

# Research Paper: Problems of Clinical Education From the Viewpoints of the Physiotherapy Students in Iran Universities



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## ABSTRACT

**Introduction:** Evaluating the educational programs in various Medical Science disciplines is a highly sensitive matter and of great importance. Physiotherapy (PT) is an important field of Rehabilitation Sciences, which requires distinguished scientific and professional skills. One of the practical ways to assess the quality of clinical education in PT is to study the students' perspective in this field, because they are the main target audience for education. Therefore, this study was conducted to determine the problems in clinical training of PT students, from the medical students' perspective, in different universities of Tehran City.

**Materials and Methods:** The present study was conducted using a qualitative content analysis approach, through individual interviews with 13 PT undergraduate students in Tehran. They were recruited through targeted sampling with maximum variation.

**Results:** After analyzing the obtained data, a total of 4 themes were derived, which included characteristics of clinical supervision, training schedules and training, setting of clinical training, and general characteristics of the learners. Furthermore, 22 subthemes were obtained; some of them included lack of clinical teaching experience among the faculty members, no supervision in clinical teaching, for example, theory and clinical courses being held in one day, short duration of clinical teaching, inappropriate facilities, and the disorganisation and laziness of some students.

**Conclusion:** Perhaps changing the clinical teaching methods, employing experienced and effective instructors, taking courses more seriously by students, establishing appropriate facilities for clinical training, supervision of the PT department over the performance of the teachers and the events during internships, and increasing the duration of theory and clinical courses, can all be effective in improving the quality of clinical training.

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## 1. Introduction

Clinical training is an important part of the Physiotherapy (PT) discipline. No experience is as important for the students as clinical training [1]. In fact, clinical training is where students learn how to integrate theory with practical work [2]. The better the clinical training is, the better the knowledge and experience will be transferred to the students, which will result in more competent trainees. Students are considered to be the main customers of the higher Education System and play a key role in identifying the clinical teaching problems because of their direct and immediate interaction with the clinical training process. Obviously the clinical training program will be more effective if we are aware of and overcome the problems the students face in clinical practice [3, 4]. In contrast, program developers who are not aware of the current status of clinical internship education waste economic resources, degrade the quality of graduate students, and reduce the efficiency and effectiveness of the education system. As a result, the quality of the health care services will decline [5]. In previous studies, those problems were mentioned in terms of management, training, motivation, personnel, and environment [3, 5-10]. Due to cultural developments and organisational policies, it is necessary to periodically assess the status of clinical training and identify their strengths and weaknesses, thereby improving its quality. This study aimed to view the problems of clinical training from the perspective of undergraduate PT students.

## 2. Materials and Methods

We used content analysis method (contractual type) in this qualitative study. Since all the clinical practice courses were offered during the last two years of the undergraduate program, study interviews were held with senior students. Finally, 13 undergraduate PT students who were in their last year of their studies, were enrolled in the study. They were studying at Rehabilitation Schools of Iran University of Medical Sciences, University of Tehran, Shahid Beheshti University, and University of Social Welfare and Rehabilitation Sciences. Students would be enrolled in the study if they passed at least 6 credits, out of a total of 24 clinical credits. They were selected for the interviews by purposeful sampling method, with maximum variation in terms of their university, gender, term, and residence (away from family or with family). Before the study, the ethics code was received (IR.IUMS.REC 1395.9311340008) and the interview process began after the necessary arrangements

were made, including setting an appropriate place for the interview (quiet place with good lighting) and taking consent forms from the participants.

Initially, two interviews were conducted, as a trial run, to complete the questionnaire. Then, the interview began with a couple of open questions. During the interview, we attempted to record participant's voice and note their body language, facial expressions, non-verbal reactions, pauses, and statements emphasised by them. During the interview, closed questions with "yes" and "no" answers were not used. In case of ambiguity, the researcher further asked the interviewee to provide further explanations. Since the collection of data was through semi-structured interviews, the entire conversation was recorded and transcribed. Next, the whole interviews were analyzed and their important concepts were extracted and encrypted. Conducting interviews and collecting data continued until a new code was added to the previous codes. To prevent interference with interviewees' perspectives and paradigms, in addition to bracketing, peer check and member check were performed. In this regard, two co-authors and all participants confirmed the validity of the findings. To validate the data, the triangulation method was used in which one faculty member and one graduate student, with 2 years of work experience, were both being interviewed. The data analysis from these two interviews confirmed the codes received from previous interviews. Each interview lasted between 25 and 53 minutes.

## 3. Results

After analyzing the data, 22 subthemes were obtained from the problems encountered during clinical training. By classifying subthemes based on their properties, a total of 4 themes were obtained: characteristics of the clinical training supervisor, problems due to the Educational System, the setting of the clinical training, and general characteristics of the students.

### Problems regarding the characteristics of the clinical training supervisor

The participants blamed their clinical training supervisor for a number of the training problems, which included disregarding students' opinions in patient selection and their initial clinical evaluation, overlooking their knowledge and skills, humiliating the student in front of others, disorganised attendance in clinical training settings, no supervision and control over the students' treatment plan, teaching topics unrelated to clinical training, and unfair student evaluation.

One of the participants said, “In terms of evaluation, if someone does not do anything and just comes in and leaves on time, and is not late, he or she will receive a passing grade. They do not really care if the person really has gained the necessary knowledge. Well, this really is a problem. A person with a strong background and knowledgeable receives a grade of 20 but someone who is much weaker gets 18! Well, there should be quite a difference between these two. This makes the student who studies a lot and is very active, loses incentive. They may think that if someone who is not working as hard as they are is receiving the same grade, then why should they try so hard to obtain the same grade.”

### Problems of the educational system

Some of the other problems we found during this study were related to the very Educational System, which included inadequate supervision of the Physical Therapy Department over the clinical teaching and the events occurring during the clinical training program, disregarding the objections of students, holding theoretical courses and clinical training both in one day, not using experienced instructors in clinical training, repeated rotations, non-specialised clinical centres, and too short clinical training courses.

One participant said, “At the health care center, the person who was in charge of the students was an MS student, with no experience in teaching, but that was not just the case. He treated us disrespectfully, as if he was better than us. The way he asked questions made students nervous and we were not able to answer the questions even if we did know the answers.”

Another participant said, “One of the main parts of our discipline requires to learn many manual techniques and exercise therapies. Unfortunately, we haven’t had the opportunity to study all these during the four years of University. So we end up having to register for courses outside university, which is very costly.”

### Problems with the setting of clinical training

The subthemes related to clinical setting included problems such as inappropriate treating the students of the staff within the clinical setting, lack of amenities and treatment facilities.

With regard to this issue, one of the participants said, “For example, in the hospital I was training at, I would have to wait for half an hour till the electrotherapy modalities become available to use for my patient. In this

way, both the patient and I would get frustrated. I think that one of the reasons why we could not attend as many patients during the day is due to a lack of facilities like US, IR, and so on.”

### Problems related to general characteristic of the learners

Laziness, students’ irregular attendance in clinical training settings, and having low self-esteem, were all problems with regard to general characteristic of the students. One student said, “One of the problems that I myself encountered many times was the issue of self-esteem. It really bothered and prevented me to explain the subject matter, the way I could explain to my teachers. Moreover, I usually did not ask my questions or mention my problems during my internships because of this issue.”

## 4. Discussion

In this study, we found that the problems and obstacles faced by PT students during their clinical training are due to factors such as individual characteristics of clinical training supervisors, Educational System, clinical training setting, and individual characteristics of the students. Studies have shown that the director(s) of the clinical training program play(s) a key role in achieving the objectives of the educational programs (students’ acquiring experience in clinical training) [8, 11]. The clinical instructors should certainly know clinical training skills, such as clinical reasoning skills, critical thinking, effective communication, and effectively transferring their knowledge to the interns. Moreover, in terms of personality, they must be disciplined, flexible, and accessible [8, 12-14]. If the directors of the clinical training program do not involve the students in the decision-making process and treatment course of patients, the sense of autonomy and self-efficacy of the students will be undermined [15, 16]. The inability or unwillingness of the clinical training supervisor in sharing their knowledge will significantly impact the clinical training program [3, 17]. During the process of teaching and learning, students and staff come in close contact with one another. Undoubtedly, their loose interaction will have a negative impact on student’s performance, reduce their self-esteem, make them afraid of encountering a patient, and even create a negative relationship between the student and the patient. Studies have shown that the teachers’ unawareness of the impact of their behaviour on the students’ morale can disturb their rapport and produce stress among learners [18]. The permanent presence of the clinical training supervisor, next to the learner, has had the greatest impact on the quality of clinical training education [4, 9]. It should be

acknowledged that in Iran's educational system, all trainees depend on their faculty members for learning, and cannot solve their clinical problems on their own.

The problem is that our educational system is centred around the teacher to teach the content and ignore the students' ability for research and problem solving [19]. Nowadays, by changing the traditional teaching methods to modern ones, such as team-based learning and problem-based learning, it has become possible for students to become more self-reliant and learn the techniques for solving clinical problems at university, despite the ever-increasing amount of knowledge and the constant change of methods and materials. Additionally, the students become more aware of their role the active members of the health care group and learn how to continue the process of being a lifelong learner. In more recent teaching approaches, the instructor, as a guide or mentor, teaches the trainee the way in which they themselves can access information [20-22]. The other clinical problem students reported was related to the faculty's poor evaluations. In fact, the current educational system is unable to distinguish the weak students from the strong ones. This issue results in the hard-working students to become disappointed [23]. This can be because of their ignorance in clinical evaluation or their assessment of knowledge rather than skills. It seems that providing education records, informing about the learning objectives, and detailed recordings of student activities will make evaluations much more effective [24].

The second category of problems in clinical training is associated with organizing and scheduling the training programs implemented by the department. The students acknowledged that the PT department had insufficient supervision over the implementation of training programs and their objectives [5]. The students' criticisms and opinions are ignored, and sometimes graduate students, without appropriate trainings, are used as supervisors in clinical training courses. Perhaps using the untrained staff with inadequate supervision is due to the shortage of faculty members that result in no supervision over the activities of the department; not having an able person to design a structured clinical training; not monitoring the quality of the training program, organisational policies, and budget constraints. In order for students to obtain enough experiences in PT services for a wide range of disorders, it is necessary to reinforce client-centered approach, accountability, referral-based therapies; and develop teamwork. The students complained that they were not able to acquire the necessary PT skills during the course of study at the university. Because the aim of the training courses is to keep the

graduate students up-to-date to treat their patients with new and supplementary courses, they had to take certain courses after their graduation. It seems that students have not completely understood the concept of the training courses and should be made more aware of this. On the other hand, the conversion of undergraduate PT to a postgraduate degree can compensate for the shortage of undergraduate PT training programs.

The third category of clinical training problems is related to the educational setting. The experience of trainees is partly dependent on environmental factors. The learners' complaints because of the inadequate interaction with staff and colleagues and lack of training facilities may be attributed to the unfair distribution of training spaces due to medical paternalism and poor financial resources [2, 8, 25-27].

The fourth category is related to the personal traits of the students, which prevents their academic and clinical qualifications. Examples include laziness, lack of motivation or curiosity, and irresponsibility. The fact is that the best training conditions for unmotivated and irresponsible learners will not result in realization of the educational and training objectives. By making students aware of their professional mission and exposing their hidden motives for pursuing higher education, it would become possible to reduce the irreparable damage they cause to the class of PT among the general public. Studies have shown that lack of self-esteem causes depression and anxiety in students. This in turn affects their clinical performance. Irregular attendance of students in training centres not only impedes their acquiring knowledge and skills, but also in some cases disrupts other students' training and learning [6, 7, 9, 28].

In sum, the obstacles in having a successful clinical training were unqualified clinical instructors, who prevent students from contributing in clinical decision making; student's dependence on their instructors and teachers as the lone source of knowledge and skill; incoherent clinical training program; using postgraduate students as clinical training supervisors; insufficient facilities at clinical centres; no motivation among students and poor participation of learners in teaching-learning process.

## Ethical Considerations

### Compliance with ethical guideline

Before the study, the ethics code was received (IR.IUMS.REC 1395.9311340008) and the interview process began after the necessary arrangements were made,

including setting an appropriate place for the interview (quiet place with good lighting) and taking consent forms from the participants.

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### Conflict of interest

There is no conflict of interest to declare.

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