

# QUALITY OF LIFE AND COPING MECHANISMS IN PATIENTS WITH BIPOLAR DISORDER AND SCHIZOPHRENIA DURING REMISSION: A COMPARATIVE ANALYSIS

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## ABSTRACT

**Background:** Bipolar Affective Disorder and Schizophrenia are chronic psychiatric illnesses characterised by periods of remission and relapse. Even during remission, patients often experience impaired quality of life (QoL) and rely on various coping strategies to manage residual symptoms and psychosocial challenges. This study aimed to assess and compare the quality of life and coping mechanisms among patients with Bipolar Disorder and Schizophrenia during remission. **Materials and Methods:** A cross-sectional comparative study was conducted over 12 months at a tertiary care hospital. Ninety patients with Bipolar Disorder and 88 patients with Schizophrenia in remission were recruited based on ICD-11 diagnostic criteria and standardised remission scales (HDRS, YMRS, BPRS). Quality of life was assessed using the WHOQOL-BREF, and coping strategies were measured using the Brief COPE scale. Data were analysed using SPSS version 28.0.1.0, with independent samples t-tests and Chi-square tests employed for group comparisons. A P-value <0.05 was considered statistically significant. **Result:** Patients with Bipolar Disorder had significantly higher WHOQOL-BREF scores across all four domains—Physical health ( $15.2 \pm 1.8$  vs  $13.6 \pm 2.1$ ,  $p=0.001$ ), Psychological health ( $14.6 \pm 2.0$  vs  $13.0 \pm 2.4$ ,  $p=0.002$ ), Social relationships ( $13.8 \pm 2.2$  vs  $12.2 \pm 2.3$ ,  $p=0.004$ ), and Environment ( $14.9 \pm 1.9$  vs  $13.5 \pm 2.0$ ,  $p=0.001$ ). In terms of coping strategies, the Bipolar group scored higher on Problem-focused and Emotion-focused coping, while the Schizophrenia group used Avoidant coping strategies more frequently. **Conclusion:** Despite clinical remission, significant differences in Quality of life and Coping mechanisms persist between patients with Bipolar Disorder and Schizophrenia. Bipolar patients tend to experience better QoL and employ more adaptive coping strategies compared to those with Schizophrenia. These findings show the need for comprehensive, individualized psychosocial interventions targeting QoL and Coping even during remission.

## INTRODUCTION

Severe mental illnesses like Bipolar Affective Disorder (BD) and Schizophrenia (SZ) impose a significant burden on individuals, families, and healthcare systems worldwide. These illnesses are chronic, relapsing psychiatric conditions that significantly impair functioning, psychosocial adjustment, and overall well-being. Although both conditions involve episodic relapses, clinical attention has increasingly shifted toward evaluating Quality of Life (QoL) and adaptive functioning during periods of remission. Remission is commonly regarded as a phase of clinical stability and a crucial

therapeutic milestone; however, it does not necessarily equate to full recovery in the broader psychosocial sense. Even in the absence of acute symptoms, individuals often continue to struggle with residual emotional, cognitive, and social impairments that hinder their ability to function optimally in daily life.<sup>[1]</sup>

In recent years, Quality of Life has emerged as a crucial outcome measure in mental health research, moving beyond mere symptom control to a more holistic understanding of health. The World Health Organization defines QoL as individuals' perceptions of their position in life in the context of their culture, value systems, goals, expectations, and concerns. In

this light, even during remission, individuals with chronic psychiatric illnesses may experience compromised QoL due to persistent interpersonal difficulties, stigma, side effects of long-term treatment, or vocational limitations.<sup>[2]</sup>

Research consistently indicates that individuals with Bipolar Disorder and Schizophrenia in remission frequently report significantly lower Quality of Life (QoL) compared to the general population across multiple domains, including physical health, psychological well-being, social relationships, and environmental factors.<sup>[3-5]</sup> These persistent QoL deficits highlight the importance of not only clinical stability but also psychological resilience and adaptive skills in determining real-world functioning and recovery.

Among the factors that influence QoL and long-term functioning, coping mechanisms have been identified as a key determinant. Coping reflects an individual's ability to respond to illness-related stress and navigate daily challenges effectively. The strategies patients use to manage stress can either mitigate or exacerbate the psychological burden of chronic psychiatric conditions, thus directly impacting their quality of life and overall recovery trajectory.

Coping mechanisms are defined as the cognitive and behavioural strategies individuals use to manage internal and external stressors, which play a crucial role. The transactional model of stress and coping by Lazarus and Folkman (1984),<sup>[6]</sup> categorises coping into adaptive (e.g., problem-solving, seeking support) and maladaptive (e.g., denial, avoidance) strategies. Studies have shown that individuals who adopt adaptive coping strategies tend to report better Quality of life and lower levels of psychological distress, whereas those relying on maladaptive coping are more likely to experience functional impairment and emotional burden.<sup>[7,8]</sup> Comparing coping styles in individuals with Bipolar Disorder and Schizophrenia may thus offer deeper insights into their psychosocial functioning and guide the development of individualised rehabilitation strategies.

Despite the growing interest in psychosocial dimensions of severe mental illness, there is a relative dearth of comparative studies exploring both QoL and coping mechanisms during remission. Given the chronicity and functional impairments associated with BD and SZ, it is essential to understand how these individuals maintain or regain their quality of life and what coping strategies they employ when free from acute symptoms.

Given the profound impact of both illness-related factors and psychosocial functioning on the lived experiences of patients with BD and SZ, there is a compelling need to explore these dimensions in depth. Despite the importance of QoL and coping styles in determining long-term outcomes, comparative studies focusing specifically on these factors during remission remain scarce in the Indian context and globally. Such a comparison can illuminate key differences in psychosocial adaptation

and inform targeted psychosocial interventions for each disorder.

Hence, the present study aims to comparatively assess the Quality of Life and coping mechanisms in individuals with Bipolar Disorder and Schizophrenia during their remission phase. By identifying patterns of coping and levels of perceived well-being in these populations, this research seeks to contribute to the development of tailored, patient-centred approaches for long-term care and rehabilitation in severe mental illnesses.

## MATERIALS AND METHODS

This cross-sectional, comparative study was conducted over a 12-month period in the Department of Psychiatry at a tertiary care hospital. The objective was to assess and compare the quality of life and coping mechanisms among patients diagnosed with Bipolar Affective Disorder and Schizophrenia during their remission phase. A total of 250 patients were initially screened, including 120 diagnosed with Bipolar Disorder and 130 with Schizophrenia, based on the International Classification of Diseases (ICD-11).<sup>[9]</sup> Remission for Bipolar Disorder was defined as scoring less than 7 on the Hamilton Depression Rating Scale (HDRS),<sup>[10]</sup> and less than 12 on the Young Mania Rating Scale (YMRS),<sup>[11]</sup> while remission for Schizophrenia was defined as scoring less than 5 on core symptom items of the Brief Psychiatric Rating Scale (BPRS),<sup>[12]</sup> in line with modified remission criteria.

After applying exclusion criteria, which included not meeting remission criteria, comorbid psychiatric or neurological conditions, intellectual disability, substance use disorders (excluding nicotine and caffeine), or unwillingness to participate - a total of 90 patients with Bipolar Disorder and 88 patients with Schizophrenia were included in the final sample. All participants were between the ages of 18 and 60 years, had a minimum illness duration of one year, and provided written informed consent after receiving a detailed explanation of the study procedures.

Sociodemographic and clinical data such as age, gender, education, duration of illness, and treatment history were collected using a semi-structured proforma. Quality of life was assessed using the World Health Organization Quality of Life-BREF (WHOQOL-BREF) scale, Hindi version.<sup>[13]</sup> This 26-item instrument evaluates four domains: Physical Health, Psychological Health, Social Relationships, and Environment. Items are rated on a 5-point Likert scale, and domain scores are calculated by averaging the responses and multiplying the mean by 4, producing scores that range from 4 to 20, with higher scores showing better perceived quality of life. The use of the validated Hindi version ensured better cultural and linguistic relevance.

Coping mechanisms were assessed using the Brief COPE Scale,<sup>[14]</sup> a 28-item self-report inventory

measuring coping responses. Each item is scored on a 4-point Likert scale ranging from 1 (“I haven’t been doing this at all”) to 4 (“I’ve been doing this a lot”). The scale covers 14 subscales, which are categorised into three domains: Problem-Focused Coping (including Active Coping, Planning, and Use of Instrumental Support), Emotion-Focused Coping (including Positive Reframing, Acceptance, Humor, Religion, and Use of Emotional Support), and Avoidant Coping (including Self-Distraction, Denial, Venting, Substance Use, Behavioural Disengagement, and Self-Blame).

Participants were recruited from both inpatient and outpatient psychiatry units. The study tools were administered in the participant’s preferred language, with the interviewer providing clarification when required to ensure accurate responses. Ethical approval for the study was obtained from the Institutional Ethics Committee. Informed consent was taken from all participants, and confidentiality was maintained throughout the study.

Data were entered and analysed using IBM SPSS version 28.0.1.0 for Windows. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were used to summarise the demographic and clinical variables. The Independent Samples t-test and Chi-square test were used to

compare the quality of life and coping domains between the two groups. Pearson’s correlation analysis was conducted to evaluate the relationship between quality of life and coping mechanisms. A p-value of less than 0.05 was considered statistically significant.

## RESULTS

[Table 1] presents the sociodemographic and clinical profile of the participants. The mean age of patients with Bipolar Disorder was  $35.6 \pm 9.2$  years, while for those with Schizophrenia it was slightly higher at  $37.2 \pm 10.1$  years; however, this difference was not statistically significant ( $p=0.28$ ). The proportion of male participants was similar across both groups, with 52 (57.8%) in the Bipolar group and 55 (62.5%) in the Schizophrenia group ( $p=0.51$ ). Regarding educational status, 66 (73.3%) individuals with Bipolar Disorder had education  $\geq 10$ th grade compared to 58 (65.9%) among those with Schizophrenia, showing no significant difference ( $p=0.29$ ). The average duration of illness was also comparable between the groups, with  $6.8 \pm 3.5$  years in the Bipolar group and  $7.3 \pm 3.8$  years in the Schizophrenia group ( $p=0.34$ ).

**Table 1: Sociodemographic and Clinical Profile of Participants**

Variable	Bipolar Disorder (n=90)	Schizophrenia (n=88)	P-value
Age (years)	$35.6 \pm 9.2$	$37.2 \pm 10.1$	0.28
Male	52 (57.8%)	55 (62.5%)	0.51
Female	38 (42.2%)	33 (37.5%)	
Illiterate	4 (0.04%)	6 (0.07%)	0.29
Education ( $\geq 10$ th grade)	66 (73.3%)	58 (65.9%)	
Duration of illness (years)	$6.8 \pm 3.5$	$7.3 \pm 3.8$	0.34

**Table 2: Comparison of WHOQOL-BREF Domain Scores Between Groups**

Domain	Bipolar Disorder (n=90)	Schizophrenia (n=88)	P-value
Physical Health	$15.2 \pm 1.8$	$13.6 \pm 2.1$	0.001
Psychological Health	$14.6 \pm 2.0$	$13.0 \pm 2.4$	0.002
Social Relationships	$13.8 \pm 2.2$	$12.2 \pm 2.3$	0.004
Environment	$14.9 \pm 1.9$	$13.5 \pm 2.0$	0.001

[Table 2] compares the WHOQOL-BREF domain scores between patients with Bipolar Disorder and Schizophrenia. Individuals with Bipolar disorder had significantly better scores across all four domains. The physical health domain score was  $15.2 \pm 1.8$  in the Bipolar group versus  $13.6 \pm 2.1$  in the Schizophrenia group ( $p=0.001$ ). Psychological health scores were

$14.6 \pm 2.0$  and  $13.0 \pm 2.4$ , respectively ( $p=0.002$ ). Similarly, Bipolar patients scored higher in the social relationship domain ( $13.8 \pm 2.2$ ) compared to Schizophrenic patients ( $12.2 \pm 2.3$ ;  $p=0.004$ ), and in the environment domain ( $14.9 \pm 1.9$  vs.  $13.5 \pm 2.0$ ;  $p=0.001$ ).

**Table 3: Comparison of Coping Subscale Scores Between Bipolar Disorder and Schizophrenia Patients (N = 178)**

Coping Subscale	Bipolar Disorder (n = 90)	Schizophrenia (n = 88)	P-value
Problem-Focused Coping			
Active Coping	$5.8 \pm 1.0$	$5.1 \pm 1.2$	0.001
Planning	$5.6 \pm 1.1$	$5.0 \pm 1.2$	0.002
Instrumental Support	$5.5 \pm 1.2$	$4.8 \pm 1.3$	0.001
Emotion-Focused Coping			
Positive Reframing	$5.4 \pm 1.2$	$4.8 \pm 1.3$	0.006
Acceptance	$5.7 \pm 1.1$	$5.2 \pm 1.2$	0.021
Humor	$3.8 \pm 1.0$	$3.4 \pm 1.0$	0.040
Religion	$5.0 \pm 1.3$	$5.1 \pm 1.2$	0.740
Emotional Support	$5.6 \pm 1.0$	$5.0 \pm 1.2$	0.004
Avoidant Coping			

Self-Distracton	4.2 ± 1.1	4.5 ± 1.0	0.040
Denial	3.5 ± 1.2	4.2 ± 1.0	0.001
Venting	4.0 ± 1.1	4.4 ± 1.1	0.030
Substance Use	3.2 ± 1.0	3.6 ± 1.2	0.020
Behavioural Disengagement	3.7 ± 1.3	4.3 ± 1.0	0.003
Self-Blame	4.1 ± 1.1	4.5 ± 1.0	0.050

As shown in [Table 3], participants with Bipolar Disorder scored significantly higher in all three subdomains. Active coping scores were  $5.8 \pm 1.0$  in the Bipolar group and  $5.1 \pm 1.2$  in the Schizophrenia group ( $p=0.001$ ). The planning subscale had scores of  $5.6 \pm 1.1$  and  $5.0 \pm 1.2$ , respectively ( $p=0.002$ ), while instrumental support was rated  $5.5 \pm 1.2$  in Bipolar and  $4.8 \pm 1.3$  in Schizophrenia patients ( $p=0.001$ ).

For the emotion-focused coping subscales, Bipolar Disorder patients again exhibited significantly better scores in most subdomains. Positive reframing was higher in Bipolar Disorder ( $5.4 \pm 1.2$ ) compared to Schizophrenia ( $4.8 \pm 1.3$ ;  $p=0.006$ ). Acceptance scores were  $5.7 \pm 1.1$  vs.  $5.2 \pm 1.2$  ( $p=0.021$ ), and humour scores were  $3.8 \pm 1.0$  vs.  $3.4 \pm 1.0$  ( $p=0.040$ ).

There was no significant difference in the use of religion as a coping strategy ( $5.0 \pm 1.3$  vs.  $5.1 \pm 1.2$ ;  $p=0.740$ ). Emotional support was significantly more used by Bipolar patients ( $5.6 \pm 1.0$ ) than those with Schizophrenia ( $5.0 \pm 1.2$ ;  $p=0.004$ ).

Avoidant coping subscales show higher reliance on these strategies among patients with schizophrenia. Schizophrenia patients scored significantly higher on self-distracton ( $4.5 \pm 1.0$  vs.  $4.2 \pm 1.1$ ;  $p=0.040$ ), denial ( $4.2 \pm 1.0$  vs.  $3.5 \pm 1.2$ ;  $p=0.001$ ), venting ( $4.4 \pm 1.1$  vs.  $4.0 \pm 1.1$ ;  $p=0.030$ ), substance use ( $3.6 \pm 1.2$  vs.  $3.2 \pm 1.0$ ;  $p=0.020$ ), behavioural disengagement ( $4.3 \pm 1.0$  vs.  $3.7 \pm 1.3$ ;  $p=0.003$ ), and self-blame ( $4.5 \pm 1.0$  vs.  $4.1 \pm 1.1$ ;  $p=0.050$ ), showing a greater tendency toward maladaptive coping.

**Table 4: Correlation Between WHOQOL-BREF Domains and Coping Domains**

Domain	Physical Health (r)	Psychological Health (r)	Social Relationships (r)	Environment (r)	P-value
Problem-Focused Coping	0.45	0.50	0.43	0.48	<0.001
Emotion-Focused Coping	0.40	0.46	0.41	0.44	<0.001
Avoidant Coping	-0.30	-0.36	-0.32	-0.29	<0.001

[Table 4] shows the correlation between coping domains and Quality of life (WHOQOL-BREF) domains. Problem-focused coping was positively and significantly correlated with all Quality of Life domains, including physical health ( $r=0.45$ ), psychological health ( $r=0.50$ ), social relationships ( $r=0.43$ ), and environment ( $r=0.48$ ), with  $p<0.001$  for all. Emotion-focused coping also showed a significant positive correlation with physical health ( $r=0.40$ ), psychological health ( $r=0.46$ ), social relationships ( $r=0.41$ ), and environment ( $r=0.44$ ), all with  $p<0.001$ . In contrast, avoidant coping was negatively correlated with all QOL domains: physical health ( $r=-0.30$ ), psychological health ( $r=-0.36$ ), social relationships ( $r=-0.32$ ), and environment ( $r=-0.29$ ), with all correlations being statistically significant ( $p<0.001$ ).

## DISCUSSION

The present study aimed to compare Quality of Life (QoL) and coping mechanisms among patients with Bipolar Disorder (BD) and Schizophrenia (SZ) during remission. Despite clinical stability, our findings reveal significant differences between the two groups across multiple psychosocial domains. Patients with BD demonstrated significantly better QoL scores in all four domains of the WHOQOL-BREF—physical health, psychological health, social relationships, and environment—compared to those with SZ. These results underscore the need to evaluate psychosocial recovery during remission, not

just symptom remission, in the management of chronic psychiatric illnesses.

In our study, the mean age of patients with BD was  $35.6 \pm 9.2$  years, and  $37.2 \pm 10.1$  years for patients with SZ, with no significant difference ( $p=0.28$ ). In contrast, previous studies such as Depp et al,<sup>[15]</sup> (2006) and Tsuboi et al,<sup>[16]</sup> (2020) reported older mean ages, though their samples were not limited to remitted patients. The Zanelli et al,<sup>[17]</sup> (2022) study included a broader age range but also did not differentiate remission status. Thus, our study adds value by focusing on a relatively younger, remitted cohort.

Educational attainment was relatively high in both groups, with no significant group difference. This finding is consistent with earlier literature by Depp et al,<sup>[15]</sup> (2006) which suggests that although educational levels may remain relatively preserved, functional impairments—particularly in individuals with Schizophrenia—can still persist. Our findings are consistent with studies showing that educational status does not always correlate with better QoL outcomes during remission (Fagiolini et al.2005).<sup>[18]</sup> Thus, our findings align with the broader literature showing that educational attainment may remain relatively intact, particularly in Bipolar Disorder, even though functional deficits persist.

Regarding duration of illness, SZ patients had a slightly longer duration of illness than BD patients, though the difference was not significant. This supports previous findings indicating a more chronic and deteriorating course in SZ, compared to the



relapsing-remitting course of BD (Tohen et al. 2000).<sup>[19]</sup>

In terms of coping strategies, BD patients were found to use more adaptive coping mechanisms, including problem-focused strategies such as active coping, planning, and seeking instrumental support. These findings are consistent with the work of Carver et al. (1989),<sup>[20]</sup> who noted greater use of such strategies in affective disorders.

Emotion-focused coping strategies, including positive reframing, acceptance, humor, and seeking emotional support, were also significantly higher in BD patients. This supports the findings of Folkman and Moskowitz (2000),<sup>[21]</sup> who emphasised the role of emotional regulation in mood disorders. No significant difference was found in religious coping between the groups.

Correlational analysis revealed that problem-focused coping was positively associated with all QoL domains, particularly psychological health, suggesting that proactive coping plays a significant role in improving subjective well-being. Similarly, emotion-focused coping also showed positive correlations with QoL domains, reinforcing the importance of emotional regulation strategies in maintaining quality of life during remission.

Conversely, patients with SZ reported greater use of avoidant coping strategies, including self-distraction, denial, venting, substance use, behavioural disengagement, and self-blame. Caregivers of SZ patients have also been found to rely more on maladaptive coping, further highlighting the illness's psychosocial impact (Chakrabarti & Gill, 2002).<sup>[22]</sup>

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In contrast, avoidant coping was negatively correlated with all QoL domains, with the strongest association found in the psychological domain. These results suggest that reliance on avoidance and disengagement can significantly undermine well-being, even in the absence of active symptoms. Although Kate et al,<sup>[24]</sup> (2013) did not find significant correlations between avoidant coping and QoL in caregivers, they did report a detrimental effect of coercive and maladaptive strategies on overall functioning, which supports our findings in patient populations.

Notably, Yen et al,<sup>[25]</sup> (2008) also observed that patients with BD reported better QoL outcomes than those with SZ, and that higher QoL was associated with greater insight and fewer adverse effects of medication. Their findings corroborate our results and reinforce the notion that QoL is a multifactorial

construct influenced by both internal factors (e.g., insight, coping strategies) and treatment-related variables.

Overall, the findings emphasise the role of adaptive coping strategies—both problem-focused and emotion-focused—in enhancing QoL, and highlight the detrimental effects of avoidant coping, particularly in patients with schizophrenia. These insights reinforce the importance of integrating psychosocial support and coping skills training into the long-term management of both disorders.

## CONCLUSION

The study shows significant differences in quality of life and coping strategies between patients with bipolar disorder and schizophrenia. Patients with bipolar disorder showed better scores in all WHOQOL-BREF domains and more adaptive (problem-focused and emotion-focused) coping styles. In contrast, patients with schizophrenia relied more on avoidant coping mechanisms, which were negatively associated with quality of life. Positive correlations were observed between adaptive coping and quality of life, while avoidant coping showed a negative correlation. These findings show the need for targeted psychosocial interventions to enhance coping strategies and improve overall well-being, particularly in patients with schizophrenia.

**Limitations of the Study:** This study had a few limitations. Its cross-sectional design limits causal interpretations. Data were based on self-report, which may introduce bias. The sample was hospital-based, reducing generalizability. Factors like medication type, adherence, and family support were not controlled, which could have influenced outcomes.

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