American Journal of Psychiatric Rehabilitation Expert Opinion Article

Prevalence and pattern of psychiatric disorders in ulcerative colitis: A study of 200 patients in North India

Waseem Javid[1*], Muneer Ahmad Baba[2], Showkat Ahmad Kadla[3], Nisar Ahmad Shah[4]

[1,2]Senior Residents, Department of Gastroenterology, GMC Srinagar, 190010
[3,4]Professors department of Gastroenterology, GMC Srinagar, 190010

***Correspondence Address:** Waseem Javid
*Waseemjavid897@gmail.com, Srinagar, 190011

Abstract

Background: Ulcerative colitis (UC), a chronic inflammatory bowel disease, is frequently associated with psychiatric comorbidities, which can significantly impact disease course and quality of life. This study aimed to assess the prevalence and pattern of psychiatric disorders in UC patients in the Kashmir region.

Methods: A cross-sectional study was conducted at a tertiary care centre in Kashmir involving 200 diagnosed UC patients. Psychiatric evaluation was performed using the Hospital Anxiety and Depression Scale (HADS) and DSM-5 criteria. Clinical and demographic data were collected and analysed.

Results: Out of the 200 UC patients (mean age 37.2 ± 12.6 years; 54% male), 118 (59%) had at least one psychiatric disorder. The most prevalent conditions were: Depression – 46% (n=92), anxiety disorders – 38% (n=76), somatoform disorders – 11% (n=22), adjustment disorders – 8% (n=16). Psychiatric morbidity was significantly higher in patients with moderate to severe disease activity ($p < 0.01$), longer disease duration (>5 years), and those with a history of steroid use. Female patients showed a higher prevalence of anxiety and depression compared to males ($p < 0.05$).

Conclusion: Psychiatric disorders are highly prevalent among UC patients in Kashmir, with depression and anxiety being the most common. Routine psychiatric screening and integrated psychosocial support should be considered essential components of UC management.

Keywords: Ulcerative Colitis, Psychiatric disorders, Adjustment disorder, Depression.

Introduction

Ulcerative colitis (UC) is a chronic, relapsing inflammatory bowel disease (IBD) characterized by mucosal inflammation of the colon (1). Its fluctuating clinical course, unpredictable relapses, and need for long-term therapy often impose a significant psychological burden on patients (2,3). Over the past decade, increasing attention has been directed toward the interplay between chronic physical illnesses and mental health, with UC emerging as a condition with a notable psychiatric comorbidity profile (4). Psychiatric disorders, particularly depression and anxiety, are frequently observed in patients with UC. These disorders can adversely affect treatment adherence, exacerbate disease symptoms, and impair overall quality of life (5,6). Several studies from Western countries have reported a high prevalence of psychiatric morbidity in IBD patients, yet regional variations influenced by cultural, environmental, and socioeconomic factors are significant (7.8).Despite the growing global evidence, data from the Indian subcontinent—particularly from the Kashmir Valley—remain scarce. Kashmir, with its unique geopolitical and psychosocial landscape, may influence the mental health outcomes of individuals suffering from chronic diseases like UC. Understanding the burden and pattern of psychiatric disorders in this population is crucial for holistic disease management. This study aims to evaluate the prevalence and types of psychiatric disorders among UC patients in Kashmir, and to identify potential clinical correlates associated with increased psychiatric morbidity.

Aims and Objectives

To study prevalence and pattern of psychiatric disorders in ulcerative colitis in Kashmir

Objectives

1. To evaluate the prevalence and types of psychiatric disorders among UC patients
2. To identify potential clinical correlates associated with increased psychiatric morbidity.

Methods

Study Design and Setting:

This was a cross-sectional observational study conducted at the Department of Gastroenterology, Super-speciality hospital, Government college Srinagar, a tertiary care centre in Kashmir, over a period of 24 months from June 2020 to June 2022.

Participants:

A total of 200 patients diagnosed with ulcerative colitis based on clinical, endoscopic, and histo-

pathological criteria were enrolled. Inclusion criteria included patients aged 18 years and above, with confirmed UC and at least 6 months of disease duration. Patients with pre-existing psychiatric illnesses diagnosed prior to UC, cognitive impairments, or other chronic illnesses with significant psychiatric implications were excluded.

Data Collection:
Demographic details (age, sex, education level, occupation), clinical history (disease duration, severity, extent of disease, treatment history), and UC activity (assessed using Mayo score) were recorded. Psychiatric evaluation was conducted by using: Hospital Anxiety and Depression Scale (HADS) to screen for depression and anxiety.
DSM-5 criteria for formal diagnosis of psychiatric disorders. Patients scoring ≥8 on either subscale of HADS were further evaluated for specific psychiatric disorders.

Statistical Analysis:
Data were analysed using SPSS version 30. Continuous variables were expressed as mean ± standard deviation, and categorical variables as percentages. Associations between psychiatric morbidity and clinical variables were assessed using Chi-square test for categorical variables and Student's t-test for continuous variables. A p-value < 0.05 was considered statistically significant.

Ethical Considerations:
All participants in the study were included after proper informed written consent and permission was obtained beforehand from the institutional ethics committee **(IEC/GMC/DNB-GE/006).**

Results:
A total of 200 patients with ulcerative colitis were included in the study. The mean age of participants was 37.2 ± 12.6 years, with a male-to-female ratio of 1.2:1. The mean disease duration was 4.8 ± 3.1 years. **(Table 1)**

Table 1: Demographic and Clinical Profile of UC Patients (n = 200)

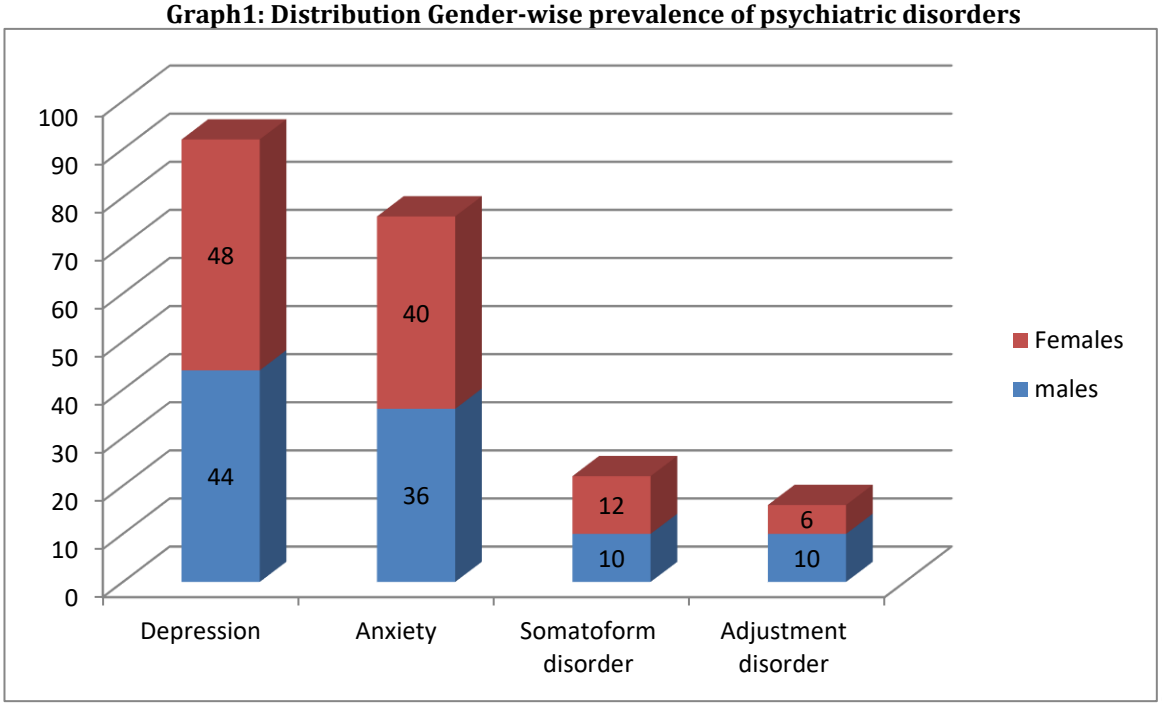
S.NO	Variable	Value
1	**Age (mean ±SD)**	37.2±12.6 years
2	**Gender (male: female)**	108:92
3	**Mean disease duration**	4.8±3.1years
4	**Disease severity**	Mild =68(34%) Moderate=90(45%) Severe =42(21%)
5	**History of steroid use**	126(63%)
6	**Extent of disease**	Left sided (49%) Extensive (36%) Proctitis (15%)

In our study, there was slightly female predominance in depression, anxiety and somatoform disorders while adjustment disorder showed predilection for male patients**. (Table 2) and (Graph 1)**

Table 2: Gender-wise prevalence of psychiatric disorders

S.NO	Disorder	Males(n=108)	Females (n=92)	p-value
1	Depression	44(40.7%)	48	0.03
2	Anxiety	36(33.33%)	40	0.09
3	Somatoform	10(9.3%)	12	0.41
4	Adjustment	10(9.3%)	6	0.46

Graph1: Distribution Gender-wise prevalence of psychiatric disorders



of

The most prevalent conditions in our study were: Depression – 46% (n=92), anxiety disorders – 38% (n=76), somatoform disorders – 11% (n=22), adjustment disorders – 8% (n=16**). (Table 3)**

Table 3: Prevalence of Psychiatric Disorders in UC Patients (n = 200)

S.NO	Psychiatric disorder	Number of patients (%)
1	**Depression**	92(46%)
2	**Anxiety disorder**	76(38%)
3	**Somatoform disorders**	22(11%)
4	**Adjustment disorders**	16(8%)
5	**Any psychiatric disorder**	118(59%)

In our study severe disease and steroid use were associated with clinically significant psychiatric disorders**. (Table 4)**

Table 4: Association between Psychiatric Disorders and Clinical Variables

S.NO	Variable	With psychiatric disorder (n=118)	Without psychiatric disorder (n=82)	P value
1	**Mean age (years)**	38.6±13.2	35.2±11.8	0.08
2	**Female (%)**	60(51%)	32(39%)	0.04
3	**Severe disease**	34(29%)	8(10%)	<0.01
4	**Steroid use**	89(75%)	37(45%)	<0.01

***Significant at p < 0.05**

Discussion

This study highlights a significant burden of psychiatric disorders in patients with ulcerative colitis (UC) in Kashmir, with 59% of patients affected. The most prevalent conditions were depression (46%) and anxiety (38%), findings consistent with global reports where psychiatric comorbidity in UC ranges between 30% and 60% [1–3]. The chronic, relapsing nature of UC, coupled with its impact on daily functioning, contributes substantially to psychological stress. Our findings are in agreement with Mikocka-Walus et al., who observed that depression and anxiety are more common in IBD patients compared to the general population [4]. The rates reported in our study are comparable to Indian data by Dutta et al., who found depression in 42% and anxiety in 36% of UC patients [5]. The high prevalence of psychiatric disorders in females may be attributed to a heightened emotional response to chronic illness, hormonal influences, and sociocultural stressors prevalent in the region [6,7]. Disease severity had a

strong association with psychiatric morbidity in our study. Patients with moderate to severe disease had significantly higher rates of depression and anxiety ($p < 0.01$). This aligns with findings from Zhang et al., who demonstrated a positive correlation between UC severity and psychological distress [8]. Additionally, long disease duration and steroid use were significantly associated with psychiatric morbidity, which is consistent with studies that have identified corticosteroid-related mood changes and cumulative psychological burden over time [9,10]. Somatoform and adjustment disorders were also documented, albeit at lower rates. These are often under-recognized but clinically significant, as they can mimic or exacerbate gastrointestinal symptoms [11,12].The role of the gut-brain axis in the pathogenesis of psychiatric disorders in UC patients has been increasingly emphasized in recent literature [13–15]. Chronic intestinal inflammation, microbial dysbiosis, and altered immune responses may contribute to neuro-inflammation and mood disturbances [16–18]. This bi-directional relationship underlines the need for an integrated treatment approach. Given the on-going conflict and psychosocial stress in the Kashmir region, the psychiatric burden may be further amplified [19,20]. Region-specific studies like ours are essential to inform local mental health policies and clinical practice. Routine screening for psychiatric disorders in UC patients is rarely practiced in gastroenterology settings. However, given the high burden and the potential for psychiatric comorbidities to adversely affect disease outcomes, integrating psychological assessment into routine UC management should be prioritized [21–23]. Evidence shows that psychological interventions, including cognitive behavioral therapy and antidepressants, can improve both mental health and gastrointestinal symptoms [24–26].Limitations of our study include its cross-sectional design, which precludes causal inference, and the use of screening tools that may overestimate psychiatric morbidity. Longitudinal studies with structured interviews could provide more definitive insights. In conclusion, our study demonstrates a high prevalence of psychiatric disorders among UC patients in Kashmir, with significant associations with disease severity, female gender, long disease duration, and steroid use. An integrated bio-psychosocial model of care is recommended for optimal patient outcomes.

Finances: Nil

Acknowledgements:
Department of Gastroenterology GMC, Srinagar, India.

References

1. Marrie RA, et al. Nat Rev Gastroenterol Hepatol. 2015;12(3):173–86.
2. Graff LA, et al. Inflamm Bowel Dis. 2009;15(7):1105–15.
3. Walker JR, et al. Can J Gastroenterol. 2008;22(5):475–82.
4. Mikocka-Walus A, et al. J Psychosom Res. 2016;87:70–8.
5. Dutta U, et al. Indian J Gastroenterol. 2015;34(3):225–9.
6. Baxter AJ, et al. Psychol Med. 2014;44(3):603–16.
7. Salk RH, et al. Clin Psychol Rev. 2017;52:15–29.
8. Zhang CK, et al. Inflamm Bowel Dis. 2013;19(9):1904–11.
9. Fardet L, et al. Am J Psychiatry. 2012;169(4):351–7.
10. Stasi C, et al. World J Gastroenterol. 2014;20(22):7604–22.
11. Creed F. Gastroenterology. 2006;130(5):1342–56.
12. Drossman DA, et al. Gastroenterology. 1997;112(6):2120–36.
13. Foster JA, et al. Trends Neurosci. 2013;36(5):305–12.
14. Cryan JF, et al. Nat Rev Neurosci. 2019;20(1):35–46.
15. Mayer EA, et al. Nat Rev Gastroenterol Hepatol. 2015;12(8):453–66.
16. Dinan TG, et al. Nat Rev Gastroenterol Hepatol. 2017;14(2):69–70.
17. Clarke G, et al. Nat Rev Gastroenterol Hepatol. 2020;17(6):336–44.
18. Carabotti M, et al. Ann Gastroenterol. 2015;28(2):203–9.
19. Housen T, et al. Confl Health. 2019;13:58.
20. Sheikh TA, et al. J Med Sci. 2020;23(2):67–72.
21. Addolorato G, et al. J Clin Gastroenterol. 2008;42(3):296–301.
22. Mikocka-Walus A, et al. Inflamm Bowel Dis. 2015;21(6):1329–36.
23. Fuller-Thomson E, et al. Inflamm Bowel Dis. 2006;12(8):697–707.
24. Knowles SR, et al. Inflamm Bowel Dis. 2013;19(10):2234–44.
25. Szigethy E, et al. Am J Gastroenterol. 2007;102(7):1456–63.
26. Gracie DJ, et al. Aliment Pharmacol Ther. 2017;45(8):1030–40.
27. Maunder R, et al. J Psychosom Res. 2013;75(2):136–41.
28. Bernstein CN, et al. Am J Gastroenterol. 2010;105(1):233–9.
29. Goodhand JR, et al. Inflamm Bowel Dis. 2012;18(5):1042–51.
30. Nahon S, et al. Clin Res Hepatol Gastroenterol. 2012;36(6):407–12.