clinical education	Student No. 3: For example, when a teacher teaches a subject very carelessly and I think it's not important at all, but later in the clinic, I come across that subject, and I wonder I should have understood that subject and it was important. They don't ask us anything here [at class], but they ask us at the clinic and they want us to have information.
		The need for accurate acquaintance with professional identity before the clinical course	Student No. 3: Where's the difference between our major and other majors? In my opinion, the OT in Iran is not what is practiced in other parts of the world.
		Lack of the seriousness in explanation of the clinical observation course by the OT department	Student No. 5: We work more as a passive individual in the clinical observation course. We only memorize a set of specific treatment options for specific patients, there is not enough emphasis on education in the observation course
	Individual abilities of the clinical teacher	Focusing on professional activities, not personal problems	Student No. 1: The person who is my teacher should leave his personal problems away, when he enters the clinical setting. His personal problems shouldn't affect his performance as a teacher.
		Self-Knowledge	Student No. 2: Having to be a strong teacher means having self-knowledge. It means that when the teacher is doing his job, he can examine himself and his inner states, because all this is transferred to students automatically.
		Turn of expression	Student No. 5: Turn of expression affects the student.
		Patience	Student No. 3: The teacher should be patient with the student and patient.
		Motivation and alacrity	Student No. 3: It is very important to be a joyful teacher, not to be too tired in the morning and then not being in that mood at the clinic.
	Professional abilities of the clinical teacher	Internalizing OT	Student No. 5: A teacher should be able to extend his work to his life and transfer it to his student. Student number 2: He shall live with OT. Shall live with this major.
		The need for paying attention to individual counseling in the psychiatric ward	Student No. 2: For example, I had mastery over all the diseases which I had learned in psychology books, and as soon as I saw a patient I was able to figure out his problem. So I wanted to get involved, in addition to diagnosis, I wanted to implement my interventions too, but I'm sure this won't happen even later. Because as we go to the hospital as trainees, we'll just implement group therapy.
		The need for enlightenment in relation to the capabilities of the OT major to help clients	Student No. 2: Let the teacher give the student the understanding that your work is so important here that there is no time to engage in controversial discussions. It is the teacher's job to explain to the student where he is and what he came for. Perhaps some of the students, whether interns or clinical observers, think that their job is simply to do a series of activities that have no specific result. But for example, I feel that even though I am participating in a clinical observation course, I am doing important work and I am confident that the role of OT in the psychiatric ward is useful. For example, I should not see a patient's drawing in group therapy as a simple treatment, because I am aware that drawing which is considered a simple task from the point of view of a non-specialist, improves attention, concentration, manual skills, etc. Student 5: For example, we need to help other human beings, and that makes us feel good, and when I went to the clinic, my teacher pointed out that this helps me feel nice.
		Proper communication with inducing a sense of reliance	Student No. 2: Given that we as youth have emotional needs that need to be addressed. Teachers know this because of their experience. If they cannot attract students, the content will be boring. Student No. 5: The teacher should be able to communicate with a student scientifically and be a support for the student.

The necessity for the physical presence of the teacher and providing necessary guidance	Student No. 3: For example, my fellow majors in my university with one year ahead of me knew how to use a gaming device and its benefits, but they did not know the name of the device, meanwhile the teacher was in other rooms and did not visit us.
The necessity to facilitate the acquisition of experience in relation to theoretical information	Student No. 1: For example, we do not come to the clinic to seek new science, we complete our general knowledge here, for instance, we come to the clinic to use theoretical information, not to see that there is nothing new here, and to say, for example, that some method is curd, who uses it? Or that checklist is useless. So why did I read it? For example, the teacher says that we should have a profile for patients, but when I said in the clinic that I could see a patient profile, everyone laughed at me and made fun of me and said, "What is the patients' profile?
Paying attention to professional guidance before performing the treatment	Student No. 4: In my opinion, the teachers should check the activity before performing it, and things like "the activity was good" or "you should not have done it here" should be mentioned. They could have warned and checked these points before performing the activity.
Use of theoretical training in the clinical department	Student No. 4: I experienced this and that is why I mentioned it. In fact, looking for content, searching, and finding an article gives me a good sense of being a student, and the information we find ourselves is more enduring.
The need for sufficient effort to justify the role of occupational therapy in the psychiatric ward for other medical personnel	STUDENT No. 4: In fact, in many cases, professors remind us to believe that OT has an effective role in the psychological ward, but I would like to have a clinical teacher who can show their effectiveness to psychiatrists by strong performance and authority.
The need to pay attention to the physical factors of the learning environment	Student No. 2: One thing that I think may be relevant to clinical teachers is the environment in which the treatment takes place, as the environments are usually crowded and cluttered, and unattractive. This is true for both the mental and psychiatric wards.
Ability to guide and discover students' hidden talents	Student No. 4: Putting together my own experiences and the words of the teacher, I came to the conclusion that I can be effective in the psychiatric wards. So I am interested in this ward.
Encouraging students to write goals and treatment plans	Student No. 4: The teacher should ask the students to write down their goals at specific intervals, such as a week. It shows what are this week`s goals whereby students can look at the goals and find appropriate activities accordingly.
The need for adequate student guidance	Student No. 1: I expect the teacher to tell me the patient's problems during evaluation. For example, he should say that this child is aggressive because he throws his stuff, beats his mother, and talks back. He has to tell us that it is better to work on these problems. Then he let us treat the kid.
Allowing communication with clients in the clinical observation course	Student No. 1: There are different patients, for example, we have an autism spectrum disorder patient in the clinic, but I mean that after half an hour, the observer would be able to communicate with the child.
The need to assess the capabilities of clinical observation students	Student No. 2: The teacher should assess us to see if we know anything about disorders. An initial assessment is very important
Paying attention to the difference between international and Iranian developmental norms	Student No. 1: There are different stages of mental and motor development in different books and they are different from the developmental norms of children we see here, but the teacher emphasizes that it is similar to the books.

course, as well as lack of seriousness and designation of the clinical observations curriculum by OT department in terms of management and educational factors were extracted. Accoridngly, these external factors influenced the performance of an effective clinical teacher.

Dundee's approach or the "three circle model" was first recommended by Donald Harden in 1999. This approach clarifies the various duties of a clinical teacher in detail. The inner-circle refers to the main clinical teacher's duties. Seven key outcomes in the external circle include clinical skills, practical procedures, patient assessment, patient management, health promotion and disease prevention, communication, and medical information.

The middle circle put emphasizes how to do the right thing, plus teacher`s approach to clinical teaching, with understanding and using learning theories. The three implications of this section include "understanding basic social and clinical sciences and basic principles of learning", "appropriate attitude, ethical considerations, and legal responsibilities and proper decision making", and "reasonable and appropriate clinical judgment".

The external circle emphasizes the training of a professional to perform the job and refers to individual development through a professional approach to teaching in the clinical setting. The two implications here are "understanding the role of the persons who are participating in the health system" and "the desire for personal growth and development"[11]. The results of this study showed that, according to the model presented by Harden, OT students' expectations of an effective clinical teacher are consistent with all three of these circles.

The need to pay attention to individual counseling in the psychology ward, the need for the physical presence of the teacher and to provide guidance, the need to facilitate

the acquisition of appropriate theoretical information in relation to experience (linking theoretical and practical information), paying attention to professional guidance prior to treatment, use of theoretical training in the clinical setting, need to pay attention to physical factors in the teaching environment, encouraging students to write treatment goals, providing adequate guidance for the student, granting permission to communicate with clients in the clinical observation course, the necessity of having an assessment of the student's capabilities, as well as considering the difference between international and Iranian children developmental norms, fall in the inner circle.

On the other hand, focusing on professional activity and ignoring personal problems, self-knowledge, power of speech, patience, motivation, and vitality, internalizing OT principles, the need for enlightenment about the power of discipline to help clients, appropriate communication skill with a sense of dependability, the ability to guide and discover the hidden talents of the students lie in the middle circle.

There is also a need to apply sufficient effort to justify the role of OT in the psychiatric ward for other health care personnel. This lies in the outer circle.

Some of the findings of this study are in line with previous studies. The results of a quantitative study by Rad and his colleagues revealed that an effective clinical teacher from the perspective of nursing students is someone who shows professional competency including the ability to relate the theoretical information with practical ones plus fair student evaluation aling with the ability to transfer scientific content to students. The other priority was communication skills, including encouraging students, providing easier answers to questions, providing help for students, confidence, and trust in the student. There was also a relationship between the teacher qualification and his relationship with the student from the students' point of view. In this study, nursing students graded the highest score to a teacher who showed a passion for teaching and had self-control, cooperation, as well as patience in the field of personality traits [12].

Hollon et al. suggested that university teachers should integrate theoretical lessons with treatment programs and should adopt better ways of providing feedback to students [13]. A study by Hill et al. suggested that third-generation millennial OT students are interested in performing action than to watch. They want their expectations and responsibilities to be clear. They tend to work in teams and tend to have their own evaluation before receiving feedback. They think regular and consistent feedback would maximize their functional level [14, 15].

According to the study of Francis et al. based on the views of clinical teachers, an ideal clinical teacher has five important skills including feedback skills, non-judgment skills, professionalism (professionalism), transparency, and listening skills [16]. Some of these features such as professionalism and feedback skill were also mentioned by our participants.

According to the study of Roger and his colleagues based on the views of OT students, a clinical teacher is someone who provides challenges to the level of student capabilities. Such a clinical teacher pays respect to the interaction with students, facilities learning opportunities and experiences and encourages student autonomy and independence [17]. It seems that our participants think differently from students who participated in this study, and indeed our participants showed different priorities.

The results of a study by Rezai et al. indicated that students who participate in clinical observation course stated problems such as neglecting students, lack of teachers' attention, lack of adequate support from the clinical teacher, the role of early sessions of clinical experience, top-down behavior of the teacher, or over-intimacy, the need for proper supervision and feedback by the clinical teacher, feeling of abandonment in the clinic, lack of guidance from the teacher, lack of attention by clinical teachers to scientific and applied lectures in the clinic, and lack of proper structure in student evaluation in the clinical area have been important problems in the field of teacher competency and clinical education in their study [4, 5].

At present, OT departments in most universities in Iran are facing a shortage of teaching staff, especially in the field of clinical education. In order to meet these needs, they sometimes have to hire new graduates and use them for clinical training, which has created many problems for OT departments. It calls for the attention of the authorities in relation to an increase in the recruitment of faculty members in the field of OT to empower specialized and motivating forces for clinical education.

Proper planning in OT departments seems to be related to the goals as well as content of theoretical and clinical courses, selection of appropriate people with sufficient clinical experience and interest in different areas of OT, and teaching pre-clinical teaching principles. Controlling and supervising the work of clinical teachers, empowering clinical teachers in communication skills, acquainting them with the needs of third-millennium generation students, as well as strengthening interdisciplinary and teamwork with other rehabilitation and medical departments can be helpful in meeting the students' needs. Empowering teachers by engaging them in some programs such as problem-based learning curriculum or other programs may improve teacher`s efficacy [18, 19].

Some students in our study were in search for a role model. Their description of good clinical teachers fit in professionalism definition [20]. They were looking for virtues and professional obligations. A study similar to Costa Silva's study can better delineate these issues in Iranian OT students [21].

One of the limitations of this study was that we only collected the opinions of second-year students of OT. Given that students in the third and fourth years were not present in the study, it can influence students' overall view of effective clinical education. The study by Zad et al. showed that the students who were in the last semesters showed a more positive view toward their clinical teachers [12]. This highlights the need for thee presence of a senior student.

Thus, it is suggested that in future studies, third and fourth years' students' views and experiences should also be collected in order to obtain a more accurate and comprehensive perspective in relation to an effective clinical teacher.

Conclusion

An effective clinical teacher has specific personal

and professional characteristics from the perspective of second-year undergraduate OT students. Proper planning in OT departments, in addition to selecting the right people with sufficient clinical experience who are interested in different areas of OT may improve clinical teacher efficacy.

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