



RESEARCH ARTICLE

The educational needs assessment of curriculum of rehabilitation management: A Qualitative Study

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Abstract

Introduction: Currently, the students' perspectives about different aspects of education in educational institutions are being analyzed worldwide. So, determining their perception and expectations of the quality of educational services can provide the educational planners with valuable information for promotion of educational services. This study was carried out to identify the educational needs of the master students and graduates of rehabilitation management.

Materials and Methods: This qualitative content analysis was conducted on 18 students and graduates of rehabilitation management using a semi-structured interview. The obtained data were analyzed through content analysis.

Results: After verbatim transcription of the interviews and encoding the data, the related codes derived from the students' viewpoints were classified into six categories, including concordance of units, entry qualifications and job status, trainer's competence, efficient trainee, revision of teaching methods and quality assurance.

Conclusions: The results indicated that participants believed compatibility of courses in terms of content, syllabus and coefficient of units, and inadequacy of management units were due to changes in curriculum. Further, the participants contended teachers play a pivotal role in learning. The students and graduates were dissatisfied with poor quality of education and considered the necessity of interview and a two-phase admission policy. To this end, it is necessary to revise the student's admission process and curriculum of rehabilitation management program.

Keywords: Educational need assessment, rehabilitation management, qualitative.

Introduction

A significant portion of economic, social, industrial and political development of every nation is due to scientific and cultural advancements in the society; that is why education, in general, and higher education, in particular, have prevailed beyond the borders and geographical regions and overshadowed even many international policies [1]. Meanwhile, universities, as major subsystems of higher education system, play a pivotal role in the development trend of a country [2]. Currently, the students' perspectives about all aspects of education presented at educational institutions are being analyzed around the world, and taken into account as an essential factor in quality monitoring at universities. Students are the main customers of universities, and evaluation of their perceptions and expectations of the quality of education can provide the educational planners with a worthwhile information [3]. Accordingly, the main concern of needs assessment is determining what has to be taught to students at university [4]. Needs assessment is a process of collecting and analyzing data, out of which the needs of individuals, groups and societies are identified, and

the most fundamental step in formulation and administration of educational programs is accurate implementation of this process [5]. The status of needs assessment in planning has not been recognized by everyone. Some consider needs assessment as the first stage of planning process (to achieve the objectives of the program) and some other regard it as the last element in formulation of objectives [6].

Needs assessment is a technique by which the needs, i.e. the problems of the target group, are analyzed and identified in practice or by the help of themselves [7]. This educational need can be a difference between an educational goal and the trainee's performance on the give goal [8]. Given the criticality and significance of the role of curricula in better performance of the expected responsibilities on the one hand, and accomplishment of the higher education objectives and missions on the other hand, experts believe numerous surveys are required to investigate and identify the weak points and strengths of the curriculum. Students are one of the foundations of higher education centers that can help solve the problems through their valuable views. Evidently, a favorable curriculum, in the opinion of students,

can dramatically affect the application of the presented content [9]. Studies show that unknown educational needs of students are one of the most important causes of higher education problems [10]. If the developed educational programs are not based on the real needs of society, in addition to the loss of resources and facilities, the useful life and age-appropriate education are also wasted, thereby not solving any problems and not fulfilling the growing needs of the society [11].

The curriculum of rehabilitation management at master level includes a combination of rehabilitation sciences and management. Also, development of rehabilitation faculties around the country (rehabilitation faculties of Shiraz, Tabriz, Ahvaz, etc.) and establishment of rehabilitation management major at rehabilitation faculties of Tehran and Ahvaz, aiming at hiring the graduates of rehabilitation management as faculty members of rehabilitation faculties, magnify the significance and revision of the objectives and missions of departments and curriculum of rehabilitation management.

Rehabilitation management major was revised by its teachers in 2007, and several course credits and apprenticeship units were added to the total units of this major. This new curriculum was implemented in the academic year 2008-2009 [12]. Educational needs assessment can contribute to the revision of the objectives of departments and curriculum in rehabilitation management. Hence, the current research was an attempt to determine the educational needs of students and graduates of rehabilitation management.

Methods

The needs assessment method is selected according to the objective, domain, level and resources [13]. The majority of authorities of needs assessment believe that the ability of quantitative methods for recognition of learners' real needs is limited and qualitative methods are better capable of achieving this goal [4]. This qualitative content analysis was carried out on 18 students and graduates of rehabilitation management at University of Social Welfare and Rehabilitation Sciences and Tehran University of Medical Sciences, who had been admitted to university in 2007 after revision of rehabilitation management curriculum. The data were gathered through a semi-structured interview. The qualitative research interview is an interview designed to collect the descriptions of the life of the interviewee with respect to the interpretation of the meaning of the described events [14]. The students of rehabilitation management are currently being accepted to three universities, including University of Social Welfare and Rehabilitation Sciences, Tehran University of Medical Sciences and Ahvaz University

of Medical Sciences. Therefore, the study was decided to be conducted in Tehran and the study population comprised of 46 students and graduates of rehabilitation management admitted to university after 2008. Prior to the interview, all participants were contacted and in the case of agreement for interview with the researcher, the subjects of interview and rehabilitation management curriculum were sent to their emails. A total of 18 participants agreed to take part in the study, and the time and place of interview were arranged as they wished. The interview took 25-50 minutes on average. After performing and recording the interviews, the obtained data were analyzed through content analysis. After each interview, the recordings were transcribed verbatim and open encoding was carried out. Then, the related codes were combined by the research team and classified into six major categories.

For the sake of accuracy of data, prolonged involvement of researcher with data, reviewing the data by participants and research team as well as confirmation of data and concepts by a qualitative research researcher were considered. The extracted codes were sent to the participants to confirm their accuracy, which were finally approved. Also, the categories derived from the related codes were delivered to two experts in qualitative research to ensure the final accuracy and reliability of research process, which were finally approved by the experts. Moreover, for the sake of ethical considerations, all the participants were ensured about the confidentiality of the recorded interview and their personal information.

Results

This study was performed on 18 participants, 11 females and 7 males, 9 of whom were graduate and the rest student. From the 9 students, 6 of them were in the fourth semester and 3 in the sixth semester. Of the participants, 5 had no work experience prior to acceptance to university and the rest had work experience. The participants had different undergraduate degrees, including physiotherapy, occupational therapy, technical orthopedics, audiology, speech therapy and optometry. Face to face interview was conducted with 14 participants and the rest participated in the study through email because they were not living in Tehran. Having transcribed the interviews verbatim, they were summarized, taking 25-50 minutes. Then, the obtained data were subjected to content analysis. First, the interview transcriptions were reviewed several times and 619 related codes were extracted, and the concepts were classified into six main categories by the research team. The categories along with their subcategories are presented in [Table 1].

Table 1: Main categories and subcategories.

Categories	Subcategories	Codes
Congruence of course units	Compatibility of the syllabus of courses	<ul style="list-style-type: none"> -Inadequacy of the syllabus -Similarity of the materials in principles of rehabilitation course -Repetition of the materials included in master entrance exam in basics of management and principles of rehabilitation courses -Too much materials included in statistics course -Necessity of replacing sociology of medicine by sociology of rehabilitation course -Necessity of practical implementation of apprenticeship course -Necessity of presenting apprenticeship in two semesters -Necessity of teaching management in rehabilitation -Inappropriateness of topics in group dynamics course -Absence of rehabilitation approaches in the materials presented in approaches to rehabilitation services course -Inappropriateness of topics in rehabilitation technology course -Inadequacy of educational materials in human resources, financial and information management course -Necessity of teaching how to choose a thesis topic -Necessity of expressing realities and problems of rehabilitation in Iran and the world -Insufficiency of financial, human resources and information management course
	Congruence between courses and content	<ul style="list-style-type: none"> -Mismatch between content and title in rehabilitation counseling course -Mismatch between content and title in rehabilitation management course -Mismatch between content and title in psychology of disability course -Mismatch between content and title in rehabilitation technology course -Mismatch between content and title in sociology of rehabilitation course
	Coefficient of courses	<ul style="list-style-type: none"> -Adequacy of 1 unit for principles of rehabilitation course -Adequacy of 1 unit for rehabilitation technology course -Excessiveness of 3 units for statistics course and 2 units for community-based rehabilitation course -Insufficiency of 2 units for rehabilitation management course -Necessity of including 1 unit group dynamics and team work in other management courses -Necessity of presenting sociology of rehabilitation as a 4-unit course: 2 general and 2 special units
	Time of presenting courses	<ul style="list-style-type: none"> -Necessity of presenting research methodology course in the first semester, as primary and advanced -Necessity of presenting courses in an appropriate time of the day
Entry qualifications and job status of the major	Entry regulations and student admission	<ul style="list-style-type: none"> -Necessity of introducing the major at the beginning of entry -Necessity of interview for the selection of applicants of rehabilitation management major -Necessity of having 2-3 years of work experience as a prerequisite to entry
	Career prospects of the major	<ul style="list-style-type: none"> -Necessity of teaching rehabilitation and management in a combined manner -Paying attention to graduates by authorities -Necessity of determining the job status of the major
	Personal characteristics of teachers	<ul style="list-style-type: none"> -Necessity of teachers' attention to their relationships with other colleagues and students -Necessity of the presence of teaching incentive in the teachers -Presence of professional ethics of the teachers
Trainer's competence	Specialized academic capabilities	<ul style="list-style-type: none"> -Necessity of knowledge of educational content on the part of teachers of rehabilitation sociology -Necessity of knowledge of educational content on the part of teachers of rehabilitation technology -Lack of application of advanced educational facilities -Necessity of congruence between teacher's academic knowledge and course content -Necessity of making the management part of the major more prominent than the rehabilitation part
	Efficient trainee	<ul style="list-style-type: none"> -Necessity of presence of interest and managerial ability in students -Necessity of presence of motivation for learning in students -Lack of being up-to-date on the part of the students -Unfamiliarity with the major -Lack of students' participation in curriculum development
Revision of teaching methods		<ul style="list-style-type: none"> -Inappropriateness of teaching method -Necessity of teaching practical skills -Necessity of highlighted class presentations -Incongruence of practical and theoretical teaching methods
Quality assurance		<ul style="list-style-type: none"> -Poor content quality of rehabilitation sociology and necessity of its improvement -Poor content quality of rehabilitation technology course -Waste of time and observatory apprenticeship -Disregarding the high quality of empirical education

Congruence of course units

The participants asserted that the materials of some courses, especially management ones were not sufficient or in some cases unrelated, or unnecessary and very advanced materials were presented. Generally, they believed that the course units were inadequate or relatively adequate. For example, one participant stated: "I believe the course units are not sufficient because some of them are unrelated to the subject area". Some participants emphasized one unit was enough for the principles of rehabilitation and rehabilitation technology courses; for instance, one participant said: "The issue is the weight given to courses. For example, 2 units is a lot for rehabilitation technology, maybe 1 unit is adequate. That is, it is not necessary to allocate 2 units to this course. The same thing is also true for principles of rehabilitation course; it can be presented as a 1-unit course".

Entry qualifications and job status

The participants highlighted the effect of employment before acceptance to university as well as a strong interest in this major. One of the participants stated: "In my opinion, those who want to study this major should have worked in this area before. It is very important. With a bachelor degree in rehabilitation, to my idea, you understand nothing and feel no change in yourself". Some students said: "it was waste of time for us to study this major". The participants believed in the uncertainty of job status. For example, one participant stated: "A problem with our major is it has no definite status yet, when you graduate, you have not changed at all, you just have a master degree, but you do the same work".

Trainer's competence

This category discussed the significant role of teaching. The participants reported the superiority of rehabilitation part over management part in the teachers' teaching. For instance, one participant said: "We were taught mostly by physicians and their view is focused on medicine and eventually rehabilitation. Perhaps, they did not have a macro-management vision, except that they might have taken some managerial courses, just that. Interestingly, they said why we take management issues so seriously".

The participants also emphasized the congruence of the teacher's academic knowledge with the course content. A participant asserted: "It is better to use those who have worked and are active in this area, are more familiar and deal more with the problems associated with rehabilitation and, in fact, have academic knowledge too".

Efficient trainee

The experiences of participants were based on the students' well-grounded, basic knowledge of rehabilitation in this field of study. One participant reported: "The rehabilitation base of the students accepted to this major is basically strong because they are graduates of the family

of rehabilitation branches, especially physiotherapy and occupational therapy majors; as they have more involvement with disability, especially with physically handicapped people".

A problem cited by the participants was students' too much involvement in their personal life and its negative effect on their academic progress. One participant stated: "With the limited time students have for study, because they are employees, have family, etc., they will not be able to succeed so much".

Revision of teaching methods

In this category, the teaching methods appropriate for rehabilitation were discussed. The participants contended that the teaching method of the master program was not generally appropriate. One of them said: "More importantly, other than the courses we took, the teaching method of some courses is a problem, i.e. the same old information is presented. Some teachers teach the same old information in the same previous manner. In fact, if there is some new material to present, because it has become a sort of cliché, it does not inspire you so much to want to learn the materials".

Discussion

This study was conducted to evaluate the educational needs of the students and graduates of rehabilitation management. Undoubtedly, knowledge of students' perspectives and characteristics can have an indispensable impact on educational planning, subject selection, content and all educational activities [15]. Thus, an attempt was made to perform an educational needs assessment by using the students and graduates of rehabilitation management. The results of the analysis of the data derived from the interviews yielded six main categories, including congruence of course units, entry qualifications and job status of the major, trainer's competence, efficient trainee, revision of teaching method and quality assurance. The main objective of needs assessment is contribution to the curriculum and provision of educational content, proportional to the needs [16].

According to the results of the subcategory "syllabus of course units" under the category "course units", the students stated that rehabilitation and management are separately taught in rehabilitation management course, and the main category is not presented to the students. Apprenticeship course, due to its being impractical, cannot do any good to the students. In sociology of rehabilitation, sociology of medicine is presented; in rehabilitation technology, nothing new is taught and in approaches to rehabilitation services, different branches of rehabilitation are introduced rather than various approaches in rehabilitation.

As for the materials needed to be presented in rehabilitation management, the participants suggested

funding, financial and accounting issues as well as updated rehabilitation regulations and facts of Iran and the world be presented, along with an increase in managerial subjects. In the subcategory “congruence of content with course units”, the content of sociology of rehabilitation, rehabilitation management and rehabilitation technology courses were reported not to be congruent with their titles.

With regard to the subcategory “coefficient of units”, the coefficient of principles of rehabilitation and community-based rehabilitation courses was suggested to be reduced, rehabilitation technology and group dynamics courses be included in other courses and coefficient of rehabilitation management course be increased. As for the subcategory “presentation time of course units, research methodology course was suggested to be offered in the first semester, and the class was also recommended to be held in an appropriate time of the day.

The second category was “entry qualifications and job status of the major”, in which the participants emphasized the job status of the major was essential to be determined, and stated this issue had discouraged them. It has been documented that providing suitable job opportunities reinforces the motivation, brings about job satisfaction and improves the efficiency of manpower [17]. Also, the participants believed that, in addition to passing the exam, interview and 2-3 years of work experience were necessary for acceptance to university because firstly, the bachelor degree of the students was different than their master program; secondly, theoretical learning is not sufficient for the management major and thirdly, interest and ability in management majors is necessary for the students.

The third category was about “trainer’s competence”. In this study, the participants reported lack of interest in teaching on the part of some teachers. The teachers try to present their knowledge to students through different texts and teaching skills and create a favorable learning environment for learners. Teachers can facilitate the learning process and compensate for the deficiency of text books and educational facilities, or conversely, change the best teaching/learning condition to a passive and boring situation due to their inability in conveying the materials [18]. The participants reported that the teaching of most teachers was not related to rehabilitation management, which might be due to absence of Ph.D. program in rehabilitation management; as the teachers were selected among the teachers of other courses for this major. Moreover, the participants contended that the rehabilitation-oriented perspective of the teachers has undermined the management part of this major. That the trainers are also involved in determining their educational needs is in line with the results of the study titled: effective training: describing the experiences of students [19].

The fourth category was “efficient trainee”, which highlighted the necessity of motivation and ability of students for studying. The reduced incentive of students of this major can be because of several reasons, including learning uninteresting and old materials [20], teacher-student relationship and uncertain job prospect. Repetition of undergraduate courses in master program was also one of the most important causes of reduced motivation among the students and graduates.

Teaching, as a complex task with too much responsibility, has long been the concern of educational planners. The art of teaching connects the student’s needs for learning [21]. Another finding of this study was the “teaching method” category, in which the participants were dissatisfied with the teaching method of some teachers and contended that a teaching with no excitement and use of advanced educational facilities discourages the learners.

The last category obtained in this study was “quality assurance”, where the students expressed their experience about poor quality of education. Sociology of rehabilitation and rehabilitation technology were reported to have lower quality of education, which might be due to incongruence between the course content and students’ needs; something that is required to be addressed in revising the content of courses.

Conclusion

The findings of this study showed to promote the knowledge of learners, it is necessary to teach rehabilitation and management in a combined manner, pay special attention to rehabilitation management course, revise the presentation method of apprenticeship course and select the teachers and teaching methods more accurately. It can be argued that a defined job prospect is one of the most significant needs of students and graduates. Another point concluded from the participants’ experiences was poor quality of teaching, which needs to be addressed by the educational authorities and policymakers. There were several limitations in this study, including finding the graduates that were out of access, communication problems with graduates owing to employment and lack of time, reluctance of some students and graduates to participate in the study and difficulty in arranging a time and place for interview. A questionnaire is suggested to be designed to perform the educational needs assessment of students and to carry out research on their other needs. Revisions are also recommended to be applied to the content of rehabilitation management, sociology of rehabilitation and approaches to rehabilitation services courses. The weight of rehabilitation technology, and group dynamics and team work courses is also suggested to be revised in order to promote the quality and quantity of the

postgraduate curriculum of rehabilitation management.

Conflicts of Interest

There are no conflicts to declare.

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