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Family Function and Quality of Life in Patients with Schizophrenia and Bipolar Spectrum Disorders: A Patient-Centered Study

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Abstract

Background: The purpose of the study was to investigate and compare the family function and quality of life in patients with schizophrenia and bipolar spectrum disorders.
Methods: A sample included 52 patients with schizophrenia and 58 patients with bipolar spectrum disorders that referred to Sahamie hospital were selected through convenience sampling method. They were asked to answer the family assessment device and quality of life questionnaire. Data were analyzed by independent t-test statistics in SPSS.
Results: Results showed that the two groups have no significant difference in family function and quality of life. Patients with schizophrenia spectrum disorders obtained the lowest score in the behavioral control and roles subscales of FAD and patients with bipolar spectrum disorders obtained the lowest score in the behavioral control and problem solving of it. Additionally, patients with schizophrenia spectrum obtained the lowest score in the physical and social relations dimensions of quality of life inventory. The ones with bipolar spectrum obtained the lowest score in the social relations, physical, and psychological dimensions of it.
Conclusions: These findings confirm the results of previous studies that showed patients with schizophrenia and bipolar spectrum disorder had family dysfunction and bad quality of life. It is important to pay attention to these factors during assessment, measurement, and implementation of treatment strategies.

Keywords: Family Function, Quality of Life, Schizophrenia Spectrum Disorders, Bipolar Spectrum Disorders

1. Background

Over the past few decades, attention has been paid to family functioning and quality of life in patients with psychiatric disorders, including chronic disorders such as schizophrenia and bipolar spectrum disorders.

Major research in this field emphasizes that poor family functioning and low quality of life can play a very important role in the emergence, continuation, and intensification of symptoms of various psychiatric disorders. For example, research has shown that high levels of excitement expressing (high criticism / high emotional involvement) in families of patients with depression, schizophrenia, and bipolar disorder are associated with a possibility of relapse and frequent hospitalization in these patients (1, 2). Other researches also indicated that the disordered function of the family of patients with psychotic and bipolar disorders is related to high frequent recurrence (3-5).

Unal et al., showed that in general, the families of patients with schizophrenia has a low level of function and in the subscales of communication and behavioral control (6). In a comparative study on three groups including patients with chronic psychiatric disorders (schizophrenia and bipolar disorder), patients with the first psychotic attack, and healthy group, findings showed that low family solidarity, non-flexibility, and psychological disturbances in the family of chronic patients and patients who were in their first period of psychosis were higher than the healthy group. In addition, the family of patients with chronic disorders also had higher scores than those who were in the first period of psychosis in these variables (7).

In the case of bipolar patients, studies have shown that families of these patients have poor performance in many aspects of the family function scale (8, 9). Research has shown that the family of patients with bipolar disorder reports less coherence and compatibility and more conflicts

than healthy families (8-10). Like people with schizophrenia, these patients also have severe familial communication problems. However, people with bipolar disorder are more active than those with schizophrenia who are more verbally active and more likely to defend themselves against criticism (11). Other research results also indicate that family functioning in patients with mood disorders is higher than that of the family functioning of patients with schizophrenia (12, 13).

Quality of life is a concept that is directly related to the function of family. The concept of quality of life is not limited to the absence of disease, however, it includes the concept of a person's psychological, social, functional, and spiritual well-being (14). Two studies showed that patients with bipolar disorders had significantly lower scores in all aspects of the quality of life scale (SF-36) compared to the normal population (15, 16). In a large sample of 1157 outpatients, Das and colleagues reported that patients diagnosed with bipolar disorder are more likely to achieve lower scores in the subscales of physical and psychological health of quality of life questionnaire than those who did not get this diagnosis (17). A study also reported that patients with bipolar disorder and schizophrenia had the same low quality of life (15).

The meta-analysis of patients with schizophrenia suggested that the positive and negative symptoms of the disease are correlated with low quality of life (18). The results of another study on schizophrenia showed that the male gender, dismemberment or widening, low economic status, economic dependence on others, life with parents, long illness, low score on overall performance (GAF), high score in the scale of positive and negative symptoms of schizophrenia (PANSS), history of suicide attempt, comorbidity with depression and anxiety disorder, negative attitude of the family towards the patient and treatment, and absence from psychotropic sessions were among the factors that had correlations with low quality of life in these patients (19).

On the other hand, it can be said that the relationship between psychiatric disorders with family functioning and quality of life is a two-way relationship; having a psychiatric disorder can automatically weaken family functioning and reduce quality of life. For example, a research showed that there was a significant relationship between the care burden of schizophrenic patients and caregivers' quality of life. Further analysis also showed that the best predictor of high quality of life in the patient and his family members is the level of patient care, social support, and support for health and treatment (20).

In regards to the above, the study of family function and quality of life of these patients can help us explain the status of these patients in terms of functional or symptomatic conditions and also degree of recovery or degradation in a more accurate manner. In this regard, the present study was conducted to evaluate the family function and quality of life in patients with schizophrenia and bipolar disorders. These kinds of research designs have not been done in Iran until now. Thus, doing that can be a very helpful way to know more about the relationships of the present research's variables in the patients and families of Iran.

2. Methods

The present study was a descriptive, comparative, and cross-sectional study. The statistical population of this study included all patients referring to the psychiatric department of Sahamie Qom hospital who had one of the two diagnosis of schizophrenia disorders (schizophrenia, schizotypal disorder, delusional disorder, schizophrenia, and schizoaffective) and bipolar spectrum disorders (bipolar I disorder, bipolar II disorder, and periodic mood disorder) by a psychiatrist and based on clinical interviews. Ethical committee code for this research was IR.MUQ.REC.1394.116.

The sample size in this study was equal to the subjects available within four months. During this period, 52 patients with one of the schizophrenia disorders and 58 patients with one of the bipolar spectrum disorders were selected to shape a convenience sample.

The inclusion criteria were: at least fifth grade elementary education, full satisfaction for participation in the research, the power of cooperation with the interviewer as well as answering questions, and the status of the disease. Exclusion criteria included: simultaneous diagnosis of a medical disorder or substance abuse, inability to understand the concepts of the questionnaire, the presence of acute illness, and ECT in the past six months.

2.1. Instrument

In this research, the family assessment device (FAD) was used to measure family functioning.

The purpose of this instrument is to measure family performance based on the McMaster model, which determines the structural, occupational, and interactive characteristics of the family. This scale evaluates six dimensions of family function including roles, behavioral control, emotional association, problem solving, and emotional attachment (21).

Researches indicate high validity and reliability of this tool (21). In Iran, one research has measured the alpha coefficient of subscales of this tool from 0/72 to 0/92 (22).

A short version of the quality of life questionnaire is used to measure the quality of in the last four weeks. The

creator is the world health organization in cooperation with 15 other international organizations in 1989.

The questionnaire has the following areas: physical health, psychological health, social relationships, and life environment. In the results reported by the creators the Cronbach's alpha coefficient, it was reported to be between 0.73 and 0.89 for the four subscales and the total scale.

The psychometric properties of the Persian form of this questionnaire showed that the amounts for test-retest was between 0.75 and 0.84 in a two-week period. In addition, Cronbach's alpha values and construct validity indices also indicated that this instrument has been valid in an Iranian population (23). The data were analyzed by t-test and SPSS-20 software.

3. Results

The mean age and standard deviation in the group of patients with schizophrenia disorders were 32.8 ± 13.8 and in the group of patients with bipolar disorder were 28.9 ± 13.9. From the bipolar disorder patients, 21 (36.2%) were female and 37 (8.63%) were male. In the group of schizophrenic patients, 15 (28.8%) were female and 37 (71.2%) were male.

In the schizophrenia group 17 (32.7%) were single, 24 (46.2%) were married, and 10 (19.2%) were divorced. In the bipolar group, 36 (62.1%) of the patients were single, 13 (23.4%) were married, and 6 (12.1%) were divorced.

In order to compare the two groups in terms of family function and quality of life, independent sample t-test statistics was used. Results are shown in the following Tables.

As Tables 1 and 2 show, there are no significant differences between the two sample groups in the sub-scales and the total score of family function and quality of life ($P > 0.05$). In addition, the analyses showed that patients with schizophrenia spectrum disorders showed the most disturbances in the behavioral control and roles of family function scale while patients with bipolar disorder showed the most disturbances in the behavioral control and problem solving subscales. The group of schizophrenic spectrum patients obtained the lowest scores in the physical and social relationship dimensions of quality of life and the bipolar spectrum group in the areas of physical, psychological, and social relations.

4. Discussion

The purpose of this study was to evaluate and compare family function and quality of life in patients with schizophrenia and bipolar disorders. The confirmative results were congruent with previous research findings suggesting poor family function and low quality of life in patients with these two spectra of chronic psychiatric disorders (4, 6, 7, 15, 17, 19).

Role subscale in the FDA questionnaire determines whether the family has defined appropriate behavior patterns for family responsibilities and assignments or not. Behavioral control also refers to ways in which the family determines and maintains standards of behavior for members (24). In the present study, the family of patients with schizophrenia disorders had upset function in both dimensions. The family of patients with bipolar spectrum disorders also had dysfunctional performance in behavioral and problem-solving dimensions.

It seems that the family of these patients have difficulty in defining the role of each family member and doing their family's tasks properly and timely. In addition, the development of chronic diseases such as schizophrenia and bipolar disorder can lead to the displacement of roles in the family structure of these patients, due to the severity of symptoms and loss of family, occupational, social, and economic. Furthermore, families of these patients are often not able to determine the standard behavioral patterns and rules for management and administration of their members, and even if a specific pattern of behavior or set of rules are determined, there is no enforceable guarantee that ultimately leads to disturbances in the structure and function of the family as a whole.

One of the important functions of the family is the ability to solve the problem, which refers to the power of the family to solve internal and external problems in a way that preserves the effective family functioning (24). The findings of the present study indicate that the family of patients with bipolar spectrum disorders has difficulty in solving problems, which is one of the main components of family functioning. Along with this research, previous research also confirms the impairment in the function of problem solving and high conflict in the family of patients with bipolar disorder (8, 10).

In this study, the results indicate low quality of life in both groups of patients, which confirms the findings of previous studies (15, 17). The analysis indicated low scores in the areas of physical health and social relationships of the schizophrenic patients group and physical, psychological, and social health in the bipolar spectrum group. However, data on the quality of life components in these two groups of patients is inconsistent. For example, one study showed that in the quality of life scale of patients with schizophrenia, the highest belonged to physical and environmental health and the lowest score in the psychological health component (25). Additionally, researchers in

Table 1. Independent Sample t-Test Results to Compare Family Function in Two Sample Groups

Subscales of Family Function	Sample Group (Spectrum)	Mean ± SD	Mean Difference	t	P Value	df
Problem solving	Schizophrenia	17.13 ± 2.94	0.556	1.00	0.318	109
	Bipolar	17.69 ± 2.89				
Roles	Schizophrenia	27.09 ± 4.7	-0.649	-0.80	0.423	109
	Bipolar	27.74 ± 3.7				
Emotional companionship	Schizophrenia	22.28 ± 3.02	0.729	0.913	0.211	109
	Bipolar	21.55 ± 3.06				
Communication	Schizophrenia	18.65 ± 3.70	0.450	0.207	0.468	109
	Bipolar	18.20 ± 2.78				
Emotional bonding	Schizophrenia	21.82 ± 3.16	-0.342	0.993	0.556	109
	Bipolar	22.16 ± 2.93				
Behavioral control	Schizophrenia	36.25 ± 5.09	-1.07	0.104	0.243	109
	Bipolar	22.16 ± 4.53				
Total score	Schizophrenia	1.43 ± 15.24	-0.327	0.119	0.889	109
	Bipolar	1.44 ± 11.87				

Table 2. Independent Sample t-Test Results for Comparing Quality of Life Between Two Groups

Dimensions in Quality of Life	Sample Group (Spectrum)	Mean ± SD	Mean Difference	t	P Value	df
Physical	Schizophrenia	17.64 ± 5.42	0.529	0.554	0.581	109
	Bipolar	18.17 ± 4.51				
Psychological	Schizophrenia	16.52 ± 3.34	0.089	0.142	0.877	109
	Bipolar	16.61 ± 3.29				
Social relationships	Schizophrenia	8.08 ± 3.007	0.492	0.889	0.376	109
	Bipolar	8.57 ± 2.79				
Life environment	Schizophrenia	21.84 ± 2.97	-0.212	-0.293	0.770	109
	Bipolar	21.63 ± 4.60				
Total	Schizophrenia	64.10 ± 11.02	0.898	0.406	0.685	109
	Bipolar	65.00 ± 12.26				

another study reported that schizophrenic patients had the lowest score in social relationships and psychological health (26). In the case of patients with bipolar disorder, various studies also show different outcomes in terms of quality of life components (27). What is important is to consider that quality of life is directly related to the demographic and clinical characteristics of the sample group. On the other hand, it must be recognized that the quality of life can be subjective, in many respects, from the way individuals perceive their living conditions. Therefore, in interpreting the results, attention should be paid to the demographic and clinical characteristics of individuals and their perceptions of quality of life.

On the other hand, the analysis showed that these two groups did not differ significantly in family function. These results are inconsistent with previous findings, which have often shown that the family function of patients with bipolar disorder is higher than the family functioning of patients with schizophrenia (7, 12, 13). In addition, the findings of this study showed that there are no significant differences between the two groups in the quality of life, which is consistent with the Depp et al., study, which did not find a significant difference in the quality of life between the two groups (15). Accordingly, it can be concluded that, in general, the symptoms of schizophrenic and bipolar spectrum disorders and the consequences of the disease can, to a certain extent, lead to loss of quality of life and functional impairment of the family in these patients.

The lack of control of demographic variables such as

occupational status, educational level, socioeconomic status, and clinical variables such as duration of the disease, type of disorder, history of drug use, use of the available sample, nature of the self-report of the instrument, and non-using of a normal group for comparison may be regarded as limitations of this study.

4.1. Conclusion

In general, the present study showed that family functioning is impaired in two groups of patients with various types of schizophrenia and bipolar disorders and these patients often have low quality of life. A review of family functioning and quality of life in these patients helps us to identify as much causal, sustaining, and exacerbating factors as possible for these chronic disorders. By knowing these factors, it is possible to apply appropriate health and treatment interventions such as family therapy or using social care services to manage an efficient and desirable treatment.

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Footnotes

Authors' Contribution: All authors have been involved in all stages of research that contributes to this article.

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