### **Authors**

Dr Nikoo Yamani, Samaneh Sargazi, Dr Arash Najimi, Dr Alireza Yousefi

### **Poster title**

Developing an educational program concerning the needs of the disabled for the students of rehabilitation

#### Institution

Medical Education Development Center, Isfahan University of Medical Sciences, Isfahan, Iran

### **Description of basic poster structure**

The poster consists of four blocks. Block 1 (top left) outlines the introduction in a text format. The methods are described in a text format in Block 2 (down left). Block 3 (top right) displays the results. In Block 4 (down right), the results are summarised in a text format.

Two tables, one diagram and one picture are used in addition to text.

### [Block 1] introduction

Isfahan University of Medical Sciences is one of the leading universities in Iran. This university currently consists of ten schools: School of Medicine, School of Nursing & Midwifery, School of Nutrition & Food Sciences, School of Pharmacy & Pharmaceutical Sciences, School of Advanced Medical Technology, School of Allied Medical Sciences, School of Dentistry, School of Health, School of Management & Medical Information Sciences, and School of Rehabilitation Sciences. It has over 900 outstanding faculty members and 75 departments in which different courses in different levels such as undergraduate, graduate and specialty are running. School of rehabilitation sciences is one of the schools in Isfahan University of Medical Sciences which besides education, provides the rehabilitation services to the community and consists of various disciplines such as Physiotherapy, Speech Therapy, Audiology, orthotics and prosthetics, and Occupational Therapy. This school is committed to training specialized, and efficient human resources needed by community, Providing rehabilitation services in the field of prevention, rehabilitation and health promotion of the highest quality in accordance with national and international standards, as well as conducting applied and fundamental researches to develop theoretical and practical development in the field of rehabilitation. Referrals to this school have some kind of physical, mental, or motor disability, and communicating with these people requires the necessary skills in this field. However, by examining the curriculum of various disciplines of rehabilitation, it was found that some important aspects of training, including the ability to communicate appropriately with the disabled; and also professionalism have not been considered in the formal curriculum. So, in the fourth phase of the project, we decided to compensate for the shortcomings observed in the curriculum of rehabilitation disciplines by planning and implementing an interdisciplinary course to empower rehabilitation students and graduates in communicating with disabled in order to promote rehabilitation services to the disabled clients.

# [Block 2] methods

**1. Needs Assessment:** This step was performed as a qualitative needs assessment to determine the educational needs of rehabilitation students through interviewing 20 professors, students, the disabled and therapists. The interviewers were taught how to interview correctly by conducting a workshop on interview skills. A Quantitative needs assessment was also done by designing and distributing a questionnaire among 169 rehabilitation students to determine the importance and necessity of learning needs. The needs assessment frame work is shown in the following table:

Table 1: Needs assessment framework

<Alternative text table start> The table consists of three columns ("Row", "Step", "Action taken") und seven rows (including header).

Row: 1 – Step: Purpose of need assessment - Action taken: The purpose of the needs assessment in this project was to identify the educational needs of rehabilitation students in the field of disability and communicating with disabled.

Row: 2 – Step: Required data - Action taken: Teachers ' opinions about curriculum deficiencies and needs they felt during their teaching course, students' perceived and expressed needs in communicating with disabled, communication problems of disabled in relation with their therapists.

Row: 3 – Step: Information sources – Action taken: Faculty of Rehabilitation School, Students of Rehabilitation School, Personnel of Rehabilitation School and Therapists, the disabled. Row: 4 – Step: Needs assessment methods and techniques - Action taken: interview, questionnaire. Row: 5 – Step: Method for Needs Prioritization - Action taken: Based on the interviews, a questionnaire was developed to determine the priority and importance of educational needs from the students' viewpoints and to determine the priorities.

Row: 6 – Step: The way of using the needs assessment results - Action taken: Needs assessment results were used to develop the curriculum and to organize workshops and courses for the rehabilitation students.

<Alternative text table end>

**2. Program Design:** For designing the program, according to the needs assessment carried out in the previous step, during numerous sessions, general purpose and specific goals, content headings and training strategies were identified and then it was planned to execute the program and evaluate it. Finally, a curriculum was designed to empower rehabilitation students in relation with the disabled.

**3.** Implementation of the educational program: In this step, during four focus group sessions, it was decided that implementation to be as workshop and some parts of it to be presented as virtual courses. It was decided to design and execute a workshop on each subject learned from the needs assessment based on the volume of content, and to provide supplementary material through virtual training. During these sessions, the first workshop (Workshop on Communication Skills when communicating with disabled, was planned and all its implementation stages were identified.

**4. Program Evaluation:** To evaluate the program, each of the four implemented areas is individually evaluated, and finally, by combining the results of these evaluations, and using other methods, the quality of the entire course is evaluated. To this end, pre-test and post-test forms were designed and approved by a number of team members to evaluate the Workshop On Communication Skills, one form was related to students' knowledge, attitude and efficiency in communication skills and the other was related to the subfields of the communication skills. Pre-test forms were distributed to students at the beginning of the first workshop, and post-test forms at the end of the second workshop.

Picture 1: Students conducting group discussions at the first communication skills workshop <Alternative text picture start> The picture is a collage of three photos. On the left photo are women, on the right photo men in the audience benches of the green conference hall are shown in group discussions. In the middle picture sit left to right Mrs. Dr. Nikoo Yamani, Prof. Dr. Joachim Schroeder and Mr. Payam Shirvanchi talking to each other.

<Alternative text picture end>

## [Block 3] results:

**Needs assessment:** In the qualitative needs assessment, the educational needs of the rehabilitation students were identified as follows in table 2:

Table 2: The result of qualitative needs assessment regarding students' educational needs <Alternative text table start>

The table consists of three columns ("Primary codes", "Subcategory", "main category") und 2 rows (including header).

Primary codes:

- Communication Skills Course for People for communicating with the disabled and normal People
- Anatomy course
- Professional Ethics Course
- Getting acquainted with the codes of professional ethics
- Early exposure period
- Clinical Skills Course
- Communication Skills Training for communicating with the family of Disabled or the persons accompanying him or her
- Ability to gain the confidence of the disabled
- Listen patiently to a person with a disability not interrupting the disabled's conversation
- Not to convey a sense of disability to the disabled
- Seeing a disabled as a normal person
- How to deal with people with mental disorders, aggression
- How to Manage a treatment session
- Emotional management skills
- The ability to convince people with disabilities
- Self-control skills
- Empathy skill in communication with the patient
- Increase the confidence of the disabled
- Making the Culture of accepting the disabled
- Getting acquainted with the principles of communicating with adolescents
- Getting acquainted with the mental and physical condition of the disabled

Subcategory: the needs of the students of rehabilitation School.

Main category: needs of the disabled.

<Alternative text table end>

Also in quantitative needs assessment, the priority of teaching subjects was confirmed as <u>communication</u> <u>skills as the first rank</u>, stress management as the second rank, professionalism as the third, and <u>knowledge about disability</u>, as the fourth rank, and accordingly, the implementation of these areas was undertaken.

**Implementation of educational Program:** Workshop on Communication Skills when communicating with the Disabled was conducted in two 5-hour workshops, at an interval of 2 weeks, in June 1st and June 7<sup>th</sup>, 2019 with 4 teachers and 36 students. To design the workshop, during several sessions, instructors,

content, time, place, etc., were identified and also it was considered that students to be active during the workshop. So group activities such as film criticism and teamwork were provided. At the end of the second workshop, a gift was given to the students to encourage and thank them.

**Program Evaluation:** The results of pre-test and post-test showed that communication skills workshop had a significant effect (P < 0.05) on the promotion of students 'knowledge and attitude on how to interact with the disabled; and students' knowledge and attitude after attending these workshops was increased. Also, the overall score of students' communication skills significantly increased after the intervention. The scores of students' communication skills subfields are shown in the following diagram:

Figure 1: Comparison between different domains of communication skills before and after workshop <Alternative text figure start>

In five groups the values for the categories "before education" und "after education" are displayed in a bart chart:

ability to send and receive message: before education: 29,92 - after education: 30,81

emotional control: before education: 20,97 – after education: 28,53

listening skill: before education: 19,78 – after education: 20,72

insight about communication process: before education: 15,92 – after education: 16,75

decisiveness communication: before education: 14,72 – after education: 14,64

<Alternative text figure end>

# [Block 4] summary:

The first step in providing the desired service to the clients is to establish a good communication and trust. This study sought to identify students' educational needs in communicating with people with disabilities through needs assessment and then to design the curriculum including goals, relevant content in four areas (communication skills, stress management, professionalism, and knowledge towards disabilities), proper teaching strategies and the evaluation method. Also, communication skills were presented to the students through a two-day workshop and after evaluating the workshop, the results showed that establishing this workshop can be effective in enhancing students' communication skills and ultimately providing desirable services to the disabled.