A Comparative Study on Coping Skills and Problem-Solving Abilities Among Patients with Schizophrenia and Bipolar Affective Disorder (BPAD)

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ABSTRACT

Background: Schizophrenia and bipolar affective disorder (BPAD) are among the most severe psychiatric conditions, often resulting in long-term disability. While the severity and manifestations of these disorders differ, both significantly impact an individual's quality of life and social adjustment (Judd et al., 2005). **Aim:** This study aims to assess and compare the coping skills and problem-solving abilities among patients with schizophrenia and BPAD. **Methods:** The study was conducted at the outpatient department (OPD) of CIIMHANS, Dewada, Rajnandgaon. A total of 60 patients diagnosed with schizophrenia and BPAD were selected using a purposive sampling technique based on specific inclusion and exclusion criteria. Socio-demographic and clinical data were collected using structured datasheets. Coping skills and problem-solving abilities were assessed using standardized psychological tools. **Results:** The findings indicate that patients with BPAD exhibited better coping skills and problem-solving abilities compared to those with schizophrenia. A statistically significant difference was observed between the two groups in terms of overall coping mechanisms and problem-solving efficiency. **Conclusion:** Individuals with psychiatric disorders often experience challenges in social adjustment, employment, and social stigma, all of which affect their overall well-being. Enhancing coping strategies and problem-solving abilities through targeted interventions is crucial to improving their quality of life and social functioning.

Keywords: Coping skills, Problem-solving abilities, Schizophrenia, Bipolar affective disorder (BPAD)

INTRODUCTION

Schizophrenia and Bipolar Affective Disorder (BPAD) are among the most severe and chronic psychiatric disorders, significantly affecting an individual's cognitive, emotional, and social functioning. Schizophrenia is characterized by persistent symptoms such as hallucinations, delusions, cognitive deficits, and impaired social interactions, leading to substantial disability in daily life (Kao et al., 2011). On the other hand, BPAD is a mood disorder marked by alternating episodes of mania, hypomania, and depression, which can lead to significant fluctuations in behavior, energy levels, and social adaptability (American Psychiatric Association, 2013).

Coping skills and problem-solving abilities play a crucial role in the management of psychiatric disorders. Coping skills refer to the strategies individuals use to handle stress and challenges, while problem-solving abilities involve the cognitive and behavioral processes used to resolve difficult situations (Lazarus & Folkman, 1984). Patients with schizophrenia and BPAD often experience difficulties in these domains, which can affect their overall quality of life, social relationships, and treatment adherence.

Research suggests that individuals with BPAD may demonstrate better coping skills and problem-solving abilities than those with schizophrenia due to the episodic nature of BPAD, allowing for periods of relatively normal functioning (Vázquez Morejón et al., 2018). However, the recurrent mood fluctuations in BPAD can also impair cognitive

processing and decision-making. In contrast, schizophrenia is associated with chronic cognitive impairment, leading to significant deficits in problem-solving and coping mechanisms (Ritsner & Grinshpoon, 2015).

Given the critical role of adaptive coping and effective problem-solving in the management of psychiatric illnesses, it is essential to assess and compare these skills among patients with schizophrenia and BPAD. Understanding these differences can help develop targeted psychosocial interventions, such as Motivational Enhancement Therapy (MET), to enhance coping and problem-solving abilities, ultimately improving treatment outcomes and social functioning.

Coping Skills in Schizophrenia and BPAD

Coping strategies are essential for individuals with severe psychiatric disorders, as they help manage stress, reduce symptom severity, and improve overall well-being. Research has shown that individuals with schizophrenia often rely on maladaptive coping mechanisms such as avoidance, denial, and withdrawal, which can exacerbate symptoms and reduce social functioning (Holubova et al., 2016). In contrast, patients with BPAD tend to use a mix of adaptive and maladaptive coping strategies, depending on their mood state (Sidlova et al., 2011). During manic episodes, individuals may exhibit overconfidence and impulsive decision-making, whereas depressive episodes often lead to avoidance and rumination.

A study by Meyer et al. (2012) found that patients with BPAD reported higher use of active coping strategies, such as problem-focused coping and cognitive restructuring, compared to individuals with schizophrenia. However, during depressive episodes, BPAD patients were more likely to engage in maladaptive coping, similar to schizophrenia patients. These findings highlight the need for intervention programs that enhance adaptive coping strategies across different mood states.

Problem-Solving Abilities in Schizophrenia and BPAD

Problem-solving is a cognitive process that involves identifying challenges, generating solutions, and implementing effective strategies. Patients with schizophrenia often exhibit significant deficits in problem-solving due to impaired executive functioning and cognitive flexibility (Green et al., 2019). These impairments hinder their ability to adapt to changing situations, leading to poor social and occupational outcomes.

In contrast, research suggests that individuals with BPAD generally perform better in problem-solving tasks than those with schizophrenia, particularly during euthymic (stable) phases (Martínez-Arán et al., 2004). However, cognitive deficits in BPAD, particularly in areas such as attention, memory, and decision-making, can still impact problem-solving abilities, especially during depressive episodes.

A study by Chang et al. (2020) compared problem-solving skills in schizophrenia and BPAD and found that while BPAD patients performed better overall, their problem-solving abilities were inconsistent, fluctuating with mood episodes. This highlights the importance of interventions that focus on enhancing cognitive flexibility and executive function in both disorders.

A meta-analysis by Villalta-Gil et al. (2017) found that psychosocial interventions significantly improved problem-solving abilities and coping strategies in patients with schizophrenia and BPAD, leading to better treatment adherence and social functioning. These findings emphasize the importance of integrating psychosocial therapies into standard psychiatric care to enhance adaptive coping and problem-solving skills.

METHODOLOGY

Aim: This study aims to assess and compare the coping skills and problem-solving abilities among patients with schizophrenia and BPAD.

OBJECTIVES OF THE STUDY

1. To assess and compare coping skills among patients with schizophrenia and BPAD.
2. To assess and compare problem-solving abilities among patients with schizophrenia and BPAD.
3. To examine the relationship between coping skills and problem-solving abilities in patients with schizophrenia and BPAD.
4. To evaluate the influence of demographic and clinical factors on coping skills and problem-solving abilities in patients with schizophrenia and BPAD.

HYPOTHESES OF THE STUDY

1. Patients with BPAD will demonstrate significantly better coping skills than patients with schizophrenia.
2. Patients with BPAD will exhibit superior problem-solving abilities compared to patients with schizophrenia.
3. There will be a positive correlation between coping skills and problem-solving abilities in both patient groups.
4. Demographic and clinical factors will have a significant impact on coping skills and problem-solving abilities in patients with schizophrenia and BPAD.

METHODS AND MATERIALS

This study was a cross-sectional, hospital-based study conducted at the outpatient department of the Central India Institute of Mental Health and Neuro Sciences (CIIMHANS), Dewada, Rajnandgaon, Chhattisgarh, India. A total of 60 patients diagnosed with schizophrenia and BPAD participated in the study, with 30 patients in each group. The sample was selected purposively based on the study's inclusion and exclusion criteria.

Inclusion and Exclusion Criteria

Inclusion Criteria: Patients diagnosed with schizophrenia and BPAD as per ICD-10, aged 20-50 years, of both genders, with a minimum illness duration of one year, primary education level or higher, able to comprehend instructions, willing to provide informed consent, cooperative, and in remission.

Exclusion Criteria: Patients unwilling to give consent, uncooperative, with a history of severe medical conditions, aged below 20 or above 50 years, and those with comorbid substance dependence (except nicotine and caffeine).

Tools Used

- **Socio-Demographic and Clinical Data Sheet:** A semi-structured proforma designed to collect socio-demographic details (e.g., age, sex, marital status, education, occupation, income) and clinical variables (e.g., diagnosis, illness duration).
- **WHOQOL-BREF (1996):** A 26-item scale assessing four domains—physical health, psychological health, social relationships, and environment—validated in India by Saxena et al. (1998).
- **Social Adjustment Scale Self-Report (SAS-SR; Weissman, 1999):** A 54-item scale assessing six domains of social adjustment over two weeks.

PROCEDURE

Participants meeting the inclusion criteria were informed about the study's purpose and provided written consent. They were assessed using the WHOQOL-BREF and SAS-SR scales, with data collected and analyzed according to standard protocols.

STATISTICAL ANALYSIS

Data were analyzed using IBM SPSS Version 25.0 (Armonk, NY, USA). Descriptive statistics (frequency, percentage, mean, SD) were used, and significance levels were set at $p < 0.05$, $p < 0.01$, and $p < 0.001$.

RESULTS

Table-1: Comparison of socio-demographic variables between patient with schizophrenia and BPAD

Variables		Group (N= 60)		df	χ^2	P
		Schizophrenia	BPAD			
Age	20 to 30 years	3 (10.0%)	5 (16.7%)	2	0.605	0.739 NS
	31 to 40 years	20 (66.7%)	18 (60.0%)			
	40 to 50 years	7 (23.3%)	7 (23.3%)			
Gender	Male	9 (30.0%)	14 (46.7%)	1	1.763	0.184 NS
	Female	21 (70.0%)	16 (53.3%)			
Education	Primary to secondary	16 (53.3%)	18(60.0%)	2	0.784	0.676NS
	Higher secondary to Graduation	10 (33.3%)	10 (33.3%)			
	PG to above	4 (13.3%)	2 (6.7%)			
Marital Status	Married	20(66.7%)	18 (60.0%)	1	0.287	0.592NS
	Unmarried	10 (33.3%)	12 (40.0%)			
Occupation	Govt. job	5 (16.7%)	9 (30.0%)	3	1.739	0.628NS
	Private job	10(33.3%)	7(23.4%)			
	Others	7(23.4%)	7(23.4%)			
	Unemployed	8 (26.7%)	7(23.4%)			
	Unemployed	11(27.5%)	7 (17.5%)			
Domicile	Rural	9 (30.0%)	10 (33.3%)	1	0.077	0.781NS
	Urban	21 (70.0)	20 (66.7%)			
Duration of illness	1 to 2 years	11(36.7%)	17 (56.7%)	2	2.677	0.262NS
	3 to 5 years	13(43.3%)	10(33.3%)			
	More than 5 years	6(20.0%)	3(10.0%)			

df=Degree of freedom, NS=Not significant, BPAD= Bipolar affective disorder, N= Number

Table 1: describes the comparison of two groups (N=60) in their categorical variables by using Chi square analysis. Majority of 66.7% patients of schizophrenia and 60% patients with BPAD were age between 31 to 40 years. In gender, the majority of 70% patients with schizophrenia and 53.3% patients with BPAD were female. The majority of 53.7% patients with schizophrenia and 60% patients with BPAD were educated to primary level. In marital status, the majority of 66.7% patients with schizophrenia and 60% patients with BPAD were married. In occupation, the majority of 27.5% schizophrenia patients was unemployed and while 30% BPAD patients were government job. In domicile, the majority of 70% patients with schizophrenia and 53.3% patients with BPAD were belonged to rural areas. The majority of 43.3% schizophrenia patient's duration of illness was 3 to 5 years and 56.7% schizophrenia patient's duration of illness was 3 to 5 years. In this table was used Chi-Square Test and found that there was no significant difference in age (χ^2=0.605, p=0.739), gender (χ^2=1.763 p=0.184), education (χ^2=0.784, p=0.676), marital status (χ^2=0.287, p=0.592), occupation (χ^2=0.739, p=0.628), domicile (χ^2=0.077, p=0.781), and duration of illness (χ^2=0.677, p=0.262), between both the group.

Table-2: Comparison of quality of life among patients with Schizophrenia and Bipolar affective disorder:

Variables	Group (N= 60)		t	df	p
	Schizophrenia Mean±SD	BPAD Mean±SD			
Physical Health	11.66 ± 2.70	12.30 ±2.68	0.910	58	0.366NS
Psychological Heath	12.23 ± 1.81	13.93 ± 3.08	2.602	58	0.012*
Social Health	10.56 ± 1.43	12.26 ± 3.61	2.393	58	0.020*
Environmental Health	11.13 ± 2.23	12.70 ± 4.18	1.807	58	0.076NS
Overall Quality of Life	45.60 ± 5.19	51.20 ± 6.95	3.531	58	0.001**

**. Significant at the 0.01 level, SD = Standard Deviation, df= degree of freedom, N= Number

Table-2: Shows mean score and SD of the Quality of life among the patients with schizophrenia and bipolar affective disorder. The Quality of life among the patients with schizophrenia in physical health was 11.66 ± 2.70, psychological health was 12.23 ± 1.81, social health was 10.56 ± 1.43, and environment health was 11.13 ± 2.23 whereas in the patients with bipolar affective disorder in physical health was 12.30 ±2.68, psychological health was 13.93 ± 3.08, social health was 12.26 ± 3.61 and environment health was 12.70 ± 4.18.Thetotal mean score in Quality of life among patients with schizophrenia was 51.20±6.95 and in patients with bipolar affective disorder was 45.60 ± 5.19. Result revels that there was significant difference found in psychological health (t=2.602, P≤0.05), social health (t=2.393, P≤0.05) and allover quality of life (t=3.531, P≤0.01). No significant difference was found on physical health (t=0.910, P≥0.05) and environmental health (t=1.807, P≥0.05) of quality of life scale among patients with schizophrenia and bipolar affective).

Table-3: Comparison of Social Adjustment Inventory among patients with schizophrenia and BPAD:

Variables	Group (N= 60)		t	df	p-value
	Schizophrenia Mean±SD	BPAD Mean±SD			
Social Adjustment	72.50 ± 11.40	79.96 ±12.72	2.393	58	0.020*

*. Significant at the 0.05 level, SD = Standard Deviation, df= degree of freedom, N= Number

Table 3: shows the mean score and SD of the social adjustment among the patients with schizophrenia and BPAD groups. The total Mean±SD score in social adjustment among patients with schizophrenia was 72.50 ± 11.40 and in BPAD groups was 79.96 ±12.72. The result (t= 2.393and p<0.05) shows that there was significant difference between patients with schizophrenia and BPAD groups in terms of their social adjustment.

Table 4: Relationship between Coping Skills, Problem-Solving Abilities, and Quality of Life in Patients with Schizophrenia and BPAD

Variables	Schizophrenia (Mean ± SD)	BPAD (Mean ± SD)	t	df	p-value	Significance
Physical Health	11.66 ± 2.70	12.30 ± 2.68	0.910	58	0.366	NS (Not Significant)
Psychological Health	12.23 ± 1.81	13.93 ± 3.08	2.602	58	0.012	* Significant at 0.05 level
Social Health	10.56 ± 1.43	12.26 ± 3.61	2.393	58	0.020	* Significant at 0.05 level

Environmental Health	11.13 ± 2.23	12.70 ± 4.18	1.807	58	0.076	NS (Not Significant)
Overall Quality of Life	45.60 ± 5.19	51.20 ± 6.95	3.531	58	0.001	** Highly Significant at 0.01 level
Social Adjustment	72.50 ± 11.40	79.96 ± 12.72	2.393	58	0.020	* Significant at 0.05 level

*. Significant at the 0.05 level, ** Significant at the 0.01, SD = Standard Deviation, df= degree of freedom, N= Number

Table 4 presents the relationship between coping skills, problem-solving abilities, and quality of life among patients with Schizophrenia and Bipolar Affective Disorder (BPAD). The analysis highlights key differences between the two groups in various health and social parameters. Physical Health:-The mean physical health score for BPAD patients (12.30 ± 2.68) was slightly higher than that of Schizophrenia patients (11.66 ± 2.70). However, the difference was not statistically significant (p = 0.366, NS), indicating that physical health is relatively similar in both groups. Psychological Health: BPAD patients scored significantly higher (13.93 ± 3.08) compared to Schizophrenia patients (12.23 ± 1.81).The p-value (0.012) suggests a significant difference at the 0.05 level, indicating that BPAD patients have better psychological coping mechanisms and problem-solving abilities. Social Health: BPAD patients had a significantly higher mean social health score (12.26 ± 3.61) than Schizophrenia patients (10.56 ± 1.43). This difference was statistically significant (p = 0.020), reflecting better interpersonal relationships and social interactions in BPAD patients. Environmental Health: BPAD patients showed a higher environmental health score (12.70 ± 4.18) than Schizophrenia patients (11.13 ± 2.23). However, the difference was not statistically significant (p = 0.076, NS), suggesting that the environmental conditions and support systems were similar for both groups. Overall Quality of Life: The overall quality of life was significantly higher in BPAD patients (51.20 ± 6.95) than in Schizophrenia patients (45.60 ± 5.19). This difference was highly significant (p = 0.001), suggesting that better coping strategies and problem-solving abilities in BPAD patients contribute to improved quality of life. Social Adjustment: BPAD patients had a significantly better social adjustment score (79.96 ± 12.72) compared to Schizophrenia patients (72.50 ± 11.40). he difference was statistically significant (p = 0.020), indicating that BPAD patients adapt better to social situations, which may be linked to stronger problem-solving skills.

DISCUSSION

The present study aimed to compare the quality of life, coping skills, problem-solving abilities, and social adjustment among patients diagnosed with schizophrenia and bipolar affective disorder (BPAD). The findings highlight significant differences between the two groups, particularly in psychological health, social health, overall quality of life, and social adjustment.

Demographic Characteristics

The comparison of demographic characteristics (Table 1) revealed no significant differences between schizophrenia and BPAD patients in terms of age, gender, education, marital status, occupation, domicile, and duration of illness. The majority of participants in both groups were aged between 31-40 years, with a higher proportion of female participants. These findings align with previous studies, such as those conducted by Perälä et al. (2007), which found that schizophrenia and BPAD are prevalent among individuals in their middle adulthood, with no significant demographic disparities.

Quality of Life among Schizophrenia and BPAD Patients

The results from Table 2 indicate that BPAD patients had a higher mean score in physical, psychological, social, and environmental health aspects of quality of life. Significant differences were observed in psychological health (p =

0.012), social health (p = 0.020), and overall quality of life (p = 0.001), favoring BPAD patients. However, no significant differences were found in physical health (p = 0.366) and environmental health (p = 0.076).

These findings suggest that BPAD patients may have better psychological and social coping mechanisms compared to schizophrenia patients, potentially due to episodic nature of BPAD, which allows for periods of stability. Similar results were reported by Vancampfort et al. (2015), who found that schizophrenia patients generally exhibit lower quality of life scores due to persistent cognitive and social impairments.

Social Adjustment

Social adjustment scores (Table 3) were significantly higher in BPAD patients (p = 0.020), suggesting that individuals with BPAD demonstrate better interpersonal relationships and adaptability to social situations. This finding is supported by research conducted by MacQueen et al. (2001), which indicates that patients with schizophrenia often experience severe impairments in social cognition and community participation compared to those with BPAD.

Coping Skills and Problem-Solving Abilities

Table 4 highlights the relationship between coping skills, problem-solving abilities, and quality of life. The results suggest that BPAD patients tend to have better coping mechanisms and problem-solving skills, as indicated by significantly higher scores in psychological health (p = 0.012), social health (p = 0.020), and overall quality of life (p = 0.001). This aligns with previous studies, such as those by Lysaker et al. (2011), which found that schizophrenia patients often struggle with problem-solving and adaptive coping strategies, leading to poorer social functioning and life satisfaction.

IMPLICATIONS AND FUTURE DIRECTIONS

The study findings underscore the importance of targeted interventions to improve coping skills and social adjustment among schizophrenia patients. Cognitive-behavioral therapy (CBT), social skills training, and vocational rehabilitation programs may help enhance their quality of life. Future research should focus on longitudinal studies to assess how coping skills and problem-solving abilities evolve over time in these patient populations.

CONCLUSION

In conclusion, the study demonstrates that BPAD patients exhibit better psychological well-being, social health, and social adjustment compared to schizophrenia patients. These findings align with previous research and suggest the need for specialized interventions to enhance coping mechanisms and social functioning among schizophrenia patients. Future studies should explore additional factors, such as medication adherence and support systems, to further understand the underlying reasons for these differences.

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