

ISSN: 2454-132X Impact Factor: 6.078

(Volume 9, Issue 2 - V9I2-1150)

Available online at: https://www.ijariit.com

Proposed survey questionnaire for the diagnosis of irritable bowel syndrome: Based on patient complaints

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ABSTRACT

Functional bowel disorders (FBD) are extremely common all over the globe. Enhancing knowledge of FBD is essential because they have a detrimental effect on the healthcare system. Irritable bowel syndrome (IBS) is one such FBD where recurrent abdominal pain is associated with a change in bowel habits. Many conditions mimic IBS which includes celiac disease, microscopic colitis, inflammatory bowel disease (IBD), lactose and fructose intolerance, etc. In order to correctly differentiate these disorders from IBS, limited testing may be necessary. Considering these overlapping conditions, we thought of developing a questionnaire to help the physicians diagnose IBS based on a scoring system. A set of questions were drafted based on patient complaints and each question had a scoring system. Basis the patient's response to each question the total score would help the physicians understand if the patient is suffering from IBS. This is a brand-new grading system that has not yet undergone testing. The medical community is urged to evaluate the scoring system's usefulness and provide input so that it can be improved.

Keywords: Functional Bowel Disorders, Irritable Bowel Syndrome, Abdominal Pain, Questionnaire, and Patient Complaints

1. BACKGROUND

Irritable bowel syndrome (IBS) is a functional bowel disorder (FBD) in which recurring abdominal pain occurs frequently and is linked to defecation or a change in bowel habits. In addition to symptoms of abdominal bloating or distention, disordered bowel habits (i.e., constipation, diarrhea, or a combination of constipation and diarrhea) are frequently present here. According to a meta-analysis of 80 research with 260,960 participants, the prevalence of IBS worldwide is 11.2%. Women experience higher prevalence rates than males, and individuals under the age of 50 are more likely to be impacted. The diagnostic criterion for IBS involves recurrent abdominal discomfort that has occurred for at least 1 day per week on average over the previous 3 months and is connected to 2 or more of the following factors:[1]

Defecation Change in stool frequency Change in stool consistency

2. OBJECTIVE

IBS diagnosis calls for a methodical approach, few diagnostic tests, and meticulous follow-up as many conditions mimic IBS which include celiac disease, microscopic colitis, inflammatory bowel disease (IBD), lactose and fructose intolerance, etc. Limited testing may be required to accurately distinguish these disorders from IBS.[1] Considering the gaps and the overlapping conditions that mimic IBS we thought of developing a questionnaire for the physicians which would help them diagnose IBS based on a scoring system.

3. METHODOLOGY

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A thorough literature search was done to understand IBS, its symptoms, and patient complaints. Basis these parameters a set of questions were drafted which would help understand the chief patient complaints. Each question had a scoring system and based on the responses a total score would be calculated which would help physicians understand if the patient is suffering from IBS or not.[2]

4. QUESTIONNAIRE DETAILS

A total of 17 questions were drafted. These questions were drafted to understand the patients' complaints with a scoring system with options like 'no', 'yes', 'some of the time', etc.[2]

The questions revolved around 'patient complaints' and included questions on the frequency and tenure of abdominal pain, in the case of women is the pain related to menses, is the pain related to defecation, the frequency of passing stools, the consistency of the stools, type of stool, bowel movement, abdominal pressure/discomfort, the patient's age, and the description of the type of stool frequently passed. The options for each question in this set had a score assigned. Here 'never/no=0, in one of the questions no=2; some of the time=1; most probably=1; yes: for less than 6 months=1; yes: for more than 6 months=2; most of the time=2; <15 years age=1; 15-50 years age=2; >50 years=0; type 3, 4, and 5=0; type 6 and 7=1; type 1 and 2=2. If the totals score to this set was observed \geq 25 the patient was considered likely to suffer from IBS; 15-24 the patient might have IBS or other conditions and <15 would indicate conditions other than IBS.[2]

5. QUESTIONNAIRE FOR DIAGNOSIS OF IBS[1-3]

Patient complaints

Table-1: Questionnaire for the diagnosis of IBS [1-3]

Sr. No	Question	Options	Score
1.	In the last 3 months, how often did you have pain anywhere in your abdomen?	No	0
		Some of the time	1
		Most of the time	2
2.	Have you had this pain 6 months or longer?	No	0
		Yes: For less than 6 months	1
		Yes: For more than 6 months	2
3.	Do you think your abdominal pain has any relation with your menstrual cycles/periods (In case of women only)?	Yes	0
		Most probably	1
		No	2
4.	Is the abdominal pain related with the passage of stool (defecation)?	No	0
		Some of the time	1
		Most of the time	2
5.	In the last 3 months, have you noticed an increased frequency of passing stools (more than 3 times per day)?	No	0
		Some of the time	1
		Most of the time	2
6.	In the last 3 months, have you noticed decreased frequency of passing stools (less than 3 times per week)?	No	0
		Some of the time	1
		Most of the time	2

Never 0	-	Letter let (O consider Letter confer Letter	I NI.	
8. In the last 3 months, have you noticed passing hard stools? Never Some of the time 1 Most of the time 2 9. In the last 3 months, how frequently did you have hard or lumpy stools? 10. In the last 3 months, how frequently did you have loose, mushy, or watery stools? 11. In the last 3 months, how frequently did you strain while passing stools or have difficulty having a bowel movement? 12. In the last 3 months, how frequently did you feel an urgency to pass stool? 13. In the last 3 months, how frequently did you feel an urgency to pass stool? 14. In the last 3 months, how frequently did you feel bloated (increase in abdominal pressure)? 15. In the last 3 months, how frequently did you feel bloated (increase in abdominal size)? 16. What is your age? 17. Under 15 years old 18. In the last 3 months, how frequently did you feel discomfort of gas? 18. Under 15 years old Pover O Some of the time 1 Most of the time 2 16. What is your age? Under 15 years old Delayers O Type 3, Type 4, Type 5	7.	In the last 3 months, have you noticed passing looser stools?	Never	0
8. In the last 3 months, have you noticed passing hard stools? Some of the time 1 Most of the time 2			Some of the time	1
Some of the time 1 Most of the time 2			Most of the time	2
9. In the last 3 months, how frequently did you have hard or lumpy stools? 10. In the last 3 months, how frequently did you have loose, mushy, or watery stools? 11. In the last 3 months, how frequently did you strain while passing stools or have difficulty having a bowel movement? 12. In the last 3 months, how frequently did you feel an urgency to pass stool? 13. In the last 3 months, how frequently did you feel an urgency to pass stool? 14. In the last 3 months, how frequently did you feel bloated (increase in abdominal pressure)? 15. In the last 3 months, how frequently did you feel that your abdomen/belly was distended (increase in abdominal pressure along with the increase in abdominal size)? 15. In the last 3 months, how frequently did you feel discomfort of gas? 16. What is your age? 17. What is your age? 18. Most of the time 2 19. Never 0 Some of the time 1 Most of the time 2 Never 0 Some of the time 1 Most of the time 2 Never 0 Some of the time 1 Most of the time 2 In the last 3 months, how frequently did you feel that your abdomen/belly was distended (increase in abdominal pressure along with the increase in abdominal size)? 19. What is your age? 10. Under 15 years old 1 Between 15 and 50 2 Years Over 50 years old 0 Type 3, Type 4, Type 5	8.	In the last 3 months, have you noticed passing hard stools?	Never	0
9. In the last 3 months, how frequently did you have hard or lumpy stools? Never			Some of the time	1
lumpy stools? Some of the time 1 Most of the time 2 2 2 2 2 2 2 2 2			Most of the time	2
Some of the time 1 Most of the time 2	9.		Never	0
10. In the last 3 months, how frequently did you have loose, mushy, or watery stools? 11. In the last 3 months, how frequently did you strain while passing stools or have difficulty having a bowel movement? 12. In the last 3 months, how frequently did you feel an urgency to pass stool? 13. In the last 3 months, how frequently did you feel bloated (increase in abdominal pressure)? 14. In the last 3 months, how frequently did you feel that your abdomen/belly was distended (increase in abdominal pressure along with the increase in abdominal size)? 15. In the last 3 months, how frequently did you feel discomfort of gas? 16. What is your age? 17. Under 15 years old 1 Between 15 and 50 2 years old 0 17. Type 3, Type 4, Type 5			Some of the time	1
mushy, or watery stools? Some of the time 1			Most of the time	2
Some of the time 1 Most of the time 2	10.		Never	0
11. In the last 3 months, how frequently did you strain while passing stools or have difficulty having a bowel movement? Some of the time 1			Some of the time	1
passing stools or have difficulty having a bowel movement? Some of the time 1			Most of the time	2
Some of the time 1 Most of the time 2	11.		Never	0
12. In the last 3 months, how frequently did you feel an urgency to pass stool? Some of the time 1			Some of the time	1
pass stool? Some of the time 1			Most of the time	2
Most of the time 2	12.		Never	0
13. In the last 3 months, how frequently did you feel bloated (increase in abdominal pressure)? Some of the time 1			Some of the time	1
(increase in abdominal pressure)? Some of the time Most of the time 1 Most of the time 2 14. In the last 3 months, how frequently did you feel that your abdomen/belly was distended (increase in abdominal pressure along with the increase in abdominal size)? Never Some of the time Most of the time 1 Most of the time 2 15. In the last 3 months, how frequently did you feel discomfort of gas? Some of the time Most of the time 1 Most of the time 1 Most of the time 1 Most of the time 2 16. What is your age? Under 15 years old Between 15 and 50 2 years Over 50 years old 17. Type 3, Type 4, Type 5			Most of the time	2
Most of the time 2	13.		Never	0
14. In the last 3 months, how frequently did you feel that your abdomen/belly was distended (increase in abdominal pressure along with the increase in abdominal size)? 15. In the last 3 months, how frequently did you feel discomfort of gas? 16. What is your age? 17. In the last 3 months, how frequently did you feel discomfort of gas? 18. What is your age? 19. What is your age? 10. What is your age? 10. Type 3, Type 4, Type 5			Some of the time	1
abdomen/belly was distended (increase in abdominal pressure along with the increase in abdominal size)? Some of the time 1 Most of the time 2 15. In the last 3 months, how frequently did you feel discomfort of gas? Some of the time 1 Most of the time 1 Most of the time 2 16. What is your age? Under 15 years old 1 Between 15 and 50 2 years Over 50 years old 0 17. Type 3, Type 4, Type 5			Most of the time	2
Most of the time 2 15. In the last 3 months, how frequently did you feel discomfort of gas? Some of the time 1 Most of the time 2 16. What is your age? Under 15 years old 1 Between 15 and 50 2 years Over 50 years old 0 17. Type 3, Type 4, Type 5	14.	abdomen/belly was distended (increase in abdominal pressure	Never	0
15. In the last 3 months, how frequently did you feel discomfort of gas? Never 0			Some of the time	1
gas? Some of the time 1			Most of the time	2
Most of the time 2	15.	1 7 7	Never	0
16. What is your age? Under 15 years old Between 15 and 50 2 years Over 50 years old Type 3, Type 4, Type 5			Some of the time	1
Between 15 and 50 2 years Over 50 years old 0 Type 3, Type 4, Type 5			Most of the time	2
years Over 50 years old 0	16.	What is your age?	Under 15 years old	1
Over 50 years old 0 Type 3, Type 4, 0 Type 5				2
Type 5				0
	17.			0
				1

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	se the appropriate from the following	e type of your stool that you frequently descriptions:	Type 1, Type 2	2
Type 1	9999	Separate hard lumps, like nuts (hard to pass)		
Type 2	6255	Sausage-shaped but lumpy		
Type 3		Like a sausage but with cracks on the surface		
Type 4		Like a sausage or snake, smooth and soft		
Type 5	3724	Soft blobs with clear-cut edges		
Type 6	fer to	Fluffy pieces with ragged edges, a mushy stool		
Type 7	-	Watery, no solid pieces, entirely liquid		

Total S	Total Score		
>25	Patient is likely suffering from IBS		
15-24	Patient may be suffering from IBS, but other conditions could also be possibly causing the symptoms		
<15	Patient is likely not suffering from IBS and other conditions should be considered.		

6. CONCLUSION

The intent behind developing this questionnaire was to help the physicians distinguish between the conditions mimicking IBS and treat the patients better. This is a new scoring system and has not been tested yet. We urge the medical fraternity to check the utility of the scoring system and let us know your feedback to improvise on the same.

7. ACKNOWLEDGEMENT

We acknowledge Medica Press Limited for helping with questionnaire creation and providing Medical Writing assistance.

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