



Case Report

Individualized rehabilitation program for a schizophrenic patient: a case report

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Abstract

Impaired functioning in schizophrenic patients and symptoms like social isolation and unwillingness to interact with others and drug side effects affect their quality of life. Therefore, the participation of schizophrenic patients in rehabilitation processes and activity programs is very important. In this case report, the problems and needs of a patient who was reluctant to join the activity program in the community mental health center were analyzed, and within the context of a family-specific, individually planned rehabilitation program, behavioral techniques were predominantly applied. When the 6-month period was evaluated, the patient's functioning and quality of life level had increased, his symptoms had decreased, and he had a greater level of participation in activities. From this case report, it can be concluded that it is beneficial to implement individual rehabilitation programs for chronic mental illness patients and to apply behavioral therapy methods. Moreover, specialist psychiatric nurses should take a more active role in rehabilitation and counselling programs.

Keywords: Behavioral approach; case management; counseling; psychiatric rehabilitation; schizophrenia.

What is known on this subject?

- Considering that individuals have different capacities and needs, individualized psychiatric rehabilitation programs are required, and the case management model is known to be effective in facilitating these programs.

What is the contribution of this paper?

- This case report presents the effect of individualized interventions applied by a psychiatric nurse on a schizophrenia patient with whom nurses had difficulties in achieving cooperation and motivation during rehabilitation.

What is its contribution to the practice?

- This case report is thought to contribute to the widespread dissemination of individualized, case-centered rehabilitation programs in the Community Mental Health Centers (CMHCs) and to promote the active participation of psychiatric nurses in these programs.

In addition to psychotic symptoms, schizophrenia, as a chronic mental disorder, also produces various other negative symptoms, including unwillingness to interact with oth-

ers, social isolation, anhedonia, lack of energy, self-care deficiency and distortions in cognitive functions. The disorder is also characterized by low daily functionality level and quality of life.^[1,2] Schizophrenic patients have difficulties in achieving and maintaining a health-promoting lifestyle. They frequently experience physical health problems, and the side effects of the psychotropic drugs they are typically prescribed for treatment can create additional problems in their lives.^[3,4] In light of this information, it is important that rehabilitation programs take a holistic approach in addressing the health of patients with chronic mental disorders. Furthermore, pharmacological therapies should be integrated with psychosocial treatments due to the former's limited efficacy in treating non-psychotic symptoms, like those related to cognitive functions and social skills.^[5-7]

Psychiatric rehabilitation programs play an important role in reducing disease symptoms and disabilities, improving the social interactions, daily functionality and quality of life of pa-

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tients, fostering patient adoption of healthy coping skills and a health-promoting lifestyle, and decreasing the frequency of relapses and hospitalizations. Included within the scope of rehabilitation programs are psychoeducation, social skills trainings, life skills trainings, health education, family trainings, occupational therapies, vocational rehabilitation, sports/exercise, entertainment, personal counselling, case management, art therapy, cognitive rehabilitation, and cognitive behavioral psychotherapies. In the long run, all these interventions are important insofar as they reduce the costs assumed by individuals, families and society in treating mental disorders.^[4,6-11] Moreover, in these interventions, special attention should be given to increasing the autonomy of individuals with mental disorders and ensuring that they actively participate in recovery and rehabilitation processes.^[4,8]

In Turkey, psychiatric rehabilitation services are provided by Community Mental Health Centers (CHMCs). However, the qualitative and quantitative features of psychiatric rehabilitation services differ, and countries around the world are faced with the common problem of ensuring access and continuity for mentally ill patients in these programs.^[12] In the literature, the difficulties of ensuring patient access, continuity and effectiveness of services are noted; the case management model and individualized programs are proposed; and the importance of including families in the programs is emphasized.^[1,7,13] Given that the problems, priorities, capacity, and motivations of patients differ from one another, the rehabilitation process should be planned based on individualized assessments. It is not realistic to expect schizophrenia patients with chronic symptoms like unwillingness to interact with others, lack of energy, etc. to be autonomous about attending a rehabilitation program; this process should primarily be planned and conducted with the patients and in the interest of the patients.^[5,13-15] Case management, as a mental health approach, involves a member of the mental health staff being assigned to carry out and coordinate the individualized treatment and care process of the patient.^[14] Among the various case management models, the rehabilitation and support types are particularly suitable for the rehabilitation process.^[16] Although efforts have been made to implement the case management model in Turkey, institutions and staff are still in need of education and support for this subject. Psychiatric nurses equipped with the requisite knowledge and counselling skills and experience in case management and behavioral therapy can take responsibility as case managers or counselors in rehabilitation units during the individualized rehabilitation process. In individualized programs, each patient is assessed and personal plans are developed and behavioral approaches and techniques are commonly used to help patients acquire skills and improve their functionality, self-sufficiency and socialization.^[5,7,16-18] Behavioral approaches include behavior acquisition and modification techniques. When administered in conjunction with cognitive therapy, it has been shown to be effective in developing insight and cognitive functions in schizophrenia patients,

and in dealing with positive symptoms, internalized stigmatization and despair.^[19,20] Moreover, numerous studies have revealed the effectiveness of individualized rehabilitation programs as well as programs administered with case management models. While personal counselling practices play a part in rehabilitation practices in Turkey, they do not correspond to the features of the case management model. In order to ensure the effectiveness of the program and patient continuity in it, individualized programs, especially those using the case management model, should be widely disseminated.^[4,5,7,10,13,14]

In this case report, personal counselling and an individualized rehabilitation program involving behavioral approaches was administered to a schizophrenia patient who was reluctant to attend the rehabilitation program. The said patient showed great progress in the rehabilitation program, and thus, this case report was prepared to highlight the importance of individualized rehabilitation programs in treating patients with chronic mental disorders.

Case Report

Background

The patient, hereinafter referred to as Mr. M, is a male born in 1975. He lives with his family in İstanbul and does not have any working experience. He had low success in school during his childhood and was diagnosed with "schizophrenia" at the age of 15. He did not attend high school and has been receiving treatment for many years, of which the last two have been at a CMHC. He lives with his family, which includes his parents and a younger, single sister. His father is retired, and his mother is a homemaker who has a history of panic attacks.

Clinical Status

Mr. M has been hospitalized 5 to 6 times. A clinical evaluation showed that he has suffered regression from negative symptoms, deceleration of movements, poverty in speech content, unwillingness to interact with others, cognitive defects (executive functions, focus, problem solving, etc.) and communication problems. His general state was one of anxiety, and the psychiatric assessment conducted by a psychiatrist determined comorbid obsessive compulsive disorder symptoms. His score on the brief psychiatric rating scale (BPRS) was 55. No hallucination or pareidolia was observed. The patient was continuing his use of an antipsychotic (clozapine). Lack of self-care, limitations in verbal communication and social interaction, social isolation, low self-esteem, inadequacies in daily activities, sedentary lifestyle, and excessive eating (BMI: 34) were identified in the first stage of the nurse assessment. Personal counselling and an individualized rehabilitation program were administered to Mr. M because of his reluctance to participate in therapeutic groups and workshops at the CMHC and his continuous need for guidance to attend the program.

Table 1. Rehabilitation process chart for Mr. M

Month	Application	Follow-up/Assessment
1 st month	First, to address the patient's self-care issues, hand washing, teeth brushing and bathing were discussed. The counselor sought to develop his knowledge and skills and assigned homework, provided reinforcement and monitored him through behavior charts. As part of his homework, he was expected to make his bed to teach him about taking on responsibilities at home. It was later determined that his family did not give Mr. M any responsibilities, other than carrying grocery bags, and they discouraged him from making his bed, by telling him "not to interfere in housework, you cannot do it." The family was interviewed to obtain more information about the patient and to facilitate cooperation between them.	Mr. M was quite eager and cooperative about developing his self-care skills at first, but later his motivation decreased due to his family's reaction. After discussing the matter with the family, they agreed to cooperate, and his sister agreed to help with his homework. He stated that he was happy about the attentive care given to him by the counselor.
2 nd month	The homework, behavior charts, and reinforcements continued. In addition, other skills, like organizing his wardrobe and preparing/clearing the table, were practiced. During this process, Mr. M expressed an interest in learning how to cook, so he was taught practical skills in this area, like preparing simple meals (toast, pasta, etc.), in face-to-face sessions held at the CMHC, and these skills were reinforced at home with the help of his sister. Positive feedback was frequently provided. An activity chart was prepared for Mr. M, and his attendance in occupational activities (painting and ceramics) and group meetings (psychoeducation) increased. However, he refused to attend the physical exercise program.	Mr. M had a high level of motivation in taking on responsibilities and doing his homework, and he responded well to positive feedback. His interaction and performance in group activities and sessions increased. The reason he refused to attend the physical activity sessions was because he believed that since he carried home objects or packages, it was important that he remained at the weight he was. The increase in his skills and level of functionality was considered to support his sense of self-esteem.
3 rd month	The counselor continued to work on improving Mr. M's functionality by teaching him daily life skills and providing him with positive feedback. To support his sense of autonomy, he was encouraged to do his homework and weekly activities by himself. Mr. M started to offer his own suggestions on what meals he wished to learn how to prepare. The counselor went grocery shopping with Mr. M and taught him how to prepare potato salad, soup, rice, and breakfast. During this process, he was provided information on his drugs' adverse effects and the importance of physical and mental health. He was further encouraged to attend the exercise program, being told that improving his muscles would be useful for carrying objects, and Mr. M agreed to attend the physical activity program.	He continued to show a high level of motivation; he was doing his homework regularly, and his sister continued to support him. He regularly attended the scheduled activity programs. He began to take part in a 15-minute exercise program two days a week. In addition, he was more willing to engage in the interviews and the groups and talked with longer sentences.
4 th month	The practices related to the previously learned daily life skills were continued and his attendance in the CMHC activities were maintained. The duration and frequency of physical exercise were increased. He was encouraged to have a schedule for his time at home. Social activities, like taking walks with the family or family trips, were planned and carried out. He took the responsibility to prepare breakfast and make tea on Sundays with his sister. He was informed about the importance of healthy eating and low-calorie foods and encouraged to eat low-calorie foods and prepare healthy meals (vegetable dishes, etc.).	He carried out the scheduled activities with his family and reduced carbohydrate intake in his daily diet. His interaction with the other patients and the team increased during group activities. His family was also happy with Mr. M's improvement and supported him with positive feedback.
5 th month	In addition to the previously practiced life skills, other skills, like tidying his room, loading the dishwasher, and turning on the washing machine, were practiced. He started to talk about old memories, and he read books and magazines and even mentioned about what he had read in the meetings. He expressed an interest in learning how to turn a computer on and off and how to use a keyboard and a search engine in the computer room of the center.	TRSM programlarına aktif katılımı ve etkileşim düzeyinde artış devam etti, egzersiz ile kendini daha iyi hissettiğini ifade etti, 2 kilo vermişti. Psikoeğitim grubunu tamamladı. Ev içinde aldığı pek çok sorumluluğun da etkisi ile özgüveni giderek artmış olarak gözlemlendi, Aile, Bay M'nin başarısından memnundu ve aile eğitim gruplarına katılmaya başladı.

Table 1. Rehabilitation process chart for Mr. M (continued)

Month	Application	Follow-up/Assessment
6 th month	The previously studied life skills continued to be reinforced, and continued support was given in encouraging him to exercise and eat healthily. The duration of his exercise session was gradually increased. Since it was observed that he had difficulty in making decisions and saying 'no', role playing activities were done to teach him the skills of saying 'no' and expressing himself. He was further taught how to do deep breathing exercises and cope with anxiety.	Mr. M continued to lose about 2 kilograms a month. Although his scheduling skills increased and he had a high level of motivation, he had a strong need to receive the counselor's approval and feedback. It was observed that there was a decrease in his level of regression and some obsessive symptoms. He was able to express his problems on his own during the individual interviews and his self-expression and communication skills improved. However, his difficulty in saying 'no' continued, despite the role playing practices.
7-8 th month	The frequency of interviews was reduced to once a week. It was explained to him that a compulsory counselor change would be made at the end of the month, and therefore what he had learned thus far was reinforced, he was encouraged to continue to take an active role in the activities, and support continued to be given to developing his sense of independence, particularly focusing on his ability to say 'no'. Mr. M's anxiety and psychotic symptoms were observed to slightly increase the closer the time the counselor change approached, and his treatment was readjusted with the cooperation of the treatment team. He was encouraged to cope with the symptoms and continue the program. His new counselor and team were informed about the entire rehabilitation process.	He continued to lose 2 kilograms a week. He acquired the requisite functionality level to stay alone for a day or two and take care of himself. His family completed the psychoeducation. Mr. M's anxiety and psychotic symptoms increased during the termination of the counseling relationship, which was considered to be a reaction to the process of loss. The need for receiving the counselor's approval or feedback, which continued despite a slight decrease, was considered to be an obsessive compulsive symptom (receiving approval) and/or the transference of a controller parental relationship, rather than a problem of inability to take initiative, and the case was discussed with the CMHC team. Mr. M adapted to his new counselor within a few weeks.

Table 2. Patient's assessment scale scores

	Primary assessment	6 th month follow-up assessment
Score on the Insight Scale	14	18
Score on the Quality of Life Scale for Schizophrenic Patients	61	92
Score on the Brief Psychiatric Rating Scale	55	36
Score on the Disability Scale	32	22
Score on the Social Functionality Scale	87	134
The Rehabilitation Form for Chronic Mental Patients	117	255

Rehabilitation Process

The primary needs of Mr. M were determined by his personal counselor, a psychiatric nurse trained in cognitive behavioral psychotherapy, who applied various scales (Table 2) and the Chronic Mental Patient Rehabilitation Form. Plans were developed, with the participation of the patient, to improve his overall health and his efficacy in self-care, daily activities and social functionality. Supportive personal interviews and/or one-to-one skills training, two-three times a week, were conducted within the scope of this plan. During the rehabilitation process, behavioral techniques, such as assigning homework,

providing verbal reinforcement/feedback and developing behavior charts and activity charts/plans, were applied. Furthermore, family training, health training, and skills training were administered, and the patient was provided with support for attending group activities and socializing. The plan allowed flexibility based on the patient's needs and requests. The personal rehabilitation process of Mr. M, who made greater progress than expected during the eight months of one-to-one therapy, is presented in Table 1. Scale scores from the primary assessment conducted before starting the program and from the follow-up assessment after six months are presented in Table 2.

Discussion

During the rehabilitation process for chronic mental disorders like schizophrenia, the problems and needs of patients should be analyzed with a holistic point of view, one that includes family and environmental factors.^[5,10] Although the negative symptoms of schizophrenia strongly contributed to the Mr. M's reluctance to interact with others and engage in activities and his poor functionality, the conservative attitude of his family and his low self-confidence were also thought to play a role in his unwillingness to attend programs. His show of resistance to exercising and his obesity can be associated with the single responsibility given to him at home, which was carrying bags/items to inside the house. With the active participation of the patient, the rehabilitation program, which was individualized based on Mr. M's capacity, readiness and priorities, served to support the independence of the patient. Behavioral techniques were mainly used in this process, and self-confidence, communication and motivation improved by increasing functionality gradually and supporting this with positive feedback. Moreover, family cooperation, the therapeutic relationship established with Mr. M, and other therapeutic activities/groups that he attended were thought to have contributed to the effectiveness of this process. Behavioral techniques are quite effective in the rehabilitation process; however, the use of mainly behavioral techniques in this case could be viewed as a limitation. Rather, the use of eclectic approaches that include a psychodynamic perspective might be more beneficial for some psychotic patients. Although the mandatory counselor change negatively affected the process, in some cases, it could serve to enhance patients' coping skills. Every individual has a potential to change, but with the rehabilitation program Mr. M went through, he showed faster and more pronounced improvement than expected. According to the results of the scale that was administered at the beginning and in the sixth month of the program, Mr. M's social functionality, independence and quality of life had increased, and his disability and psychiatric symptoms had decreased. Results from Turkey-based studies assessing the outcomes of patients who attended CMHC rehabilitation programs that involved personal counselling were similar to those reported in this case report. Controlled studies conducted by Eryıldız et al.^[6] and by Arslan et al.^[9] found that the social functionality and insight levels of patients who attended CMHC programs increased, and that their disabilities and psychopathological symptoms decreased. Arslan et al.^[10] conducted a study examining the effects of the rehabilitation process on patients for six months and found similar results, and furthermore, in the follow-up assessment performed three years later, the continuity of the benefits of the program on patients was shown to have been retained. Likewise, a study assessing the effects of ergotherapy on increasing the independence and functionality of a group of schizophrenia patients in terms of dealing with problems related to daily activities found that the activity performances of the patients improved, and that their disability levels decreased.^[21] In a case report presented by Ulu-

soy and Arslan^[7] that examined the individualized and holistic rehabilitation process of a patient observed that the functionality and self-confidence of the patient increased and that his/her psychopathology-related symptoms decreased. Similarly, a case report presented by Arslan, Mert and Yıldız^[5] on a patient who was reluctant and incontinent during the rehabilitation process showed that the self-care of the patient increased and that the patient's treatment cooperation and participation in activities improved; the report further showed that the patient benefitted from the change in the attitude of the family, which before the rehabilitation process had hindered the patient's well-being. A controlled study conducted by Stanard^[16] found that the quality of life of patients on whom an individualized rehabilitation program was applied improved, and that their symptoms decreased, with these results differing significantly from those of the control group. A study by Rychkova and Kholmogorova emphasized the importance of behavioral interventions on psychosocial rehabilitation, and they further showed that social skills deficiencies were associated with cognitive function deficiencies, and that developing social skills had an indirect effect on cognitive functions.^[8]

Integrating the psychiatric rehabilitation process for schizophrenia patients with health promotion education and interventions are important, especially in terms of managing the side effects of antipsychotics. In addition, treatment programs should address self-care, healthy lifestyle behaviors, and the losses incurred due to poor physical health, and diet and exercise programs should be administered.^[3,4,22] Studies in the literature indicate that exercise programs are important for patients who use antipsychotics, as exercising has positive effects on changes in neurotransmitter level, decreases neural destruction, develops mental well-being and cognitive functions, decreases disease symptoms and physical health problems related to drug side effects, like metabolic syndrome, and increases overall quality of life. Patients should exercise two to three times a week for 30 minutes, and if the patient has a weight problem, then the exercise regime should be combined with a nutritional diet.^[4,22,23] Improvement in the general well-being of patients is indirectly related to treatment and social compliance. A randomized controlled study which examined the effects of physical exercise on the symptoms of schizophrenia patients who participated in an exercise program found that their symptoms subsided, and that their general health and willingness to participate in activities increased.^[23] Maintaining the motivation and continuity of participation of patients in diet and exercise programs is extremely challenging and requires counseling and support. At the beginning, Mr. M resisted exercising and losing weight, with the excuse that he had to carry stuff at home and therefore needed to be larger to be able to continue doing this; however, he gradually started to cooperate about his physical health as his functionality and self-confidence increased. Obstacles and motivation sources of patients can vary; thus, individualized interventions aimed at promoting a healthy lifestyle can be more effective.

Conclusion

In chronic mental disorders, a long-term treatment and rehabilitation process is required. Studies have shown that individualized programs and case-based methods render the rehabilitation process more effective. Individualized interventions in mental recovery models highlight the active participation of patients in the recovery process. In Turkey, individualized programs are used in the rehabilitation and special education processes of children/individuals with mental disabilities, but their use in the rehabilitation of chronic mental disorders, particularly those of a mental and emotional nature, is limited and should be expanded. Behavioral approaches are effective in increasing functionality and self-confidence and should be more actively used in psychiatric rehabilitation programs in Turkey; however, in some cases eclectic approaches can be more effective. For the case management model or individualized counselling practices in CHMCs, the knowledge and equipment of rehabilitation teams should be increased, and psychiatric nurses should take an active role in individualized programs. Lastly, maintaining the continuity of health staff during the rehabilitation process of chronic mental patients is very important.

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