ORIGINAL RESEARCH PAPER

Family functioning in persons with schizophrenia: Cross sectional study across the genders

Santos Behera[1], Indira Bhowmick[2], Pradeep Kumar[3]

[1]PSW, Circle Jail, Baripada, Directorate of Prisons & Correctional Services, Odisha, India
[2] Consultant, Psychiatric Social Work (PSW), Sukoon Recovery Centre, New Delhi, India
[3]Consultant, Psychiatric Social Work, State Institute of Mental Health, PGIMS, Rohtak, India

ABSTRACT

Background: Schizophrenia is a significant and disabling condition that puts a financial and emotional burden on the supporting family members. The aim of the study was to explore the family functioning among the persons diagnosed with schizophrenia and differences across genders. *Materials and Methods:* The study was a cross-sectional, hospital-based observational research conducted at the tertiary care institution. A purposive sampling technique was used to select participants, resulting in a sample size of 65, calculated using G*Power software. Inclusion criteria included individuals diagnosed with schizophrenia according to ICD-10, with a duration of illness over two years and an age range of 21 to 60 years. Family caregivers with co-morbid psychiatric or organic illnesses, substance abuse history, or those caring for more than one patient were excluded. Data was collected using a Socio-Demographic Data Sheet and the Family Assessment Device (FAD), a standardized measure assessing seven subscales of family functioning. SPSS version 20 was used for statistical analysis, including tests of normality and descriptive statistics such as frequency, percentage, mean, and standard deviation. *Results:* The family assessment data using the McMaster Family Assessment Device (FAD) shows significant dysfunction across multiple domains among individuals with schizophrenia, with notable gender differences. *Conclusion:* These findings highlight the need for tailored interventions that address specific challenges faced by males and females to improve family functioning and support recovery.

Keywords: Schizophrenia, family functioning, gender

INTRODUCTION

Schizophrenia is marked by fundamental and distinctive cognitive and perceptual abnormalities, as well as incorrect or dampened feelings. Although certain cognitive deficiencies may develop over time, clear consciousness and intellectual capacity are usually retained. The most common psychopathological phenomena include thought echo, thought insertion or withdrawal, thought broadcasting, delusional perception, delusions of control, influence or passivity, hallucinatory voices commenting or discussing the patient in the third person, thought disorders, and negative symptoms.[1] Schizophrenia affects around 23 million people worldwide, according to the World Health Organization (WHO).[2]

Access the Article Online	
DOI: 10.29120/IJPSW.2024.v15.i2.616	Quick Response Code
Website: http://pswjournal.org/index.php/ijpsw	

The prevalence of schizophrenia and other psychotic diseases is considerable in India, with a prevalence of 0.5% for current and 1.4% for lifetime experience. The 40-49 age group (0.6%) showed a greater prevalence of current experience of schizophrenia and other psychotic disorders than any other age group.[3] Around 30% of persons with schizophrenia experience persistent and severe unpleasant symptoms that are resistant to treatment. Chronic negative symptoms, known as 'deficit syndrome,' include a lack of initiative, interests, and social fluency; impaired verbal communication and concentration; and a loss of interpersonal function. Along with progressive deterioration in various cognitive functions

Address for Correspondence:
Dr. Pradeep Kumar
Consultant, Psychiatric Social Work
State Institute of Mental Health, PGIMS
Rohtak -124001, India
Email: pradeep.meghu@gmail.com

How to Cite the Article: Behera S, Bhowmick I, Kumar P. Family functioning in persons with schizophrenia: Cross sectional study across the genders. Indian J Psychiatr Soc Work 2024;15(2):57-64.

(e.g., problems with working memory and information processing, reasoning and problem solving, and social cognition), there are numerous and diverse functional impairments that can jeopardize overall psychosocial functioning, social integration, and overall health.[4]

A family is a fundamental unit responsible for protecting the dignity of its members. Families provide their members with financial, social, and emotional support. A high-functioning family supports its members' problem-solving and coping skills and aspects of communication, emotional stability, and behaviour management. A condition like schizophrenia is significant and disabling, placing a financial and emotional burden on the supporting family members. The last three decades have seen an increase in research on the impact of families on the development of schizophrenia. The family context has been highlighted as important in determining whether a patient will relapse or recover. This paved the way for the concept of expressed emotions (EE), which describes how family members view the patient and has significant effects on the course and prognosis of the condition. Family interventions have been made to minimize the caregivers' detrimental effects on the patient's rehabilitation and recovery.

The patient's mental health and outcome are significantly influenced by the family. However, the severe difficulties brought on by a patient with schizophrenia can place a heavy burden on the family. A thorough and sympathetic understanding of the family members' perspectives is necessary to identify the behavioural patterns present in the family and develop better treatment methods.[5] People with schizophrenia may require assistance from others to meet daily needs due to deficits in life functioning and self-care. A deeper understanding of the interactions between the family and the patient is required, given the varied aetiology of schizophrenia. On one hand, patients' perceptions of the support from their environment were strongly correlated with their perceptions of family functioning and family environment, which was shown to predict disease recurrence and re-hospitalization for people with schizophrenia.[6]

The importance of family functioning in patient and family cantered care cannot be overstated. In the United States, the joint commission has incorporated Patient and Family-Centered Care (PFCC) ideas into their performance standards and regulations for healthcare organizations. Patient and family cantered care is appreciated and highlighted in clinical practice to support families and increase family functioning during tough times.[7]

In health research, the term "family functioning" has been used repeatedly. According to previous research, good family functioning occurs when family members fulfil their duties, complete practical chores, and maintain relationships within and beyond the family setting. However, different research uses different conceptual and practical definitions of family functioning, making it difficult to compare and synthesize results.[8] Schizophrenia has a significant negative impact on both the patients and their families.[9,10] Since the introduction of antipsychotic medications and patient deinstitutionalization, families have become an integral part of the care system, taking over some of the responsibilities and care that psychiatric institutions previously handled.[11] It has been noted that this caregiving may become a burden that reduces their quality of life, impacting the care that the ill family members receive and their progress.[12] Many factors, including the level of care, stigma, and lack of support for the family, impact the family's capacity. About 67.8% of families endure various burdens due to having a person with schizophrenia in the family system.[13] Higher levels of family functioning were correlated positively with greater levels of family support.

As a result of the deinstitutionalization movement in the 1970s and subsequent modifications to patients' legal rights, patients with serious mental illnesses (such as schizophrenia) have moved from a hospital-based to a community-based system. However, the flaws of the community-based system of care have had several effects on the patients' families, who are frequently called upon to make up for the deficiencies of the current system.[14] Being part of a self-help organization was not traditionally aligned with cultural and family traditions in India, which has strong kinship and clan networks. However, given the urgent need, numerous initiatives to establish family support groups in various regions of the

country have been launched; some of these efforts have grown into family support movements for the provision of mental healthcare services in the country.[15] This illustrates how strong Indian families can be. Indian families play an all-pervasive role, encompassing decisions about when, where, and how to seek treatment, as well as whether or not to continue with it. They also play a significant role in issues pertaining to rehabilitation, such as employment and marriage, in addition to providing for the patient's basic (housing, clothing, and food), emotional, and financial needs.[16] As caregivers, family members of those with mental illness deal with various issues that can impact their daily lives, health, and employment. These issues might be financial, emotional, interpersonal, or social.[17]

A patient's support systems may come from several sources, including family, professional, residential or day program providers, shelter operators, friends, and roommates. There are numerous situations in which a patient with schizophrenia may need help from people in their family or community. Often, a person with schizophrenia will resist treatment, believing that delusions or hallucinations are real and that psychiatric help is not required. At times, family or friends may need to take an active role in having them seen and evaluated by a professional. Many patients live with their families; however, this should not imply that families must be the primary support system.[18] Thus, the aim of the study was to explore the family functioning among the persons diagnosed with schizophrenia and differences across genders.

MATERIALS AND METHODS

The study was conducted at the Centre of Excellence in Mental Health, Atal Bihari Vajpayee Institute of Medical Sciences & Dr. Ram Manohar Lohia Hospital, New Delhi, from October 2022 to January 2023. A cross-sectional, hospital-based observational study design was used. The sample was selected using a purposive sampling technique. The sample size formula applied was $Z^2_{1-\alpha/2} \times SD^2/d^2$ The sample size was calculated based on a study by Sawant & Jethwani[5] which assessed family functioning and social support. The minimum correlation found in the problem-solving subscale of the Family Assessment Device (FAD) and social support was 0.34. G*Power online software was used for sample calculation, utilizing a statistical test for correlation with a bivariate normal model. The level of confidence was set at 95%, and power at 80%, resulting in a sample size of 65. The inclusion criteria for individuals included: a diagnosis of schizophrenia as per ICD-10 criteria, a duration of illness of more than two years, an age range of 21 to 60 years, and the provision of written informed consent. Both male and female participants were included. Exclusion criteria for family caregivers included those who were caring for individuals with co-morbid psychiatric or organic illnesses, caregivers with a history of substance abuse, and family members who were providing care for more than one patient with a mental illness.

The tools used in the study included a Socio-Demographic Data Sheet, which is a semi-structured and self-prepared form that collects information on socio-demographic variables such as age, sex, religion, education, and marital status. Another tool used was the Family Assessment Device (FAD), developed by Epstein et al.[19] The FAD consists of 60 items and is a standardized measure for assessing family functioning, providing seven subscale scores that include communication, problem-solving, roles, affective responsiveness, affective involvement, behavioral control, and general functioning.[19] For statistical analysis, SPSS (Statistical Package for the Social Sciences) version 20 was utilized. The normality of the variables was checked to determine the appropriate statistical methods. Descriptive statistics frequency, percentage were calculated to weigh the results.

RESULTS

Socio-demographic Characteristics Participants

Table 1 shows the socio-demographic characteristics of the study subjects. The table depicts that 36.9% of the respondents were in the age group of 21-30 years, followed by 46.2% in the 31-40 years group. The age groups 41-50 years and 51-60 years comprised 12.3% and 4.6% of respondents, respectively, with 3 out of 65 respondents in the latter group. Among the respondents, 47.7% were male and 52.3% were female. The majority (23.1%) had completed higher secondary education, followed by secondary (21.5%), primary (20.0%), and graduation (16.9%). Only 6 respondents (9.2%)

had postgraduate education or higher. Most respondents (96.9%) resided in urban areas, with 1.5% in semi-urban and 1.5% in rural areas. In terms of occupation, 35.4% were housewives, 33.8% were unemployed, 9.2% were engaged in business, and 7.7% were students or professionals/government employees. Only 6.2% were farmers.

Table 1 Socio-demographic Profile Participants

Socio-demographic	*f*	%
Age in years		
21-30	24	36.9
31-40	30	46.2
41-50	8	12.3
51-60	3	4.6
Gender		
Male	31	47.7
Female	34	52.3
Highest Education		
Illiterate	6	9.2
Primary	13	20.0
Secondary	14	21.5
Higher Secondary	15	23.1
Graduation	11	16.9
PG and above	6	9.2
Domicile		
Rural	1	1.5
Semi-Urban	1	1.5
Urban	63	96.9
Occupation		
Farmer/Agri	4	6.2
Business	6	9.2
Professional/Govt	5	7.7
Housewife	23	35.4
Unemployed	22	33.8
Student	5	7.7

Table 2 shows that the majority of respondents (41.5%) had a duration of illness of 2-5 years, while only 1.5% had a duration of 21-25 years. Among the respondents, 43.1% had never been hospitalized, and only 1.5% had been hospitalized 5, 6, or 7 times. Additionally, 66.2% of respondents were adherent to their treatment, whereas 33.8% were non-adherent.

Table 2 Clinical Profile of Person with Schizophrenia

Socio-demographic Variables	*f*	%
Duration of Illness		
2-5 years	27	41.5
6-10years	19	29.2
11-15years	8	12.3
16-20 years	8	12.3
21-25 years	1	1.5
Above 25 years	2	3.1
No of hospitalization		
Never	28	43.1
1.00	20	30.8
2.00	12	18.5
3.00	2	3.1
5.00	1	1.5
6.00	1	1.5
7.00	1	1.5
Adherence		
Yes	43	66.2
No	22	33.8

Table 3 Comparison of family functioning between male and female

Areas of Family Functions	Unhealthy Functioning Family n (%)		
	Female n = 34	Male n = 31	Whole n = 65
Problem Solving	23 (67.65)	23 (74.19)	46 (70.77)
Communication	27 (79.41)	26 (83.87)	53 (81.54)
Roles	24 (70.59)	23 (74.19)	47 (72.31)
Affective Responsiveness	19 (55.88)	18 (58.06)	37 (56.92)
Affective Involvement	34 (100.00)	31 (100.00)	65 (100.00)
Behaviour Control	34 (100.00)	31 (100.00)	65 (100.00)
General Functioning	26 (76.47)	18 (58.06)	44 (67.69)

The data from the table 3 reveals distinct patterns in family functions among male and female respondents with schizophrenia, as well as the overall sample. In terms of problem-solving, a higher percentage of females (67.65%) and males (74.19%) are classified as having unhealthy problem-solving functions, with the overall sample reflecting a similar trend (70.77%). Communication patterns show that 79.41% of females and 83.87% of males are in the unhealthy category, with 81.54% of the whole sample being unhealthy communicators.

When examining roles within the family, both females (70.59%) and males (74.19%) demonstrate a high prevalence of unhealthy

functioning, mirroring the overall sample (72.31%). Affective responsiveness, which measures emotional responses, indicates that 55.88% of females and 58.06% of males fall into the unhealthy category, with the whole sample at 56.92%.

Affective involvement and behaviour control show a significant concern, as 100% of both male and female respondents are categorized as unhealthy, highlighting a critical area for intervention. Lastly, general functioning presents that 76.47% of females and 58.06% of males are unhealthy, with the overall sample at 67.69%.

DISCUSSION

The family assessment data, based on the McMaster Family Assessment Device (FAD)[19] provides a comprehensive view of family functioning among individuals with schizophrenia. The findings reveal significant dysfunction in several domains, including problem-solving, communication, roles, affective responsiveness, affective involvement, behaviour control, and general functioning. Significant differences were observed in the domains of the Family Assessment Device between males and females.

Problem-Solving and Communication: The ability to solve difficulties, which refers to the family's capacity to deal with both internal and external issues while maintaining efficient family functioning, is one of the family's key roles.[20] The high percentages of unhealthy functioning in problem-solving (67.65% for females, 74.19% for males) and communication (79.41% for females, 83.87% for males) are concerning. These findings align with previous research that highlights the challenges families face in effectively managing problems and communicating when a member has schizophrenia. Studies have shown that communication patterns in families with a schizophrenic member are often marked by high levels of criticism and hostility, which can exacerbate symptoms and hinder recovery.[21]

Roles and Affective Responsiveness: Roles and affective responsiveness also show significant dysfunction, with 70.59% of females and 74.19% of males having unhealthy roles, and 55.88% of females and 58.06% of males having unhealthy affective responsiveness. This aligns with research suggesting that family members often struggle to maintain clear and supportive roles, leading to increased stress and burden.[22] Affective responsiveness is crucial for emotional support, and its deficiency can lead to a lack of empathy and understanding within the family, further isolating the individual with schizophrenia.[23]

Affective Involvement and Behaviour Control: The complete absence of healthy functioning in affective involvement and behaviour control (100% unhealthy for both genders) is particularly alarming. Affective involvement refers to the family's interest and engagement in each other's activities, and its absence can indicate emotional disengagement and neglect. Similarly, ineffective behaviour control reflects a lack of clear expectations and boundaries, which are essential for managing schizophrenia symptoms and ensuring a stable environment.[24] A study by Tabaee and Abbasi, found no significant differences in the family function and quality of life subscales or the overall score between the two sample groups. However, the current analysis revealed that patients with schizophrenia exhibited the greatest disturbances in the behavioral control and problem-solving subscales.[25]

General Functioning: General functioning shows that 76.47% of females and 58.06% of males are unhealthy, with the overall sample at 67.69%. This suggests that the overarching functioning of families with a schizophrenic member is significantly impaired, consistent with findings from other studies that indicate high levels of dysfunction and stress in such families.[26]

Comparison with Other Research Findings: Research consistently shows that families of individuals with schizophrenia face numerous challenges that impact their functioning. For instance, a study by Magliano et al. found that family burden is high in schizophrenia, with many family members experiencing significant emotional distress, social isolation, and financial strain.[27] Additionally, psychoeducational interventions have been shown to improve family functioning by enhancing communication skills, problem-solving abilities, and emotional support.[28]

Overall, these findings emphasize the need for comprehensive family-based interventions that address the multifaceted challenges faced by

families of individuals with schizophrenia. Interventions such as family therapy, psychoeducation, and support groups can be beneficial in improving family functioning, reducing burden, and supporting recovery.[29] The alignment of this study's findings with existing research underscores the importance of continued focus on family dynamics in the context of schizophrenia treatment and support.

Family therapies have been found to improve family well-being, foster their ability to cope, and work well to preserve psychological well-being. The capacity to handle stress is increased, according to the meta-analysis of the interventions provided to families of schizophrenia patients. Caregivers who participated in the National Alliance on Mental Illness family to family support programme and completed it were interviewed as part of a qualitative study to assess the effectiveness of the programme. After participating in the programme, caregivers reported that they were able to solve problems more effectively, that their confidence had grown, that they behaved more compassionately toward the patients, that their anger and frustration had decreased, and that they were better able to handle stress.[30] The family's environment and other activities also impact the mental health of the person. The family's negative attitude such as inadequate problem solving, communication, role, general functioning and inadequate social support ultimately impact the person diagnosed with schizophrenia. There are few studies found which has focused on understanding family functioning in unremitting schizophrenia.

STRENGTHS

(a) The use of reliable and valid assessment tools, such as the Family Assessment Device scale, which facilitates direct comparison with several studies employing these tools. (b) Few studies address all domains of the FDA, as most focus on the remission of schizophrenia; this study highlights family functioning and social support in schizophrenia. (c) Purposive sampling ensured that all patients and their informants were involved in the study within the constraints of limited time and resources. (d) The findings can inform specific interventions aimed at improving family functioning among individuals with schizophrenia.

LIMITATIONS

(a) The study was conducted over a brief period with limited resources, posing challenges in data collection within the required timeframe. (b) The Family Assessment Device covers various domains of family functioning, necessitating more time for comprehensive assessment. (c) The study focused solely on schizophrenia, excluding other psychiatric comorbidities. (d) Rater bias may have influenced results due to the researcher's familiarity with the study subjects. (e) A follow-up measurement was not feasible within the time constraints of the study.

FUTURE DIRECTIONS

(a) The study represents only a small sample of India's large population; future research with a larger, randomly drawn sample from the community is needed to validate or challenge these findings. (b) More extensive research across the country is required to generalize the study's findings. (c) Future studies should also explore the impact of interventions on mental health outcomes to assess and sustain improvements.

CONCLUSION

In conclusion, the family assessment data using the McMaster Family Assessment Device (FAD) reveals significant dysfunction across several domains of family functioning among individuals with schizophrenia, with notable gender differences. Males and females showed varying levels of unhealthy functioning in areas such as problem-solving, communication, roles, affective responsiveness, and general functioning. These findings suggest that schizophrenia affects family dynamics differently for males and females, which could be due to varying gender roles, expectations, and coping mechanisms within families. Understanding these gender differences is crucial for tailoring interventions that enhance communication, problem-solving, and emotional support to improve overall family functioning and support recovery for individuals with schizophrenia.

Financial support and sponsorship: Nil.

Conflicts of interest: None

Ethical considerations: Taken

REFERENCES

1. Uhlhaas PJ, Mishara AL. Perceptual anomalies in schizophrenia: integrating phenomenology and cognitive neuroscience. Schizophr Bull. 2007;33(1):142-56.
2. World Health Organization. The world health report 2001: mental health: new understanding, new hope. Geneva: World Health Organization; 2001.
3. Murthy RS. National mental health survey of India 2015–2016. Indian J Psychiatry. 2017;59(1):21-6.
4. Millan MJ, Fone K, Steckler T, Horan WP. Negative symptoms of schizophrenia: clinical characteristics, pathophysiological substrates, experimental models and prospects for improved treatment. Eur Neuropsychopharmacol. 2014;24(5):645-92.
5. Sawant NS, Jethwani KS. Understanding family functioning and social support in unremitting schizophrenia: A study in India. Indian J Psychiatry. 2010;52(2):145-9.
6. Peng MM, Zhang TM, Liu KZ, Gong K, Huang CH, Dai GZ, et al. Perception of social support and psychotic symptoms among persons with schizophrenia: A strategy to lessen caregiver burden. Int J Soc Psychiatry. 2019;65(7-8):548-57.
7. Zhang Y. Family functioning in the context of an adult family member with illness: A concept analysis. J Clin Nurs. 2018;27(15-16):3205-24.
8. Shore D, editor. Schizophrenia: questions and answers. Washington, DC: US Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute of Mental Health; 1986.
9. Awad AG, Voruganti LN. The burden of schizophrenia on caregivers: A review. Pharmacoeconomics. 2008;26(2):149-62.
10. Boyer L, Caqueo-Urízar A, Richieri R, Lancon C, Gutiérrez-Maldonado J, Auquier P. Quality of life among caregivers of patients with schizophrenia: A cross-cultural comparison of Chilean and French families. BMC Fam Pract. 2012;13:42.
11. Gutiérrez-Maldonado J, Caqueo-Urízar A, Kavanagh DJ. Burden of care and general health in families of patients with schizophrenia. Soc Psychiatry Psychiatr Epidemiol. 2005;40(11):899-904.
12. Ribé JM, Salamero M, Pérez-Testor C, Mercadal J, Aguilera C, Cleris M. Quality of life in family caregivers of schizophrenia patients in Spain: caregiver characteristics, caregiving burden, family functioning, and social and professional support. Int J Psychiatry Clin Pract. 2018;22(1):25-33.
13. Darwin P, Hadisukanto G, Elvira SD. Burden of care and emotional expression of nurses work with schizophrenia patient in mental hospital. J Indones Med Assoc. 2013;63(2):46–51.
14. Saunders JC. Family functioning in families providing care for a family member with schizophrenia. Issues Ment Health Nurs. 1999;20(2):95-113.
15. Seshadri K, Sivakumar T, Jagannathan A. The family support movement and schizophrenia in India. Curr Psychiatry Rep. 2019;21(10):1-7.
16. Thara R, Padmavati R, Srinivasan TN. Focus on psychiatry in India. Br J Psychiatry. 2004;184:366–73.
17. Ponnuchamy L, Mathew BK, Mathew S, Udayakumar GS, Kalyanasundaram S, Ramprasad D. Family support group in psychosocial rehabilitation. Indian J Psychiatry. 2005;47(3):160–3.
18. Sewlikar SA, Pillai RS, Mahajan NS, Desai AA. Triclosan coated sutures: an overview of safety and efficacy in reducing risk of surgical site infection. Int Surg J. 2016;2(1):1-7.
19. Epstein NB, Baldwin LM, Bishop DS. The McMaster family assessment device. J Marital Fam Ther. 1983;9(2):171-80.
20. Kuipers E, Bebbington P, Dunn G, Fowler D, Freeman D, Watson P, et al. Influence of carer expressed emotion and affect on relapse in non-affective psychosis. Br J Psychiatry. 2006;188:173-9.
21. Sullivan AE, Miklowitz DJ. Family functioning among adolescents with bipolar disorder. J Fam Psychol. 2010;24(1):60-7. doi: 10.1037/a0018183.

22. Smith J, Birchwood M. Schizophrenia and the family: burden, risk factors, and intervention. Int Rev Psychiatry. 2010;22(2):142-9.
23. Hesse K, Klingberg S. Examining the cognitive model of caregiving–a structural equation modelling approach. Psychiatry Research. 2014;217(3):171-6.
24. Mueser KT, Glynn SM. Behavioral Family Therapy for Psychiatric Disorders. 2nd ed. Oakland: New Harbinger Publications; 1999.
25. Tabaee SR, Abbasi M, Nejad PR, Mohammadi SD. Family function and quality of life in patients with schizophrenia and bipolar spectrum disorders: A patient-centered study. Ann Mil Health Sci Res. 2017;15(4):e79866. doi: 10.5812/amh.79866.
26. McFarlane WR, Dixon L, Lukens E, Lucksted A. Family psychoeducation and schizophrenia: a review of the literature. J Marital Fam Ther. 2003;29(2):223-45.
27. Magliano L, Fiorillo A, Malangone C, De Rosa C, Maj M; National Mental Health Project Working Group. Patient functioning and family burden in a controlled, real-world trial of family psychoeducation for schizophrenia. Psychiatr Serv. 2006;57(12):1784-91.
28. Pharoah F, Mari J, Rathbone J, Wong W. Family intervention for schizophrenia. Cochrane Database Syst Rev. 2010;(12). doi: 10.1002/14651858.CD000088.pub3
29. Dixon L, Adams C, Lucksted A. Update on family psychoeducation for schizophrenia. Schizophr Bull. 2001;26(1):5-20.
30. Bademli K, Cetinkaya DZ. Family to family support programs for the caregivers of schizophrenia patients: a systematic review. Turk Psikiyatri Derg. 2011;22(4):255-65.

Received on: 05-07-2024
Revised on: 03-08-2024
Accepted on: 12-09-2024
Published on: 21-09-2024