



## Original Article

# Assessment of Psychiatric Disorders in Irritable Bowel Syndrome Patients

M A Alim<sup>1</sup>, A M Hussain<sup>2</sup>, M A Haque<sup>3</sup>, M A Ahad<sup>1</sup>, Q T Islam<sup>3</sup>, A R M S Ekram<sup>4</sup>

### Abstract

Irritable bowel syndrome (IBS) is the most common functional gastrointestinal disorder commonly associated with psychosomatic illness. Eighty six patients of IBS who met the clinical Rome-II criteria were enrolled in this prospective study. Necessary laboratory investigations were done to exclude organic diseases. All patients were subjected to psychiatric assessment by clinical psychiatrist using DSM-IV criteria. 96.5% of the studied patients actually had different psychiatric illness. Among them generalized anxiety disorder (24.4%), depressive illness (27.8%), somatoform disorder (12.7%) and hypochondriasis (10.4%) were the predominant abnormalities. New onset of IBS patients exhibited higher prevalence of generalized anxiety disorder (42.8%) in comparison to longer duration of illness. Depressive illness (44.4%) was substantially higher in constipation-predominant IBS than other forms.

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### Introduction

Irritable bowel syndrome (IBS) is a disorder characterized by abdominal pain, often associated with abdominal swelling due to gas, and by altered bowel habit (either constipation or diarrhea or both), in absence of tissue pathology which explains these symptoms. It is a common disorder accounting for 40-70% of consultations to gastroenterologist<sup>1</sup>. The cause of irritable bowel syndrome is unknown but it is frequently regarded as a psycho-physiologic disorder because 40-100% of patients in published series are found to have diagnosable psychiatric disorders<sup>2</sup>. The symptoms of Irritable bowel syndrome have no organic basis. It has been hypothesized that reducing the severity to psychological distress will alleviate the symptoms of irritable bowel syndrome<sup>3</sup>, and psychological treatments have been tested in clinical trials<sup>4,5,6</sup>, and psychological

approaches have gained wide acceptance in the management of irritable bowel syndrome. It is evidenced that psychiatric disorders have an adverse influence on the outcome of disease and also have close relationship of psychological symptoms and severity of irritable bowel syndrome. Therefore accurate measurement of psychological symptoms may be an important aspects of successful management. Furthermore IBS is common and expensive disorder<sup>7</sup> with an estimate prevalence of 14-22% in selected non-patients populations<sup>8</sup>. As it is considered as an incurable disease having a remitting and relapsing course the patients with IBS move from physician to physician and undergo costly investigations that will heightens anxiety, frustration and monetary loss. So the purpose of the study is to assess psychological disorders in irritable bowel syndrome patients for proper & specific psychiatric management.

<sup>1</sup> Assistant Professor, Department of Gastroenterology, Rajshahi Medical College, Rajshahi.

<sup>2</sup> Assistant Professor, Department of Psychiatry, Rajshahi Medical College, Rajshahi.

<sup>3</sup> Associate Professor, Department of Medicine, Rajshahi Medical College, Rajshahi.

<sup>4</sup> Professor, Department of Medicine, Rajshahi Medical College, Rajshahi.

## Material and Methods

This study was conducted in Rajshahi medical college hospital during the period from July 2004 to January 2005. A total number of eighty six patients were enrolled in this prospective study using Rome-II clinical diagnostic criteria for irritable bowel syndrome<sup>9</sup>.

### Rome-II criteria for irritable bowel syndrome

At least 12 weeks abdominal discomfort or pain (need not be consecutive) with two of the following three features

- relieved by defecation
- Onset associated with change in stool frequency
- Onset associated with change in stool form

### Symptoms supportive of irritable bowel syndrome

- Abnormal frequency (>3/day, <3/week)
- Abnormal form (lumpy, hard or loose stool)
- Abnormal stool passage
- Passage of mucous
- Bloating/ sensation of abdominal distension

All the study patients were subjects to necessary investigations including CBC with ESR, stool for routine & culture. Flexible sigmoidoscopy, upper GIT endoscopy and abdominal sonography was done selectively if indicated.

Patients having fever, significant weight loss, rectal bleeding, anemia, nocturnal diarrhea and progressive worsening of symptoms were excluded from this study. Psychiatric assessment was done by specialist psychiatrist using DSM-IV criteria<sup>10</sup>.

## Results

The study included 86 patients, 75 (87.2%) males and<sup>11</sup>(12.7%) females. Their age distribution ranging from 16-60 years and majority 48 (55.8%) were in age group 25-35 years. A total of 86 patients were interviewed by clinical psychiatrist. 83 (96.5%) out of 86 patients had one or more psychiatric illness. The main bulk of patients had got either generalized anxiety disorder (GAD) (24.4%), Major depressive illness (10.4%, or mixed anxiety depression (17.4%), Somatoform

disorder (12.7%) and hypochondriasis (10.4%) were also fairly common (Table-1). New onset IBS tend to exhibited more concomitant anxiety than depression (Table-2). Depressive illness (44.4%) was substantially higher in constipation-predominant IBS in comparison to diarrhea-predominant (3.7%) and cyclic (5.5%) from. But other psychiatric illness did not differ significantly (Table-3).

**Table 1:** DSM-IV psychiatric diagnosis in IBS patients (N=86)

DSM-IV psychiatric diagnosis	No (%)
Generalized anxiety disorder	21 (24.4%)
Major depressive illness	9 (10.4%)
Mixed anxiety depression	15 (17.4%)
Undifferentiated somatoform	11 (12.7%)
Hypochondriasis	9 (10.4%)
Subsyndromal anxiety	7 (8.1%)
Obsessive compulsive disorder	6 (6.9%)
Major depressive illness with hypochondriasis	3 (3.4%)
Panic disorder	2 (2.2%)
Nil	3 (3.4%)

**Table 2:** Relationship between psychiatric disorders and duration of illness of irritable bowel syndrome.

Psychiatric disorder	Duration of illness		
	<6 months (n=28)	6-12 months (n=27)	>12 months (n=31)
Generalized anxiety disorder (n=21)	12 (42.8%)	07 (25.9%)	02 (6.4%)
Major depressive disorder (n=15)	01 (3.5%)	01 (3.7%)	07 (22.8%)
Mixed anxiety disorder (n=15)	03 (10.7%)	04 (14.4%)	08 (25.4%)
Somatoform disorder (n=11)	04 (14.2%)	04 (14.4%)	03 (9.6%)
Hypochondriasis (n=9)	04 (14.2%)	02 (7.2%)	03 (9.6%)
Obsessive compulsive disorder (n=6)	02 (7.1%)	01 (3.7%)	02 (6.4%)
Others illness (n=12)	02(7.1%)	06 (22.2%)	04 (12.8%)
Nil	00 (00%)	02 (7.2%)	01 (3.2%)

**Table 3:** Relationship psychiatric disorders and IBS type

Psychiatric illness	Constipation predominant (n=9)	Diarrhea predominant (n=41)	Cyclic form (n=36)
Generalized anxiety disorder (n=21)	02 (22.2%)	11 (24.4%)	08 (22.2%)
Major depressive disorder (n=9)	04 (44.4%)	03 (7.3%)	02 (5.5%)
Mixed anxiety disorder (n=15)	02 (22.2%)	08 (19.5%)	05 (16.6%)
Somatoform disorder (n=11)	00 (00%)	06 (14.6%)	05 (13.8%)
Hypochondriasis (n=6)	01 (11.1%)	05 (12.1%)	03 (8.3%)
Obsessive compulsive disorder (n=6)	00 (00%)	02 (4.8%)	04 (11.1%)
Subsyndromal anxiety (n=7)	00 (00%)	03(7.3%)	04 (11.1%)
Others illness (n=5)	00 (00%)	01 (2.4%)	04 (11.1%)
Null (n=3)	00 (00%)	02 (4.8%)	01 (2.7%)

## Discussion

Irritable bowel syndrome is frequently regarded as a psycho physiologic disorder because 40-100% of patients in published series are found to have diagnosable psychiatric disorders; hysteria (20%), depression (20%) and anxiety (14%) have been most frequent<sup>(11-1)</sup>. In addition, stress is associated with the onset of IBS in more than one-half of the patient<sup>12</sup>. Somatization also has been prominently associated with IBS<sup>13</sup>. Patients with symptoms of the syndrome who see a physician have a higher frequency of psychological disturbances than patients who do not seek medical attention<sup>14</sup>. Psychological illness in IBS patients in our populations conform well with populations residing in developed countries. In our study 96.5% of IBS patients have either major or minor disorders. Among them GAD (24.4%), depressive illness (27.8%), somatoform disorder (12.7%) and hypochondriasis (10.4%). Blanchard et al.<sup>15</sup> obtained significantly higher scores in females than in males IBS patients on measuring scales of

depression, anxiety and hysterical personality and prevalence of psychiatric disorder was higher in females. Blewett et al<sup>16</sup> found no difference between men and women in rates of psychiatric disorder. Here majority of patients are male, so gender differentiation is difficult to interpret. New onset of IBS exhibit more concomitant anxiety than depression and constipation- predominant IBS is substantially associated with depressive illness. This finding does not correlated with study done by william et al.<sup>17</sup> who did not observe any difference.

## Conclusion

IBS is a most common functional GI disorder and high levels of co-morbidity with psychiatric illness especially anxiety and depressive disorders have been related. The response of irritable bowel syndrome to standard medical treatment, however, is unsatisfactory and many remain troubled by symptoms for long term. So proper psychiatric evaluation is necessary for successful alleviation of the bothering symptoms of such incurable functional illness.

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All Correspondence to:  
**M A Alim**  
Assistant Professor,  
Department of Gastroenterology,  
Rajshahi Medical College  
Rajshahi.