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Problems encountered with in the physiotherapy and rehabilitation course and solution recommendations ¹

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It was designed in the case evaluation pattern included in the qualitative research tradition in order to determine the problems which the scholars serving in the physiotherapy and rehabilitation major program encounters in their courses and the solution recommendations related with these problems. Consisting the study group of in the scholars actively lecturing in Physiotherapy (PT) courses is very important with respect to determine the problems encountered with in the application process, not the problems possible to encountered with in the courses in the scope of physiotherapy and rehabilitation (PTR) program. Accordingly, the data related with the problems and the solution recommendations for these problems, which are experienced during this process by the lecturers, was taken through an open-ended questionnaire. The problems encountered by the lecturers serving in the PTR program, who participated in the research, in their classes and the solution recommendations related with these problems were determined by analyzing the answers they gave to the open-ended questions. It was found out as a result of the analyses made that the lecturers deal with the problems related with the courses in two subdimensions as the problems for the interaction in the learning environment and the problems experienced for the PT curriculum and contents and that they offer solution recommendations accordingly.

Keywords: physiotherapy and rehabilitation, physiotherapist training, learning and teaching environment, learning and teaching process, problems

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Introduction

Physiotherapy and rehabilitation is a science discipline where the approaches and methods, based on proofs, are applied, the communication with the patients/clients is at the high level and which usually requires close contact in order to reenable the independency of the person and to increase his/her quality of life for physical incapability and functional losses, developed due to various reasons (Erel et al., 2019). The physiotherapy and rehabilitation (PTR) undergraduate program where the graduates of which are intitled for the physiotherapist title after the education process lasting at least 4 years in the body of a faculty or academy contains clinical applications in addition to the theoretical and application courses (Algun, 2013; Gürses, Alemdaroğlu, & Tanrıverdi, 2014). Physiotherapy education has a curriculum consisting of mainly theory (usually included in the university) and applications (usually outside the university) with its structure combining theoretical information and applications based on proof in the education process (Røe et al., 2019). At this point, the academic and clinic education environments indicate differences related with the education of the student. In spite of these differences, the academic and clinical environment should ensure mutual communication in order for fulfilling the curriculum requirements (Jensen, & Mostrom, 2013).

The rapid increase in the number of physiotherapy and rehabilitation programs has brought infrastructure and educational programs attendantly. The number of lecturers, from the occupation, and insufficiencies in material, environment, equipment and clinical environment required for the practical application as well as the living area conditions are mentioned frequently among the basic problems related with the education in the researches made related with the topic (Algun, 2013; Erden, Cavlak, & Turhan, 2017; Gürses, Alemdaroğlu, & Tanrıverdi, 2014; Karaali, Ilgın, Özcan, & Seçer, 2020; Kınıklı, Erden, Cavlak, & Erden, 2017). In addition to all these, the problems on evaluation of the harmony of educational programs and outputs of the learning, which are important indicator of the quality in the education, are frequently mentioned (Algun, 2013; Gürses, Alemdaroğlu, & Tanrıverdi, 2014; Karaali, Ilgın, Özcan, & Seçer, 2021). At this point, the need of the students for gaining competences intended for information, skills and attitude related with the education process via Physiotherapy and Rehabilitation National Core Education Program (FTRÇEP), which is an important part of the accreditation activities in PTR education field, is emphasized. It is expected that these competences are made gained in the cognitive, affective and psychomotor areas again in the core education program prepared (FTRÇEP, 2016). At this point, it is required that the education environment is required to be designed well and it supports the process for ensuring these achievements. The education environment which depends on factors related with physical, cognitive, cultural, psychosocial, emotion, and motivation provides the platform where the learning activity between teacher and students takes place (Imanipour, et al., 2015).

The instructors always try to create a better education environment in the application. The instructors who encounter with problems within this process try to generate instant solutions to these problems. However, determining these problems and generating permanent solutions would positively contribute to obtain requested learning outputs. Arranging learning and teaching processes belonging to the programs such as PT which especially has theoretical and application courses and making it healthier by managing them have much more critical importance. For this, the priority, it is required to determine the present situation and to make the necessary precautions for the negative situations, which are encountered with, permanent. At this point, it is required to determine the problems related with the process of applying the courses included in the program of the PT department area and to reflect the recommendations for the solution of these problems to the application. For this, it is required to make researches on the lecturers who currently actively providing the lectures in question. By this way, the problems experienced in the process and the requirements can be found out and correct strategies can be developed for teaching these courses more effectively in the future. In this research it is targeted to determine the problems which the lecturers serving in the PTR major program experience in their courses and the solution recommendations related with these problems. According to the target of the research, the answers to the questions:

- a) What are the problems they experience and
- b) What are their solution recommendations related with the problems they encounter with, of the lecturers were looked for.

Method

There are the descriptions on the model of the research, study group, data collection, and data analysis in this chapter.

Model of the research

The research was designed in the case evaluation pattern included in the qualitative research tradition in order to determine the problems which the scholars serving in the physiotherapy and rehabilitation major program encounters in their courses and the solution recommendations related with these problems. Qualitative research is an approach in the social sciences researches, using an inductive approach, emphasizing defining data collection technique in the natural environments and point of view of the research subjects (Bogdan, & Biklen, 2006). Qualitative research is a research mothed where qualitative data collection methods, such as observation, interview and document analysis and it is targeted to reveal the cases in their natural environment in a realistic and holistic way. Case evaluation tries to present the existing application examples with the question how (Yıldırım, & Şimşek, 2008).

Study group

The study group of the research consists of the lecturers currently teaching area courses at undergraduate and postgraduate level in PTR program.

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Gender	f	%
Female	6	54.5
Male	5	45.5
Service years		
<10	2	18.2
11-15	5	45.4
15+	4	36.4
Total	77	100

Table 1. Demographic characteristics of the teachers participating in the research

As it is detailed in the Table 2, most of the lecturers (81.8%) participating in the research has an experience more than 10 years in their professional lives.

Collecting and analyzing data

At the data collection stage, first of all, the lecturers participating in the research were informed about the target of the research. Then, the two open ended research questions:

- a) "what are the problems experienced and
- b) what are your solution recommendations related with the problems experienced in the physiotherapy and rehabilitation major courses?"

were given to the students and teachers to be answered in written according to the purpose of the research. By this way, it was enabled that the lecturers state their opinions freely and in detail.

Inductive coding technique, frequency analysis and descriptive content analysis techniques were used in the stage of analysis of the data obtained from the answers which the research participants gave to the open-ended questions. With the inductive coding technique, the notions underlying the data obtained and the relationships between these notions were revealed (Yıldırım, & Şimşek, 2008). With the frequency analysis used in the research, the quantitative appearance frequency of the units was revealed and the intensity and importance of a certain factor was determined (Tayşancıl, & Aslan, 2001). Accordingly, in order to state the frequency of the opinions of the lecturers $(f_e, \%_e)$ participating in the research for the problems experienced and the solution recommendations, the frequency (f) and percentage (%) values were shown comparatively. By this way, the data reliability was increased, bias was decreased and comparison between data was obtained by digitalizing the qualitative data (Yıldırım, & Simsek, 2008). The data obtained via descriptive content analysis used in the research was summarized according to the themes determined beforehand and the results obtained were interpreted in the framework of cause-effect relationships (Yıldırım, & Şimşek, 2008). During data analysis, two researchers thematized the data separately, the similar themes were accepted and interpreted. Besides, the research questions were supported by making direct citations from the interview texts in places where it is considered as necessary. Persuasiveness was tried to be ensured by giving some of the data obtained in the research as it is (Wolcott, 1990). The direct citations from the lecturers, the lecturers were coded as "e+number" for the lecturers for not stating identity in the framework of the research ethics.

Findings and interpretations

The problems which the lecturers encounter with who serve in the PTR program and participated in the research with in their classes and their solution recommendations related with these problems were determined by analyzing the answers given to open-ended questions. As a result of the analyses made, it was determined that the lecturers deal with the problems of the lecturers oriented for the courses in two subdimensions as problems for the interaction in the learning environment and PT class program and contents and they offer solution recommendations accordingly.

In this chapter, together with the problems which the lecturers experienced in the PT learning-teaching process depending on their own statements, and the solution recommendations for these problems were evaluated, interpreted and assessed according to the findings obtained in the literature. Considering the problems stated for the problems experienced in the process of teaching the courses included in the PTR teaching program in general, it is seen that one problem may cause that other problems emerge too. The problems determined accordingly and the solution recommendations against these problems are presented in titles below.

1. The problems experienced for interaction in the learning-teaching process and the solution recommendations related with these problems:

The problems which the lecturers experienced related with the interaction in the learning-teaching process in PT education are presented in the Table 2.

	f	%
The class size is excessive	11	100
Unnecessarily technology usage in the class (mobile telephone usage)	6	54.5
Indifference against courses	5	45.5

Table 2. The problems experienced for the interactions in the learning-teaching process

It was found out that it is considered that the classrooms are crowded is the most important reason for the problems related with interaction it the class environment and all lecturers participating in the research have a consensus on this topic. Related with this situation K9 made a statement as "Crowded classrooms is a problem and this situation makes communication with the students hard too" and stated that classrooms being crowded is the basic source of the problem related with the interaction. Related with the problem again K9, with his statement as "crowded classrooms is a problem and this situation makes communication with the students during lecture hard", emphasized again crowded classrooms and pointed out the inadequacy of the physical environment, the other problem, and the need that the classrooms being larger.

One of the factors which a great majority (54.5%) of the lecturer participating in the research stated as a problem related with the interaction in the class environment is that the students pay attention to their mobile phones during lecture. Especially misusing the technology could cause that the students drift from the lecture and in this case, the study environment in the class can be negatively affected. In this framework, K3 states the problem he encounters in the classroom as "... when teaching in the class, some students pay attention to their phones and I have to warn them. However, after some time they continue paying attention to phone again". Again, a similar problem related with the problem was referred as "... the students paying attention to their phones can't focus on the lecture as well as they distract me..." by K1 and remarked the focusing problem in student of this situation. Again K1, in his statement, emphasized that this situation may have negative impact on the motivation of the lecturer during course narration and stated that this attitude indicated in the classroom can negatively affect the lecturer too, not only the student.

inattentive behavior of students against lectures (45.5%) emerges as another problem which the lecturers refer related with the interaction in the class environment. Related with the topic, K3 included the statement "... they are inattentive against the courses. The main reason for this is the unemployment after graduation..." and stated that the inattentiveness of the students is caused by the concerns for their job security in the future. At this point, the need is emerged to take permanent precautions for eliminating the work concerns of the students for the future, which is considered as one of the basic reasons that the students who are inattentive to the lecture are problem. Hence, align with the number of PT programs increasing every day, the number of students is increasing. At this point employing graduated students becomes harder too. This situation reveals the requirement that the number of students placed to PT programs is determined based on the needs.

2. The problems experienced related with the curriculum and its contents in the learning-teaching process and the solution recommendations related with these problems

The problems encountered with the lecturers in PT education related with the curriculum and its contents are presented in the Table 3.

	f	%
Intense content	9	81.8
Lack of interactive equipment and materials	6	54.5
Courses requiring high level of learning skills	5	45.5
Not having repetition means (applied courses)	3	27.3

Table 3. Problems experienced related with PT curriculum and its contents

According to the findings obtained from the research, it was found out that one other problem of the PT major lecturers is related with PT curriculum and its contents. It was found out that related with this topic, a great majority of the lecturers emphasized the intensity of the course contents (81.8%). For the related problem, K2 stated the current situation and his problem related with time against this

situation as "course contents are very intense and time is not enough". Again K1, with his statement that "contents are intense and the students get bored against this situation", stated that the intensity of the contents is an effective factor in the boredom of the students.

A great majority (54.5%) of the lecturers participating in the research remarked the lack of interactive material that can support the courses in addition to the course contents. At this point the statement of K5 that "... course contents is very intense and interactive environments which enable repetition by the students at home should be developed" indicates that it is required to develop alternative materials for the students in the solution of this situation.

The situations of intensity of the courses requiring high level of learning skills (45.5%) and especially not having means for repeating the applied courses (27.3%) emerge as the problems frequently stated by again the lecturers of PT major. Related with the subject, the problem described as "the courses have very intense content and require high level skills" by K6 was stated as "... students have to repeat the courses but only the theoretical repetition is inadequate" by K7. These statements of the lecturers indicate that the problems encountered with PT curriculum and its contents are the problems connected with each other. For the solution of this problem, the requirement of supporting out-of-school studies of the students and especially the requirement of developing interactive materials consistent with the course contents has become one of the factors frequently emphasized by the lecturers.

Conclusion and recommendations

In this research it is targeted to determine the problems which the lecturers serving in PT program encounter with and the solution recommendations related with these problems. The research performed with lecturers currently teaching in the undergraduate and postgraduate major courses in PTR program was designed in the case evaluation pattern, included in the qualitative research tradition. Consisting of the study group only with the lecturers teaching actively PT courses is not only important for determining the problems possibly encountered with in the courses in the scope of PTR program, but also the problems encountered with in the application process. Accordingly, the data related with problems encountered with the lecturers and their solution recommendations for these problems through open-ended questionnaire were taken. At the stage of analyzing the data obtained, inductive coding technique, frequency analysis and descriptive content analysis technique were used. At this stage of the research, two researcher thematized the data separately and themes which are similar were accepted and interpreted. Besides, where it is considered necessary in the research, the research problems were supported by directly citing from the interview texts.

The problems which the lecturers serving in PT program, participating in the research, encounter with in their classrooms and their solution recommendations related with these problems were determined by analyzing the answers they give to the open-ended questions. As a result of the analyses made, it was found out that the lecturers deal with the problems related with the courses in two subdimensions as the problems related with the interaction in the learning environment and the problems encountered with the PT curriculum and its contents and offer solutions accordingly. As a result of the analysis of the data taken from the PT major lecturers, it was found out that the classrooms being crowded is seen as the most important reason of the problems related with the interaction in the classroom and all lecturers participating in the research have consensus on this topic. At this point the lecturers state that especially classrooms being crowded can affect interaction negatively in teaching and together with improving physical environments, larger classrooms can be a solution, even if partially. Another problem related with interaction, unnecessary technology usage, especially mobile phones, by the students during lecture causes focusing problem in the student as well as causes that the lecturer is negatively affected when lecturing. It is seen at this point that the lecturers resort to warn the students and this situation is a short term solution. It is seen that another negativity related with interaction is caused by inattentive behavior of the students against lectures. As the reason for this negation, it is seen that the lecturers show indirect factors as source, different from the other negations. As the most important ones of them, the concerns of the students for the future and their concern for finding job in their profession are shown.

According to the findings obtained from the research, it was found out that one other problem of PT major lecturer is for the PT curriculum and its contents. It was found out that related with this topic, a great majority of the lecturer remarked the intensity of the course contents. This situation, qualified as a problem by the lecturers is seem as related with the other problems, the other problems related with the curriculum and course contents. Hence, the lecturers emphasized the lack of interactive material that can support this intense course contents and informed this situation as a problem. Again, in addition to the intense content, the courses requiring high level of learning skills being predominant and not having means for repetition especially in the application courses emerges as the problems stated frequently by the PT major lecturers. For the solution of this problem, the necessity of supporting the students' out-of-school studies and especially developing interactive materials consisting with the course contents became one of the factors frequently emphasized by the lecturers.

One of the most important components in the efficient health sciences education curriculum is the education environment and it reflect the quality of the education (Karim, et al., 2015). In physiotherapy education, it is required to deal with the curriculum topic as a whole for improving the general skills and qualities of the students. In order that the process being efficient, integration of education and learning activities at the learner and teacher level increases the quality of the education. The positive sides of the social and psychological learning environment and the requested learning results are positively related. In other words, a better education environment brings better education results (Rotthoff, 2011). At this point, evaluating the learning and teaching processes belonging to programs such as especially PT which has theoretical and practical courses and making them healthier would contribute for the learning outputs becoming at the requested level. Together with this situation that is also targeted in this research performed, the present problems were found and solutions were developed. According to the findings obtained, it is seen that the opinion comes forward that integrating especially the technology and these technologies to the education environment would contribute positively to the process. The recent developments in the technology and the integration of these development in the education design has caused mass individualization where personalized education is offered to big learning groups simultaneously (Lee, & Park, 2008). At this point, it seems possible to say especially generating technology-based solutions would be beneficial for solving the problems experienced especially for the PT curriculum and its contents. At this point, it is recommended to develop education materials where the students can use every time and everywhere and to develop individualized learning environments.

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