

The role of CBR in the rehabilitation process in home conditions

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Abstract

Introduction: Community Based Rehabilitation (CBR) is a strategy within community development for rehabilitation, equalizes opportunities and social integration of incapacitated people. This is a comprehensive strategy of involving people with disabilities in their communities through the development program. CBR system provides for the people with disabilities equal access to treatment and rehabilitation, education, promotes health and healthy living, and also indicates the existence of other features that make these people become full members of society and the community in which they live and is currently used in over 90 countries around the world.

Methods: Research was conducted in two CBRs (CBR-Kumrovec and CBR-Saraj Polje) in the department of physical medicine and rehabilitation in the Sarajevo Canton. The study included and statistically treated 97 patients during the period from 01.01.2008 to 31.12.2008 year.

Results: In a study from the total number of respondents 65% were women, 35% male respondents, and the most represented were respondents of age group from 71-80 years - 40%. Of all diseases, the most represented were respondents with ICV, 43%.

Conclusion: This type of treatment in the home conditions is providing necessary medical rehabilitation services by qualified physical therapists through a sufficiently long period for successful medical rehabilitation in the natural environment of patients (home conditions), and the presence of family members who we can also educate for the enforcement of basic physical procedures and instruct them on the condition of the patient and his perspective.

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Keywords: CBR, rehabilitation, home conditions.

Introduction

Community Based Rehabilitation (CBR) is a strategy within community development for rehabilitation, equalizes opportunities and social integration of incapacitated people. This is a comprehensive strategy of involving people with disabilities in their communities through the development program. Expansion of the rehabilitation was so big that the bulk of financial resources was spent, and greatly impede progress in other areas. Development of scientific and clinical basis of rehabilitation took place simultaneously with the appear-

ance of the consumer movement through which people with disabilities and their families become aware of their individual rights and needs (1). In the last decade of the twentieth century in our country, in the area of habilitation and rehabilitation of persons with disabilities, own concept appropriate to the current specific socio-economic conditions and overall economic development was trying to define, which resulted in the creation of significant financial, technical and personnel resources. However, socio-political and health care system opted for the most expensive, institutional model of rehabilitation development, which required a huge investments in stationary capacities with expensive equipment and concentration of personnel, which did not provide adequate coverage and accessibility of rehabilitation services to multiple users (2).

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Submitted: 04. April 2012 / Accepted: 23. April 2012

Rehabilitation resources had been altered during the war in BiH. During wartime events from April 1992 health care institutions have been significantly damaged, as well as equipment in them, and there was a significant reduction of health care personnel. In such a situation, depending on the circumstances and conditions, there was attempt to provide rehabilitation services, sometimes in improvised conditions considering the large number of injured people (3). After the establishment of peace in the area of BiH followed by the activity on the establishment of a new concept of rehabilitation with the dispersion of services across the BiH. So in all regions of the Federation and later in the Serbian Republic, through international projects there was construction and equipping of spaces for about 60 centers for physical therapy (CBR centers), and then a program for education of professionals was conducted, who are employed or have been hired to work in these centers. On this work as educators jointly attended national and international experts from Queens University in Canada (4). Also, by this concept sustainable development through the aforementioned project is provided because by the Law on Health care of the Federation the same included in the primary health care thus to secure a continuous and predictable funding. Total in the Federation 38 CBR clinics for physical therapy are opened and 23 in the Serbian Republic, which fundamentally altered the organization model of rehabilitation from institutional to outpatient model. According to the data from 2006 year 1,700,000 services were provided for approximately 30 000 patients (through outpatient services 29,000 and stationary services for approximately 900 patients), which means that by the new organization with rehabilitation services 7.15% of the population of Sarajevo Canton is covered, compared to 2% that is how many was covered until 1992 year (5). Tasks and responsibilities of this program are practically the principles of rehabilitation. Primary role of the Center for Physical Therapy is reflected in the application of measures for medical rehabilitation, particularly physical therapy, to prevent or minimize disability following injury through the application of all methods of physical therapy, through the ambulatory and patron-

age work, in the area for which it was founded. The aim of the program in the community (CBR) is to enable individuals with disabilities to manage lives in which they have equal opportunities, equal access to social, cultural and economic privileges. In many societies are increasingly accepting the fact that persons with disabilities are talented, possess skills and abilities to be active and productive in the community, capable and competent as a workforce (6). CBR centers integrated into primary health care centers (Health centers), through the use of existing infrastructure of primary health care system in the F BiH, have become accessible to persons with disabilities, who had no access to services of physical therapy and rehabilitation in the community where they live or work until then. People with disabilities, before the establishment of the CBR system in the F BiH, services of physical therapy and rehabilitation could only get in the clinical centers or regional hospitals within departments for physical therapy and rehabilitation (7). The aims of the study were to show the age and gender structure of respondents in the process of rehabilitation in the home conditions, then to show the representation of diseases in those patients, to show the ratio between home visits of doctors and physiotherapists in the process of rehabilitation and to show the representation of existing medical staff in CBR clinics.

Methods

Subjects

The study was conducted on the patients who have had a referral for a home visit from CBR Center Novi Grad Sarajevo (CBR-Kumrovec and CBR-Saraj Polje) in the department of physical medicine and rehabilitation at the Sarajevo Canton. The study included and statistically treated 97 patients (total number of them who has achieved a home visit) during the period from 01.01.2008 to 31.12.2008 year. Criteria for inclusion were subjects of either sex, any age with disease or condition rendering them unable to attend the treatment of physical therapy and rehabilitation in CBR. Criteria for exclusion were respondents who were referred to the stationary form of treatment or died during the study period.

Procedures

From the procedures used in the home conditions, electro therapy is used the most (TENS, ultrasound, DDS, IFS, IR lamp, hot-pac, cryotherapy, manual massage). After electrotherapy various kinesiotherapeutic procedures (active, active-assisted and passive exercise).

Statistical Analysis

Data of treated patients are computer processed by entering all the relevant parameters and statistically analyzed through specialized unified software program.

TABLE 1. Gender structure of respondents from 01.01.2008 to 31.12. 2008 year

GENDER	NUMBER OF RESPONDENTS	%
MALE	34	35%
FEMALE	63	65%
TOTAL	97	100%

TABLE 2. Age groups of respondents from 01.01.2008 to 31.12. 2008 year

AGE GROUP	Up to 20 years	21-30 years	31-40 years	41-50 years	51-60 years	61-70 years	71-80 years	81-90 years	91-100 years	total
NUMBER OF RESPONDENTS	1	1	4	2	19	20	39	10	1	97
%	1%	1%	4%	2%	20%	21%	40%	10%	1%	100%

TABLE 3. Presentation of the leading diseases from od 01.01.2008 to 31.12. 2008 year

r/b	DIAGNOSIS	No. of respondents	%
1	ICV	41	43%
2	SCLEROSIS MULTIPLEX	7	7%
3	FRACTURA	15	16%
4	CRANIOTOMIA	6	6%
5	ENDOPROTESIS	6	6%
6	PARAPLEGIA	3	3%
7	CP	1	1%
8	QADRIPLEGIA	1	1%
9	AMPUTATIO	2	2%
10	QADRIPARESIS	4	4%
11	HERNIA DISCI	4	4%
12	GONARTROSIS	3	3%
13	OSTEOPOROSIS	2	2%
14	TROMBOEMBOLIA	1	1%
15	SPONDILOSIS DEFORMANS	1	1%
	TOTAL	97	100%

Results

The results are shown in Tables.

Discussion

The study included and statistically treated 97 patients (total number of them who has achieved a home visit), of which 35% were men and 65% women. The largest number of respondents were from the age group of 71-80 years (40%), followed by a group of 61-70 years (21%), a group of 51-60 years (20%), a group of 81-90 years (10%), group 31-40 years (4%), a group of 41-50 years (2%), and groups of up to 20 years, 21-30 years and 91-100 years of age amount (1%). The largest percentage of the leading diseases have respondents diagnosed with ICV (43%), fracture (16%) and endoprotesis (6%), while the smallest number of visits had respondents with a diagnosis of CP, Spondilosis Deformans and Tromboembolia (1%). Mallick M and associates(9) in their research which they conducted

TABLE 4. Home visits of doctors from 01.01.2008 to 31.12. 2008 year

HOME VISITS OF DOCTORS	NO. OF HOME VISITS	%
CBR – "KUMROVEC"	62	41%
CBR – "SARAJ POLJE"	91	59%
TOTAL	153	100%

TABLE 5. Home visits of physiotherapists from 01.01.2008 to 31.12. 2008 year

HOME VISITS OF PHYSIOTHERAPISTS	NO. OF HOME VISITS	%
CBR – "KUMROVEC"	456	33%
CBR – "SARAJ POLJE"	942	67%
TOTAL	1398	100%

TABLE 6. Existing medical staff in CBR Novi Grad from 01.01.2008 to 31.12. 2008 year

CBR NOVI GRAD	NO.	%
DOCTORS	4	8%
HIGHER EDUCATION PHYSIOTHERAPISTS	6	12%
MIDDLE EDUCATION PHYSIOTHERAPISTS	37	74%
NURSES	3	6%
TOTAL	50	100%

in 2005, cited the importance of rehabilitation in community (CBR) in Pakistan after a major earthquake. The program involved 741 people with spinal injury and 713 with amputation. The total number of home visits of doctors in CBR centers Kumrovec and Saraj Polje is 153 of which the doctors from CBR Kumrovec made 62 home visits (41%) and doctors from CBR Saraj Polje made 91 home visits (59%). The number of home visits of physiotherapists in CBR centers Kumrovec and Saraj Polje was 1398 home visits, of which the physiotherapists from CBR Kumrovec made 456 home visits (33%) and physiotherapists from the CBR-Saraj Polje made 942 home visits (67%). Matsuda A and Kunori M (10) in their work come to the conclusion that home visits from physiotherapists have a great effect in the elderly in improvement of their condition. Medical personnel from CBR Novi Grad, which has two centers (CBR-Kumrovec and CBR-Saraj Polje), in the period from 01.01.2008 until 31.12.2008 had 4 doctors physiatrist specialists (8%), 6 higher

education physiotherapists (12%), 37 middle education physiotherapists (74%) and 3 nurses (6%). The average of home visits that are shown in tables and graphs is referring to the professional personnel who performed home visits in this period. The total number of personnel is 26 professionals, of which 4 are doctors physiatrist specialists and 22 physiotherapists.

Conclusions

The study included respondents of all ages and professions, who require rehabilitation in the home conditions. All respondents involved in research are from the Sarajevo Canton. Age structure of respondents who are treated in the home conditions are respondents were between 71 and 80 years of age and occupy 40% of all treated patients in a home conditions. Of the total number of respondents women are 65%. Most often the visits in the home physical treatment is applied after the ICV and in the condition after the fractures which, with sclerosis multiplex and arthroplasty, represents about 80% of all services on a home visit. CBR "Saraj Polje" performed 59% and CBR "Kumrovec" 41% of visits in the municipality of Novi Grad. In the home visits middle education physiotherapists attended the most 74%, and nurses at least 6% of the total medical staff.

Competing interests

There is no competing interests or an ethical violation in the preparation of this project.

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