

Knowledge, Practices and Attitudes of Medical Students Towards Irritable Bowel Syndrome: A Cross Sectional Study

Knowledge of
Medical Students
Towards
Irritable Bowel
Syndrome

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ABSTRACT

Objective: To assess the knowledge, practices and attitudes of medical students towards irritable bowel syndrome.

Study Design: A Cross Sectional Study

Place and Duration of Study: This study was conducted at the MMC General Hospital Peshawar from January 2023 to June 2023.

Materials and Methods: The medical students attending the clinical wards were in the inclusion criteria and people from other disciplines like paramedics and nurses were excluded from the study. Total sample size was 100 and method used was non-probability convenient sampling. The responses of the participants were recorded through a validated questionnaire. The data was analyzed by SPSS version 22. Descriptive statistics were applied and the frequencies and percentages were applied for categorical data whereas Mean and SD were applied for quantitative data. The Chi Square test was applied taking a p value of 0.05 or less as significant.

Results: The mean age of the patient is 23.78 with a standard error of mean .152.63% of participants were medical and allied while 33% were from surgical and allied .48% of the participants were men while 52% of them were females The responses were assessed in terms of strongly agree, agree, neutral, disagree and strongly disagree . IBS requires good compliance to drugs by physicians, the females had better knowledge perception and attitude as reflected by the bar chart. IBS is more common than chronic diseases such as diabetes and hypertension. There was an equal response in terms of awareness of the participants with 31 % of saying it as true 37% perceiving it as false and 33% saying do not know.

Conclusion: This study shows that medical students have overall good knowledge, perception and attitude of IBS as a disease.

Key Words: Irritable Bowel Syndrome, Perception

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INTRODUCTION

IBS has played a havoc with the life common men. The exact cause of it isn't known but it is said that it is mostly due to the over activity of nerves supplying the gut and impaired visceral hypersensitivity. ²Most of the patients have complex mental health history ranging from depression to severe psychosis. They have symptoms ranging from few days to months and several years.

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They have got a relapsing and remitting course and that is very irritating for the people suffering from it.³

Mostly the patients present to the gastroenterology outdoor with complains of altered bowel habits with episodes of diarrhea alternating with constipation .Sometimes there is a diarrhea predominant IBS while some of them constipation predominant one and at times there is a mixed picture .⁴They do complain of bloating, flatulence, urgency to go the toilet, feeling of incomplete defecation or increased frequency of bowel movements .They do have normal inflammatory markers and no signs and symptoms of inflammatory bowel disease. At times the patients do present with bleeding per rectum, blood in the stools, cramping abdominal pain and unintentional weight loss prompting the physician do act more aggressively and do urgent referral to gastroenterologist for further investigations in form of fecal calprotectin and colonoscopy. The main aim of such investigations is to rule out diseases like crohnsdisease, ulcerative colitis and even dangerous colorectal carcinoma.⁵

Some of the patients with irritable bowel syndrome are misdiagnosed. It can be said beyond any shadow of doubt that colorectal cancer is on the rise and most of the patients getting diagnosed in later stages with limited prospects of treatment and hence poor prognosis. Doing colonoscopy is of paramount importance. The key is to diagnose it early and hence treated by an appropriate physician.⁶ For this to be achieved it is inevitably significant to arouse the curiosity of the people for increased awareness of the disease.⁶ As medical students are largely in contact with the patients during clinical rotation and can play very important role in pointing out the right patients to the attending doctor after histories from them.⁷ Their education is must and that is why we need to assess the knowledge ,practices and attitudes of medical students about it.

MATERIALS AND METHODS

This cross sectional study was conducted in MMC General Hospital Peshawar after the approval of research proposal by research committee. The study was conducted from January 2023 to June 2023. The medical students attending the clinical wards were in the inclusion criteria and people from other disciplines like paramedics and nurses were excluded from the study. Total sample size was 100 and method used was non-probability convenient sampling. The responses of the participants were recorded through a validated questionnaire. The data was analyzed by SPSS version 22. Descriptive statistics were applied and the frequencies and percentages were applied were applied

for categorical data where as Mean and SD were applied for quantitative data. The Che Square test was applied taking a p value of 0.05 or less as significant.

RESULTS

The mean age of the patient is 23.78 with a standard error of mean .152.In terms of specialties , 63% of participants were medical and allied while 33% were from surgical and allied .48% of the participants were men while 52% of them were females The responses were assessed in terms of strongly agree, agree, neutral, disagree and strongly disagree. IBS requires good compliance to drugs by physicians, the females had better knowledge perception and attitude as reflected by the bar chart. IBS is more common than chronic diseases such as diabetes and hypertension. There was an equal response in terms of awareness of the participants with 31 % of saying it as true 37% perceiving it as false and 33% saying do not know. On applying Che Square test significant association was found for “ Did you skip medications after few days os symptomatic relief “ with a p value of 0.05 that is shown by table below

Table No. 1: Statistics

Age		
N	Valid	100
	Missing	4
Mean		23.7800
Std. Error of Mean		.15214

Table No. 2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	48	46.2	48.0	48.0
	Female	52	50.0	52.0	100.0
	Total	100	96.2	100.0	
Missing	System	4	3.8		
Total		104	100.0		

Table No. 3: Specialty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medicine&Allied	63	60.6	63.0	63.0
	Surgery&Allied	37	35.6	37.0	100.0
	Total	100	96.2	100.0	
Missing	System	4	3.8		
Total		104	100.0		

Table No. 4: Knowledge

		Frequency	Percent	Valid Percent	Cumulative Percent
IBS is associated with symptoms such as abdominal	Valid True	40	38.5	40.0	40.0
	False	41	39.4	41.0	81.0
	Do not know	19	18.3	19.0	100.0

pain/discomfort,constipation/diarrhoea,bloating		Total	100	96.2	100.0	
	Missing	System	4	3.8		
	Total		104	100.0		
			Frequency	Percent	Valid Percent	Cumulative Percent
IBS is more common than chronic diseases such as diabetes and hypertension	Valid	True	31	29.8	31.0	31.0
		False	37	35.6	37.0	68.0
		Do not know	32	30.8	32.0	100.0
		Total	100	96.2	100.0	
	Missing	System	4	3.8		
	Total		104	100.0		
			Frequency	Percent	Valid Percent	Cumulative Percent
IBS develops because of increase in stress/anxiety	Valid	True	41	39.4	41.0	41.0
		False	36	34.6	36.0	77.0
		Do not know	23	22.1	23.0	100.0
		Total	100	96.2	100.0	
	Missing	System	4	3.8		
	Total					

Table No. 5: Attitudes

			Frequency	Percent	Valid Percent	Cumulative Percent
For treating IBS medications should be taken in consultation with physicians only	Valid	Strongly Agree	32	30.8	32.0	32.0
		Agree	33	31.7	33.0	65.0
		Neutral	17	16.3	17.0	82.0
		Disagree	12	11.5	12.0	94.0
		Strongly disagree	6	5.8	6.0	100.0
	Total	100	96.2	100.0		
	Missing	System	4	3.8		
	Total		104	100.0		
			Frequency	Percent	Valid Percent	Cumulative Percent
Dietary and life style changes are critical to manage IBS symptoms	Valid	Strongly agree	24	23.1	24.0	24.0
		Agree	29	27.9	29.0	53.0
		Neutral	28	26.9	28.0	81.0
		Disagree	16	15.4	16.0	97.0
		Strongly disagree	3	2.9	3.0	100.0
	Total	100	96.2	100.0		
	Missing	System	4	3.8		
	Total		104	100.0		
			Frequency	Percent	Valid Percent	Cumulative Percent
IBS management requires good compliance to drugs required by your physician	Valid	Strongly agree	25	24.0	25.0	25.0
		Agree	36	34.6	36.0	61.0
		Neutral	27	26.0	27.0	88.0
		Disagree	9	8.7	9.0	97.0
		Strongly disagree	3	2.9	3.0	100.0
	Total	100	96.2	100.0		
	Missing	System	4	3.8		
	Total		104	100.0		
			Frequency	Percent	Valid Percent	Cumulative Percent
You should report worsening of symptoms	Valid	Strongly Agree	30	28.8	30.0	30.0
		Agree	37	35.6	37.0	67.0

immediately to doctor		Neutral	23	22.1	23.0	90.0
		Disagree	6	5.8	6.0	96.0
		Strongly disagree	4	3.8	4.0	100.0
		Total	100	96.2	100.0	
	Missing	System	4	3.8		
	Total		104	100.0		

Table No. 6: Practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Do you perform yoga/meditation to minimize the stress/anxiety?	Valid	Yes	42	40.4	42.0
		No	58	55.8	58.0
		Total	100	96.2	100.0
	Missing	System	4	3.8	
	Total		104	100.0	
		Frequency	Percent	Valid Percent	Cumulative Percent
Do you exercise regularly to prevent IBS symptoms?	Valid	Yes	82	78.8	82.0
		No	18	17.3	18.0
		Total	100	96.2	100.0
	Missing	System	4	3.8	
	Total		104	100.0	
		Frequency	Percent	Valid Percent	Cumulative Percent
Do you have adequate sleep?	Valid	Yes	62	59.6	62.0
		No	38	36.5	38.0
		Total	100	96.2	100.0
	Missing	System	4	3.8	
	Total		104	100.0	
		Frequency	Percent	Valid Percent	Cumulative Percent
You should report worsening of symptoms immediately to doctor	Valid	Strongly Agree	30	28.8	30.0
		Agree	37	35.6	37.0
		Neutral	23	22.1	23.0
		Disagree	6	5.8	6.0
		Strongly disagree	4	3.8	4.0
	Total	100	96.2	100.0	
	Missing	System	4	3.8	
Total		104	100.0		

Table No. 7: Chi-square Tests

	Value	Df	Exact Sig. (1-sided)
Pearson Chi-Square	3.336 ^a	1	
Continuity Correction ^b	2.606	1	
Likelihood Ratio	3.322	1	
Fisher's Exact Test			.053
Linear-by-Linear Association	3.303	1	
N of Valid Cases	100		

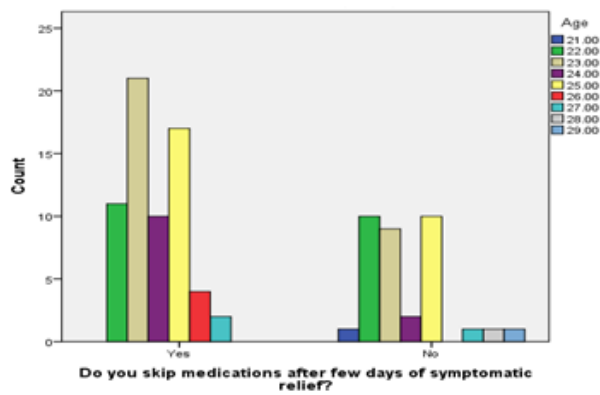


Figure No. 1: Bar Chart

DISCUSSION

IBS has increased in prevalence over the last so many years and Pakistan is not an exception. This can be attributed to difficult living style of the common men and that has made their life miserable.⁸ According to this study the medical students had reasonable level of awareness about IBS as a disease with females having superior knowledge of the disease. A survey was done among nursing practitioners giving a 0.06% response rate. The scores of checking knowledge were quite poor ($M = 2.44$; $SD = 0.869$) for diagnosis as well as treatment. Modest consensus was there for attitude ($M = 4.02$; $SD = 0.59$) and perception ($M = 4.41$; $SD = 0.58$) as per scaled questions scores. The experience of them had no correlation with level of knowledge. No significant difference was seen between nursing practitioners and other professionals regarding IBS diagnosis and treatment.¹⁰ 96% of participants agreed for further awareness of nursing practitioners as the present study reflected poor perceptions.⁷

According to another study done in Riyadh in 2017 the prevalence of IBS among local population was 10.7% and a vast majority of them had awareness about it and its causative factors (81.1%) while only 18.9% had limited awareness regarding it. Majority of the subjects had perception about diet and proper counseling as first line of management for IBS. The level of knowledge improved with the increasing education.¹⁰ The majority of participants had adequate knowledge about the disease course, prognosis and management. The study recommended for future researches to measure the knowledge, perception and attitudes of people from other areas.¹⁰ According to this study IBS requires good compliance to drugs by physicians, the females had better knowledge perception and attitude as reflected by the bar chart. IBS is more common than chronic diseases such as diabetes and hypertension. There was an equal response in terms of awareness of the participants with 31% of saying it as true, 37% perceiving it as false and 33% saying do not know. One of the studies reported positive attitudes of patients to yoga as a therapy for IBS. Although gastroenterologists

did believe yoga is safest and very useful for IBS patients, most people don't recommend it due to lack of concrete evidence.

HCPs are of the view that IBS – D is quite difficult to treat. Approximately one-third of them emphasized the need for practice guidelines, only 11%–14% felt the need for following those and a same proportion shared their own understanding and experience.¹¹ These results find a disparity between health professionals reporting objectives of alleviating symptoms and better living and the decreased compliance to standard guidelines, indicating that current guidelines need improvement. Antidiarrheals and antispasmodics were reported to be the most effective therapies for improvement of symptoms. On the other hand, antidepressants and psychotics are not used as first line therapy.¹²

This study has highlighted the awareness level of medical students and will be of enormous help for raising the awareness of the public at large and medical students in particular. We need to do multicenter trials for arousing the curiosity of people.¹³

CONCLUSION

This study shows that medical students have overall good knowledge, perception and attitude of IBS as a disease.

Author's Contribution:

Concept & Design of Study:	Adil Shah Roghani Jibran Umar Ayub Khan, Intikhab Alam
Drafting:	
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Final Approval of version:	Adil Shah Roghani

Conflict of Interest: The study has no conflict of interest to declare by any author.

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