



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1484462>Available online at: <http://www.iajps.com>

Research Article

**CROSS SECTIONAL STUDY ON IRRITABLE BOWEL  
SYNDROME AND EXAMINATION OF PATIENTS  
ACCORDING TO ROME-2 CRITERIA IN LAHORE**<sup>1</sup>Dr. Iram Younas, <sup>2</sup>Dr. Faria Khalid, <sup>3</sup>Dr. Aamir Hamid<sup>1</sup>Children Hospital, Faisalabad<sup>2</sup>Ganga Ram Hospital, Lahore<sup>3</sup>Latin-American School Of Medicine, Cuba**Abstract:**

**Objectives:** The objective of this study is to differentiate the probable risk features, medical aspects & conclusion for women suffering of pain of abdomen. They went under examination with the help of colonoscopy.

**Methodology:** Six hundred females with pain in the abdomen cavity who referred to gastrointestinal departments of three different hospitals of Lahore city were the participants of this research work. The duration of this study is from January 2012 to April 2017. GI examination carried out for all the patients. The division of the patients carried out according to the outcome of the findings as females with fundamental reason for pain in abdomen and females with usual examination and declared as IBS (irritable bowel syndrome) with the use of the standard of hospitals.

**Results:** Seventy percent females had the normal examination and one hundred and seventy eight patients had the primary reasons. Limitations of the family and culture were the main risk factors in the females suffering of IBS. Anomalous faeces or way was also the most frequent symptom of the disease. Fifty five percent patients were regularly visiting the hospital due to the pain of abdomen, one hundred and twenty two patients were taking their medicines regularly and thirty seven patients got admission in the hospitals due to serious pain in the abdomen in which four patients diagnosed with the new reasons of the disease.

**Conclusions:** The detection of the IBS in the females suffering of pain in abdomen cavity is very common in Lahore. A unclear cause and effect of the disease as celiac disease, colitis are not normal and may present in the patients suffering of IBS & investigate for these symptoms and other probable identifications are measured when suitable.

**Keywords:** Gastrointestinal, Psychology, Hormones, patient, Ultrasound, Colonoscopy, colitis.

**Corresponding author:**

**Dr. Iram Younas,**  
Children Hospital,  
Faisalabad

QR code



Please cite this article in press Iram Younas et al., *Cross Sectional Study on Irritable Bowel Syndrome and Examination of Patients According To Rome-2 Criteria in Lahore.*, Indo Am. J. P. Sci, 2018; 05(11).

**INTRODUCTION:**

IBS is a widespread abnormality in the function of gastrointestinal as a result of pain in the abdomen or defecation related complications [1]. IBS has a major affect on the quality of life and health [2, 3]. The proper treatment of this problem is still indefinable. Different types of medicines in treatment of the IBS are in use to get rid of this disease [4]. The studies on the development and causes of the IBS have concluded the sex disparity with high amount of the females as compared to the males [5].

There is a two to four times more occurrence of the IBS in females than men. Many probable procedures for the sex disparity have been given as the actions of the hormones of sex [6, 7], disparity in the signs of psychology [8] and disparity in the attitudes against the depression [9]. The case studies on the sex dissimilarity in accordance with the response to pain show that females have less threshold level of pain, high aptitude to distinguish & high ratings of pain than males [10].

**METHODOLOGY:**

Six hundred females who visited GI departments of three hospitals of Lahore city were the part of this research work. The age of the patients was eighteen years to sixty five years. The duration of this study is from January 2012 to April 2017. All patients were suffering of pain in the abdomen cavity from last 6 months before these medical appointments. The elaborated record of the patients gathered and their medical tests started. Different types of examination carried out to know the reason of the pain as tests of

the blood samples, tests of the functions of liver & kidney, faecal tests, tests of urine and ultrasound of the abdomen. Colonic biopsies carried out for thirty two patients. All the patients separated into two groups according to the availability and non availability of underlying reasons discovered by the examination. The detection of the IBS carried out with the help of Rome-2 diagnosis standard.

Symptoms for the diagnosis of irritable bowel syndrome of IBS include:

1. Abnormal frequency of faeces, greater than three times in a day or less than 3 times in a week.
2. Loose or hard form of stool.
3. Abnormal passage of the stool.
4. Mucus passage.
5. Pain in the abdomen cavity.

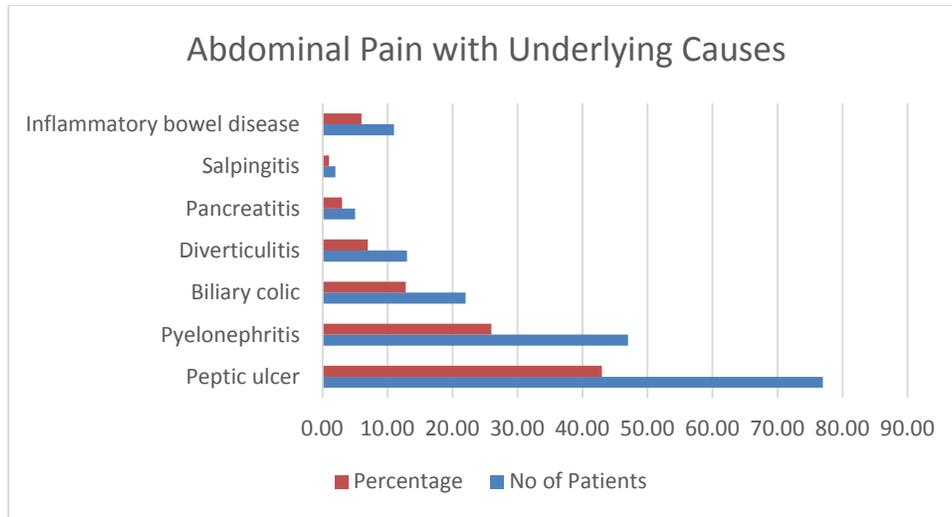
Females less than eighteen year of age, pain duration in the abdomen from less than three months, patients of high blood sugar, previous history of operation of abdomen cavity and known GI diseases were not the part of this research work. The problems during the checkups as continued pain in the abdomen, readmission in the hospital and other underlying reasons were also documented. Statistical analysis carried out with the help of Chi-Square and P value was important if it was below 0.05.

**RESULTS:**

Out of six hundred patients under examination, one hundred and seventy eight patients were found with the underlying reason for pain in the abdomen cavity. The PUD (peptic ulcer disease) & pyelonephritis were the most frequent underlying reasons as mentioned in Table-1.

**Table-I: Women referred with abdominal pain and found to have underlying cause. (n=178)**

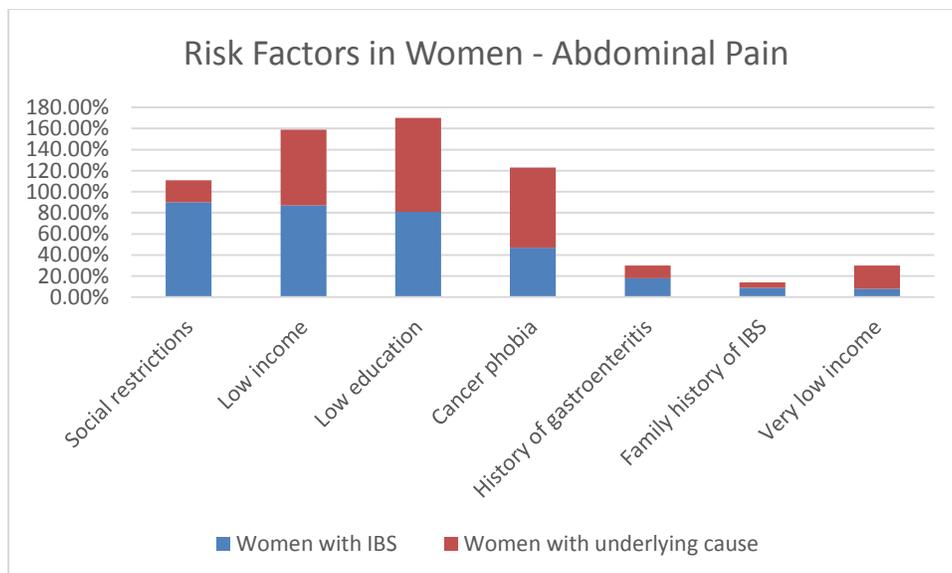
<i>Underlying Causes of abdominal pain</i>	Peptic ulcer	Pyelonephritis	Biliary colic	Diverticulitis	Pancreatitis	Salpingitis	Inflammatory bowel disease
<i>No of Patients</i>	77.00	47.00	22.00	13.00	5.00	2.00	11.00
<i>Percentage</i>	43.00	26.00	12.80	7.00	3.00	1.00	6.00



Seventy percent patients under normal examination confirmed the presence of irritable bowel syndrome according to the standard of Rome-2. Social hindrances were also the most common cause in the patients detected with IBS. Less income and low qualification were the same results in the patients of IBS as described in Table-2.

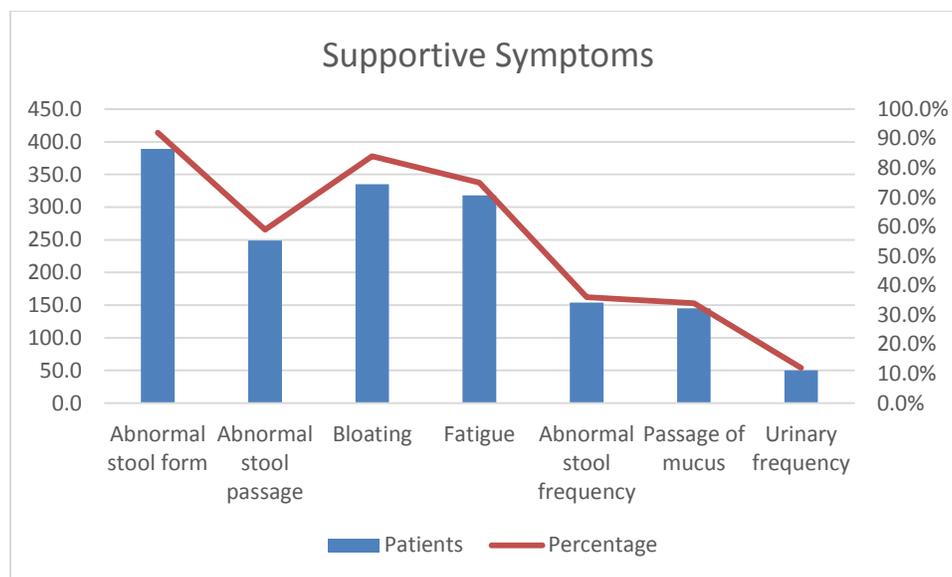
**Table-II: Risk factors in women with abdominal pain.**

Risk Factors	Women with IBS	Women with underlying cause
Social restrictions	380.00 (90.0)	37.00 (21.0)
Low income	366.00 (87.0)	127.00 (72.0)
Low education	343.00 (81.0)	148.00 (89.0)
Cancer phobia	197.00 (47.0)	134.00 (76.0)
History of gastroenteritis	74.00 (18.0)	20.00 (12.0)
Family history of IBS	40.00 (9.0)	10.00 (5.0)
Very low income	32.00 (8.0)	38.00 (22.0)



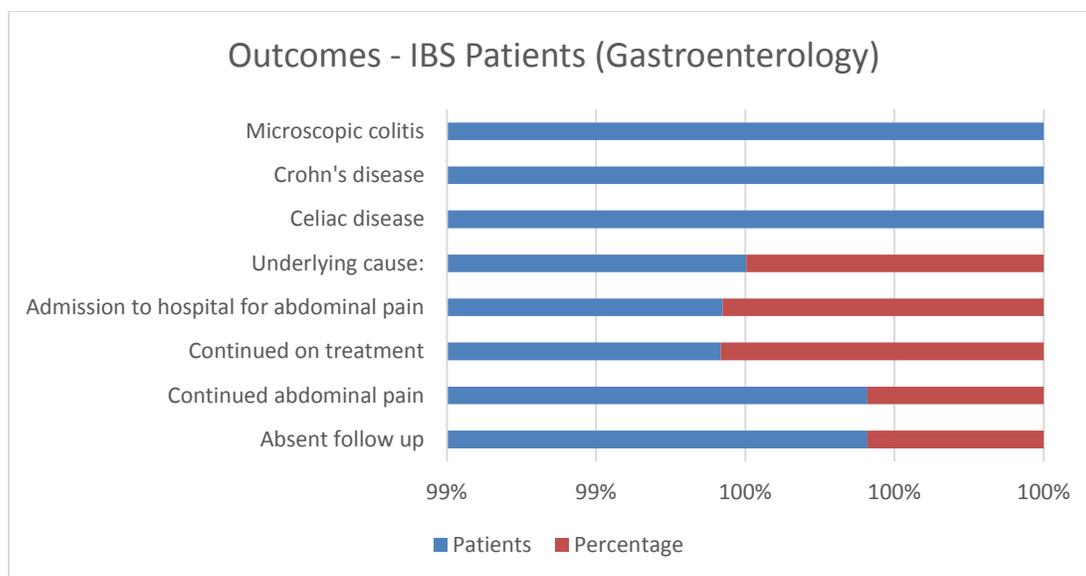
The Symptoms which were helpful in the detection of the irritable bowel syndrome in the patients of this research work are displayed in Table-3.

<i>Symptoms</i>	<i>Patients</i>	<i>Percentage</i>
Abnormal stool form	389.0	92.0%
Abnormal stool passage	249.0	59.0%
Bloating	335.0	84.0%
Fatigue	318.0	75.0%
Abnormal stool frequency	154.0	36.0%
Passage of mucus	145.0	34.0%
Urinary frequency	50.0	12.0%



Abnormal stool form found in ninety two percent patients and abnormal passage of stool discovered in eighty two percent patients of this research work. These two factors were the most common in the IBS patients of this case study. The follow up of the patients of IBS and their sufferings are available in full detail with the percentages of the patients of IBS in Table-4.

<i>Outcome of women diagnosed IBS</i>	<i>Patients</i>	<i>Percentage</i>
Absent follow up	190.0 (Total 422)	45.0%
Continued abdominal pain	232.0 (Total 422)	55.0%
Continued on treatment	122.0 (Total 232)	53.0%
Admission to hospital for abdominal pain	37.0 (Total 232)	16.0%
Underlying cause:	20.0 (Total 232)	8.0%
Celiac disease	11.0	
Crohn's disease	7.0	
Microscopic colitis	2.0	



### DISCUSSION:

IBS (Irritable bowel syndrome) is very common abnormality of GI discovered in medical practice in the whole world. There is no availability of the biological identifier to confirm the presence of IBS; this disease has become a challenge for doctors. In old times, irritable bowel syndrome was a waste basket analysis provided to the patients with unidentified signs of the GI. In current times, Patients of irritable bowel syndrome found with a set of the particular GI symptoms. Manning standard was elaborated in 1978 [11] that standard followed by Rome-1 in 1989 [12] & then Rome-2 standard in 1999 [13]. The working groups of different nations created Rome-1 & Rome-2 to give a structure for the choice of the patients in analytical & curative trials. The current published analytical rules [14, 15] provide the standard based on the symptoms in the detection of the irritable bowel syndrome in the field of medical. The research works checking the significance of the dangerous aspects in the advancement of irritable bowel syndrome have displayed that less income, gastroenteritis past history & history of irritable bowel syndrome in the family [16, 17] are very vital in the development of irritable bowel syndrome.

The patients with social hindrances will gain some comfort with the visit to hospital and they will get care & concentration from their family. Less income was very frequent cause in about twenty two percent females. The patients of irritable bowel syndrome had the lower rate of income. The less income rate is very widespread in IBS patients because the patients of this case study do not have much income to get clinical treatment. Fifty five percent patients were

continuously visiting the hospital due to continuous pain in the abdomen. Fifty three percent patients were taking various medicines and forty five percent were irregular in getting their treatments because;

1. The reasons for the symptoms of the disease in the patients were undiscovered.
2. Patients believed that their pain was organic, but fifty three percent were taking their medicines continuously.

Celiac disease was checked in some of our patients, because five percent IBS patients may have this disease especially in women [18]. Eight percent patients of this research work underwent colonic biopsies, therefore, colitis and swollen bowel diseases are not ruled out, Twenty percent of the patients of Crohn's disease have invisible granulomas when mucosa is in normal condition [19-22]. The non availability of the tests of hydrogen breath was the main shortcoming of this case study [22]. Some shortcomings of this case study are; the device for the evaluation of the social stress in the IBS patients was not in use, many symptoms elaborated in the Rome-2 standard were not well described and colonoscopy was not carried out on all patients.

This research work shows the requirement of dramatic change in our procedure in the detection of the irritable bowel syndrome in our areas with the help of the Rome standard.

### CONCLUSIONS

IBS (Irritable bowel syndrome) is very frequent in the females having pain in their abdomen cavity in Lahore. In spite of detection of the irritable bowel syndrome, it was the cause of significant morbidity; a considerable amount of the patients continued to suffer with the pain of abdomen and remained under

medications. In some patients, some unclear diseases were present and related examinations for the diagnosis of those pathologies were the requirement to tackle this issue.

#### REFERENCES:

1. Thompson WG, Longstreth GF, Drossman DA. Functional bowel disorders and functional abdominal pain. *Gut*, 1999;45(suppl 2):43-7
2. Heitkemper M, Jarrett M, Bond EF. Irritable bowel syndrome in women: A common health problem. *Nurs Clin North Am* 2004;39:69-81 .
3. Mayer EA, Berman S, Chang L, Naliboff BD. Sex-based differences in gastrointestinal pain. *Eu J Pain* 2004;8:451-63.
4. Kwan AC, Hu WH, Chan YK. Prevalence of irritable bowel syndrome in Hong Kong. *J Gastroenterology and Hepatology* 2002;17:1180-6.
5. Kim HS, Rhee PL, Park J. Gender-related differences in visceral perception in health and irritable bowel syndrome. *J Gastroenterology and Hepatology* 2006;21:468-73.
6. Spiegel BMR, Kanwal F, Naliboff B. The Impact of Somatization on the Use of Gastrointestinal HealthCare Resources in Patients with Irritable Bowel Syndrome. *The Amer J Gastroenterology* 2004;17:422-5.
7. Tack J, Müller-Lissner S, Bytzer P. A randomised controlled trial assessing the efficacy and safety of repeated tegaserod therapy in women with irritable bowel syndrome with constipation. *Gut* 2005;54(12):1707-13.
8. Blanchard EB, Keefer L, Galovski TE. Gender differences in psychological distress among patients with irritable bowel syndrome. *J Psychosom Res* 2001;50:271-5.
9. Celebi S, Acik Y, Deveci SE, Bahcecioglu IH. Epidemiological features of irritable bowel syndrome in a Turkish urban society. *J Gastroenterology and Hepatology* 2004;19:738-43 .
10. Kellow JE. Advances in the management of irritable bowel syndrome. *J Gastroenterology and Hepatology* 2002; 17:503-7.
11. Manning AP, Thompson WG, Heaton KW, Morris AF. Towards positive diagnosis of the irritable bowel. *BMJ* 1978;2:653-4.
12. Thompson WG, Dotewall G, Drossman DA. Irritable bowel syndrome: Guidelines for the diagnosis. *Gastroenterol Int* 1989;2:92-5.
13. Gangula PRR, Pasricha PJ. Women and irritable bowel syndrome: Is the gain in pain mainly in the brain? *J Gastroenterol Hepatol* 2006; 21:468-73..
14. Drossman DA, Camilleri M, Mayer EA, Whitehead WE. AGA technical review on irritable bowel syndrome. *Gastroenterology* 2002;123:2108-31.
15. Brandt LJ, Bjorkman D, Fennerty MB. Systematic review on the management of irritable bowel syndrome in North America. *Am J Gastroenterol* 2002;97(suppl):S7-S26.
16. Heitkemper MM, Jarrett M. Gender differences and hormonal modulation in visceral pain. *Cur Pain Headache Rep* 2001;5:35-43.
17. Heitkemper M, Jarrett M, Cain KC. Autonomic nervous system functions in women with irritable bowel syndrome. *Dig Dis Sci* 2001;46:1276-84.
18. Talley NJ. Diagnosis and management of the IBS. *DDW* 2004.
19. Tagkalidis P, Bhathal P, Gibson P. Microscopic colitis. *J Gastroenterology and Hepatology* 2002;17(3):236-48.
20. Liszka U, Woszczyk D, Pajak J. Histopathological diagnosis of microscopic colitis. *J Gastroenterology and Hepatology* 2006;21(5):792-7.
21. Talley N. New and important insights into IBS. *DDW*, 2002.
22. Lucak S. Diagnosing Irritable Bowel Syndrome: What's Too Much, What's Enough? *Medscape General Medicine* 2004;6(1):117-19.