

## A Prospective Study on Psychiatric Morbidity in Irritable Bowel Syndrome

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### Abstract

**Background:** Irritable Bowel Syndrome (IBS) is a prevalent functional disorder characterized by gastrointestinal symptoms and extra-digestive manifestations without clear organic etiology. Psychiatric comorbidities, including mood and anxiety disorders, are common among individuals with IBS, impacting healthcare-seeking behavior. **Objective:** This study aims to assess psychiatric morbidity in individuals with IBS. **Methodology:** A prospective observational clinical study was conducted at the Department of Gastroenterology, tertiary hospital, from June 2021 to June 2022. Convenient sampling was used to select 100 diagnosed cases of IBS aged 18 and above. A semi-structured questionnaire was developed to collect socio-demographic data, and psychiatric morbidity was assessed using the Structured Clinical Interview for DSM-V Axis-I disorders (Clinician Version). Data were analyzed using SPSS version 20. **Results:** Among the participants, 60% were male and 40% were female. Most participants (80%) exhibited psychiatric disorders, with depressive disorder being the most prevalent (30%), followed by anxiety disorder (29%) and somatoform disorder (10%). Non-psychiatric disorders were diagnosed in 31% of participants. **Conclusion:** Depressive disorder emerged as the predominant psychiatric illness in individuals with IBS, followed by anxiety disorder and somatoform disorder. A comprehensive psychiatric evaluation is essential for effectively managing the symptoms of IBS, particularly in individuals with psychiatric comorbidities.

**Keywords:** Irritable Bowel Syndrome, Psychiatric Morbidity, Generalized Anxiety Disorder, Major Depressive Disorder, Somatoform Disorder.

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### INTRODUCTION

Irritable Bowel Syndrome (IBS) presents as a functional disorder characterized by a range of gastrointestinal symptoms, often accompanied by extra-digestive manifestations without a clear organic basis. Its complex nature and multifactorial pathogenesis make it a quintessential functional bowel disorder. While its prevalence in the general population is estimated to be between 8% and 17%, only half of those affected seek medical attention, influenced by psychological factors impacting healthcare-seeking behavior [1-3]. Patients with IBS commonly experience gastrointestinal distress such as pain, distention, flatulence, and urgency, alongside symptoms of autonomic arousal akin to those found in mood and anxiety disorders, including weakness, fatigue, palpitations, nervousness, dizziness, headache, hand tremor, back pain, and sleep disturbance. Clinical studies consistently show a high prevalence of psychiatric comorbidities among individuals seeking medical help for IBS, with mood disorders, anxiety

disorders, and somatization disorder being the most common [4]. Studies in India have reported a significant co-occurrence of depression or anxiety disorder in 30-40% of IBS patients, with a notable lifetime prevalence of major depression, somatization disorder, generalized anxiety disorder, panic disorder, and phobic disorder. Psychiatric morbidity is prevalent among IBS outpatients, with lifetime prevalence rates of depressive and anxiety disorders reaching up to 76% and 54%, respectively, and point prevalence rates ranging from 9.6% to 54% for depression and 11.1% to 52.4% for anxiety disorders. Additionally, between a quarter and a third of IBS patients meet criteria for somatization disorder, significantly higher than in the general population [5-7]. Studies using various diagnostic criteria across different populations reveal varying prevalence rates of IBS, highlighting its widespread impact and the need for tailored approaches to diagnosis and management [8-9].

**Objective**

To assess psychiatric morbidity in individuals with Irritable Bowel Syndrome (IBS).

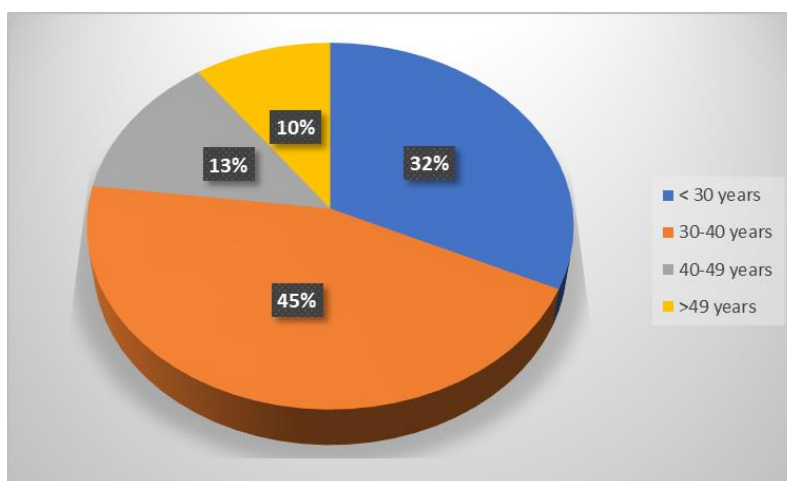
**METHODOLOGY**

The study was conducted at the Department of Gastroenterology, tertiary hospital from June 2021 to June 2022, employing a prospective observational clinical design. Convenient sampling was utilized to select 100 diagnosed cases of Irritable Bowel Syndrome (IBS) aged 18 and above, regardless of gender. Exclusion criteria included individuals with co-morbid gastrointestinal diseases and severe cognitive impairment hindering interviews. A semi-structured questionnaire, encompassing socio-demographic variables such as age, gender, occupation, education, and economic status in both English and Bangla versions, was developed for assessing psychiatric morbidity among IBS patients. The Structured Clinical Interview

for DSM-V Axis-I disorders (Clinician Version) was employed for diagnostic assessment. Cases of IBS were identified based on Rome III criteria by consultant gastroenterologists, and informed written consent was obtained from eligible participants. Face-to-face interviews were conducted by the researcher using the questionnaire to collect socio-demographic data and relevant variables. Subsequently, psychiatric morbidity was assessed using SCID-CV, and diagnoses were confirmed based on DSM-V criteria. Data analysis was performed using the Statistical Package for Social Science (SPSS) version 20 for Windows.

**RESULTS**

32% were below 30 years old, while 45% fell within the 30-40 age range. Additionally, 13% were aged between 40-49 years, and a smaller proportion, comprising 10%, were over 50 years old.



**Figure-1: Age Distribution of the Study group**

The study's gender distribution revealed that 60% of participants were male, while 40% were female.

**Table-1: Gender Distribution**

Gender	%
Male	60%
Female	40%

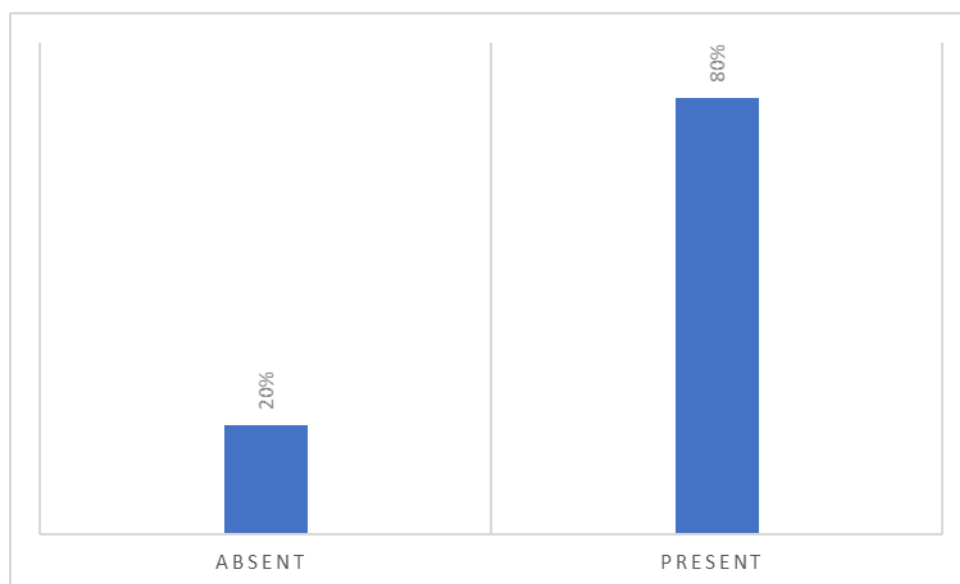
Among individuals seeking treatment for irritable bowel syndrome (IBS), 51.3% reported a duration of less than 4 years, while 30.9% reported a duration of 4-9 years, and 17.8% reported a duration of over 10 years. Additionally, 38.8% of respondents

reported a history of drug addiction, while 61.2% did not. Furthermore, familial psychiatric history, 30.3% reported a positive history, with 69.7% reporting no familial psychiatric history.

**Table-2: Distribution of the patients according to clinical history**

Variable	Percent	
IBS duration	<4	51.3
	4-9	30.9
	>10	17.8
Familial history of psychiatric disorder	Yes	30.3
	No	69.7

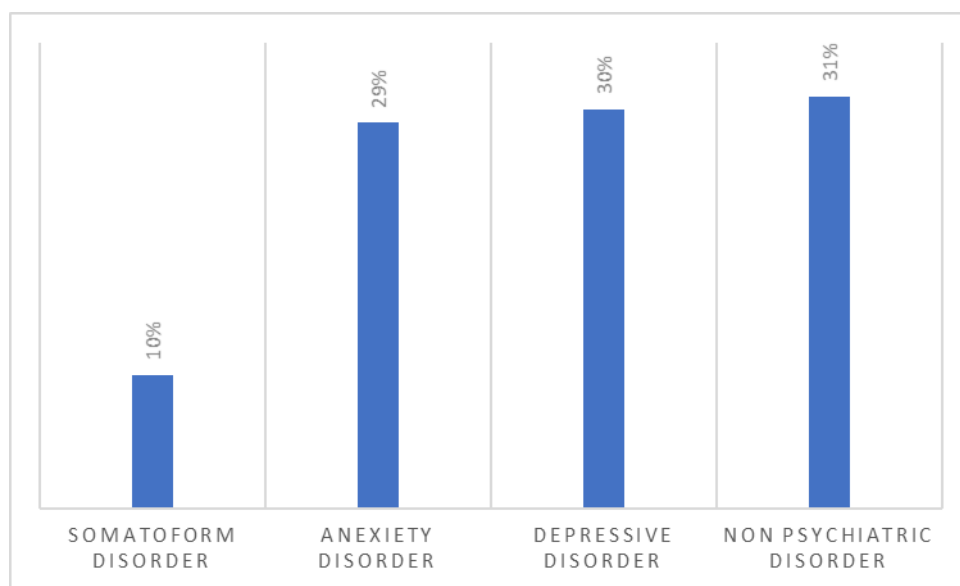
Majority (80%) had psychiatric disorders among IBS patients. The difference was statistically significant ( $P < 0.05$ ).



**Figure-2: Proportion of psychiatric disorders among IBS patients**

The results indicate a diverse distribution of disorders among the participants, with depressive disorder being the most prevalent at 30%, followed closely by anxiety disorder at 29%. Somatoform disorder

was identified in 10% of the participants, while the remaining 31% were diagnosed with non-psychiatric disorders.



**Figure-3: Types of disorder among psychiatric morbidity**

## DISCUSSION

Psychiatric diagnosis prevalence in Irritable Bowel Syndrome (IBS) varies widely, ranging from 40% to 100%, contingent upon population, setting, and diagnostic criteria. In one study functional bowel symptoms have been reported in 30-70% of patients with psychiatric disorders [10]. In this study, 80% of IBS patients exhibited psychiatric disorders, with a predominance of males, particularly in the diarrhea-predominant subtype, maintaining a male-to-female ratio

of 1.5:1. Notably, 45% of IBS patients fell within the 31-40 age group.

A Bangladeshi study similarly found a male majority (87.2%), with the majority falling within the 25-35 age bracket, aligning with our findings due to similar study settings. 11 Generalized anxiety disorder emerged as the predominant psychiatric illness (44.9%), consistent with other clinic-based studies [2]. Major depressive disorder followed closely, affecting 37.5% of IBS patients in our sample, in line with previous clinic-

based studies but differing from a Bangladeshi study, possibly due to varied diagnostic criteria. Somatoform disorders were less prevalent but varied across studies, with a higher prevalence reported in chronic IBS cases (>2 years). Nonetheless, socio-demographic and clinical characteristics showed weak correlations with psychiatric morbidity, consistent with previous findings [10-11].

## CONCLUSION

In this study, depressive disorder emerged as a prominent psychiatric condition, followed by anxiety disorder as the second most prevalent, with somatoform disorder ranking third. Major depressive disorder and generalized anxiety disorder exhibited higher frequencies. Therefore, a comprehensive psychiatric assessment is imperative for effectively addressing the distressing symptoms associated with these persistent functional ailments.

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