

Original Research Article

Physicians' perspectives on irritable bowel syndrome, diagnosis and management in India: insights from in-clinic questionnaire-based survey study with a focus on Rifaximin

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ABSTRACT

Background: In India, irritable bowel syndrome (IBS) contributes notably to patients' discomfort and places a considerable strain on healthcare resources. With Physicians as a primary care provider for IBS patients, this survey objective was to explore their practices, perspectives and experience with Rifaximin in management of IBS with Rifaximin in the management of IBS-D.

Methods: A cross-sectional structured electronic survey consisting of 20 multiple-choice questions was administered to 302 physicians across India.

Results: A total of 302 physicians participated in the survey, reporting diverse monthly caseloads of patients diagnosed with IBS. Among them, 32.81% managed between 10–20 patients per month. IBS with diarrhea (IBS-D) emerged as the most commonly encountered sub-type. Rifaximin was identified as a frequently prescribed therapy for IBS-D, with physicians' observance in reduction of 40-80% pain (47.07% patients), bloating (50.20%), diarrhea (47.83%) and symptom urgency (47.08%), with preferred dose of 400 mg twice daily (44.66%).

Conclusions: IBS remains one of the most frequently encountered functional gastrointestinal disorders among Physicians, with clinical judgment as primary diagnosis. Rifaximin was commonly preferred for managing IBS-D due to its proven efficacy, minimal systemic absorption, and strong safety profile.

Keywords: Irritable bowel syndrome, IBS-D, Rifaximin, Survey study

INTRODUCTION

Irritable bowel syndrome (IBS) is a common digestive disorder that often cause symptoms such as abdominal pain, bloating and altered bowel habits.¹ It affects an estimated 9%-23% of the global population, significantly impacting quality of life. In primary care practice, the percentage of patients seeking IBS related health care are reported to be 12%, thus making IBS the largest sub-group in clinics.² Although the exact cause of IBS is not fully understood, several factors are believed to play a role. These include visceral hypersensitivity, irregular

movements of the digestive tract and the influence of psychological stress or emotional health issues.³ The treatment of IBS differs according to its sub-types, which include unclassified IBS (IBS-U), mixed IBS (IBS-M), IBS with diarrhea (IBS-D), and IBS with constipation (IBS-C).⁴ IBS-D is characterized by frequent loose or watery stools and abdominal discomfort or pain. It is a chronic functional gastrointestinal disorder in which the bowel appears structurally normal but does not function properly.⁵ The gastrointestinal infections, dietary factors, psycho-social factors, certain medications, lifestyle factors like physical activity, sleep patterns, genetic

predisposition, environmental factors, and socioeconomic factors are some of the main risk factors for IBS.⁶

Irritable bowel syndrome (IBS) is diagnosed using established symptoms-based framework, with the Rome IV criteria being the most commonly applied. According to these criteria, IBS is identified by recurrent abdominal discomfort occurring at least one day per week over the past three months, accompanied by at least two of the following features: relief or worsening with detection, alteration in stool frequency, or changes in stool consistency.¹ IBS treatment methods are typically symptom-specific. An approach to treating the illness is provided by antibiotic therapy, particularly by substances that target the gut flora.⁷ The majority of efforts to treat IBS have been focused on symptom management and the most used antibiotic is Rifaximin with a wide spectrum of gastrointestinal-specific antibiotic actions. It has no clinically meaningful bacterial resistance with poor bio-availability, thus there is less chance of systemic toxicity, adverse effect or drug interactions. These characteristics make Rifaximin significant when contemplating long-term or recurring rounds of treatment.⁸ Physicians are frequently the initial point of contact for patients with IBS, and hence there is a need to study the method of diagnosis and treatment, as primary care physicians, has a significant impact on patient outcomes. Thus, the current survey aims to find gaps and supports targeted, evidence-based strategies for better management of IBS-D with focus on Rifaximin.

METHODS

In this descriptive, cross-sectional, questionnaire-based, real-world survey study, there were 20 questions. The purpose of this study was to collect information from Physicians throughout India. The questionnaire was created with an emphasis on topics including the prevalence of IBS related diarrhoea, constipation, and other treatment-related issues with understanding on prescription pattern of Rifaximin. 302 physicians who regularly treat IBS cases and work in clinical settings were enrolled in the survey. Data were analyzed to identify the trends and variations in treatment approaches, preferences for drugs, and factors influencing therapeutic decisions. The inclusion criteria for participating physicians were age in the range of 40-60 years, having more than 5 years of clinical experience, practicing in private clinics, nursing homes, and hospitals. Physicians were further chosen based on their qualifications and clinical experience in the management of IBS. The exclusion criteria were physicians with less than 5 years of experience, those outside the specified age range, or without relevant qualifications in Doctor of Medicine (MD) and who did not practice IBS management were excluded.

Statistical analyses

The data was analyzed and expressed as a percentage for all the parameter using the Microsoft Excel program 2016.

RESULTS

Physician-reported trends in the diagnosis and management of IBS and its sub-type

According to the reported data, there is considerable variation in the number of irritable bowel syndrome (IBS) patients managed by physicians each month. Approximately 32.81% of respondents indicated treating between 10 and 20 IBS patients monthly, while 28.06% reported managing 20 to 30 cases. A further 25.69% treated more than 30 patients per month, whereas only 13.44% attended to 5 to 10 cases monthly. In relation to IBS sub-types, particularly IBS with diarrhea (IBS-D), 38.74% of physicians diagnosed 1 to 5 patients per month, and 26.88% reported managing 10 to 20 cases. Conversely, 21.34% of physicians treated more than 20 patients monthly with IBS related constipation, while 13.04% reported managing 5 to 10 such cases. These results highlight the significant and varied clinical burden that IBS and its sub-type cause (Table1). For diagnosing irritable bowel syndrome (IBS) the majority of physicians (67.98%) relied on clinical judgment as the primary method. Additionally, 32.81% of physicians reported using the Rome IV criteria as their main diagnostic tool and a smaller group, accounting for 17.0%, identified the Manning criteria as their preferred approach for diagnosing IBS (Figure 1) and to manage IBS-D, the majority of physicians (77.08%) favored the use of antibiotics, particularly Rifaximin. A considerable number (33.60%) opted for antidepressants such as amitriptyline as part of the treatment strategy. Additionally, 30.43% of Physicians considered antidiarrheal agents like Loperamide beneficial, while 28.46% acknowledged the role of antispasmodics such as Dicyclomine. Only a small percentage (11.46%) reported using bile acid sequestrants, such as cholestyramine in clinical practice (Figure 2).

Table 1: Monthly-physicians reported caseload of IBS and its sub-type.

IBS type	Patients (N)	Percentage of physicians (%)
All IBS types	5-10	13.44
	10-20	32.81
	20-30	28.06
	≥30	25.69
IBS with diarrhoea (IBS-D)	1-5	38.74
	10-20	26.74
IB with constipation (IBS-C)	5-10	13.04
	≥20	21.34

Physician insights on Rifaximin: symptoms improvement and prescribing patterns in IBS-D management

A majority of physicians (58.10%) found Rifaximin effective in relieving symptoms of IBS, with 32.41% rating it as very effective. A smaller group (8.30%) considered it somewhat effective, while only 2.77% reported it as

ineffective. In terms of prescribing patterns, Rifaximin was frequently recommended by 75.49% of physicians for IBS-D patients, and 20.55% prescribed it very frequently. Meanwhile, 24.11% of physicians prescribed it occasionally, and just 4.74% did so rarely (Figure 3); however, a significant proportion of physicians reported wide-ranging symptom relief in IBS-D patients treated with Rifaximin. While 84.58% observed improvement across all key parameters, individual benefits were noted in bowel habits (7.91%), abdominal pain (8.70%), bloating (9.09%), and overall quality of life (9.09%) (Figure 4).

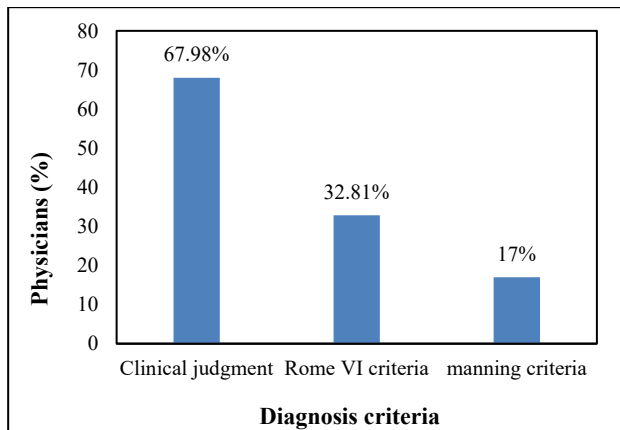


Figure 1: Preference criteria used to diagnose IBS.

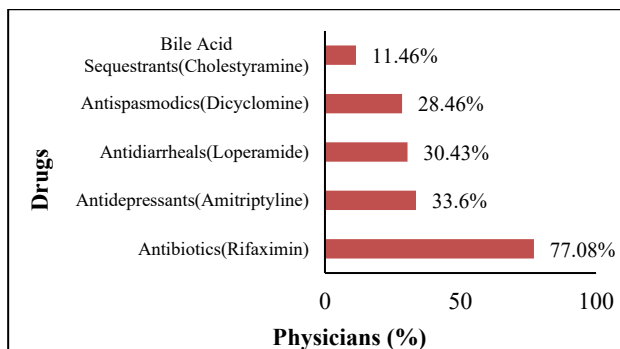


Figure 2: Physicians preference for managing IBS-D.

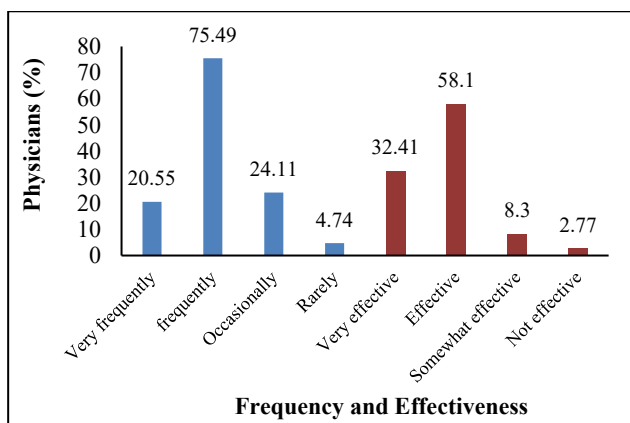


Figure 3: Physicians perception on Rifaximin: effective and frequency of use.

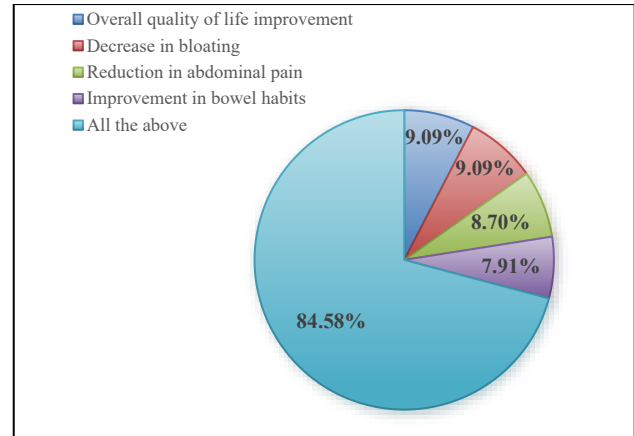


Figure 4: Improvement observed by physicians after Rifaximin treatment.

Effectiveness of Rifaximin and physician prescribing preference in IBS-D management

According to physicians responses, Rifaximin demonstrated notable effectiveness in managing multiple symptoms of IBS-D. Nearly half of the physicians observed a 40–80% reduction in bloating, abdominal pain, and diarrhea frequency among their patients. Around 25–32% of them reported that Rifaximin was more than 80% effective, especially in reducing bloating and diarrhea. Additionally, about 20% of Physicians noted moderate improvements (20–40%), while only a small fraction observed minimal impact, with effectiveness under 20% (Figure 5). Furthermore, the survey revealed varied physicians preferences for prescribing Rifaximin in the management of IBS-D. Approximately 44.66% of physicians favoured the use of 400 mg twice daily, making it the most commonly preferred regimen. A significant proportion (33.60%) opted for 400 mg three times daily. Additionally, 30.04% of Physicians reported prescribing 550 mg twice daily, while a smaller segment (15.02%) indicated using 550 mg three times daily. These findings highlight a general preference for the 400 mg dosage, particularly the twice-daily schedule, in clinical practice (Figure 6).

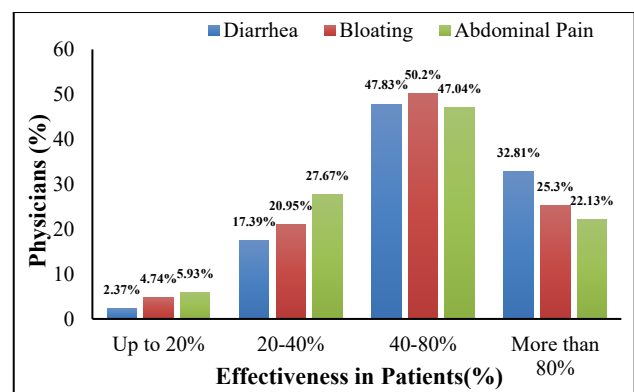


Figure 5: Physicians reported effectiveness of Rifaximin in IBS-D symptom relief.

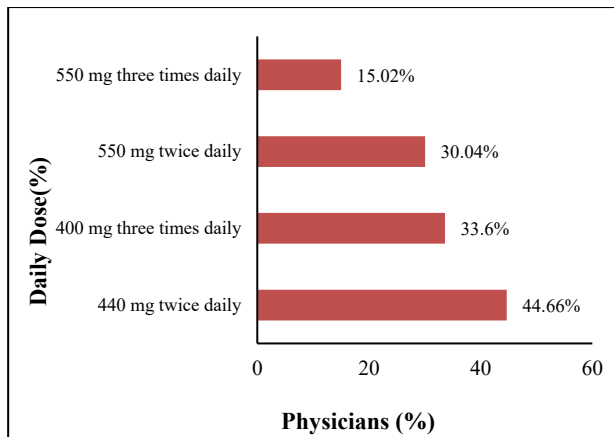


Figure 6: Physicians preference for Rifaximin dosage in IBS-D management.

DISCUSSION

This survey offers meaningful insights into how physicians currently approach the diagnosis and management of diarrhea-predominant irritable bowel syndrome (IBS-D). A significant proportion of respondents nearly one-third reported treating 10-20 IBS patients monthly, with the majority encountering only a few cases of each sub-type, including IBS-C (30.83%), IBS-D (38.74%), and IBS-M (37.94%). These observations indicate that although IBS is frequently seen in practice, physicians often manage a limited number of patients per sub-type, reflecting the variability in symptom patterns and presentation. When it comes to diagnosis, clinical assessment is still largely based on physicians' personal assessment, with over 67% relying on clinical judgment and around 29% using physical examination findings. Although the Rome IV criteria offer a more standardized approach, many physicians continue to use a symptom driven method.⁹ Importantly, a growing number of Physicians (66.40%) recognize that disturbances in the gut microbiome play a central role in IBS pathophysiology, particularly in IBS-D.¹⁰ This aligns with modern thinking that considers gut health, lifestyle, and psychosocial elements when evaluating these patients and the findings indicate that, in real-world practice, guideline-based diagnostic tools are still underutilized placing greater reliance on clinician expertise to manage the heterogeneity of IBS presentations.^{11,12} Broader implementation of validated diagnostic criteria and non-invasive assessments could improve the consistency of diagnosis and facilitate earlier intervention for patients.

Building on these diagnosis insights, a major highlight of this survey is the strong preference for Rifaximin in treating IBS-D. About (77.08%) of physicians favour antibiotics specifically Rifaximin for IBS-D, with 71.54% choosing it as a first-line prescription and 96.04% prescribing it very frequently due to its localized action in the gut, minimal absorption into the bloodstream, and reduced risk of systemic side effects.^{13,14} These real-world choices align well with the latest guidance from the

American College of Gastroenterology (ACG), which recommends using rifaximin for patients who haven't seen improvement with lifestyle or dietary adjustments.¹⁶ Among the surveyed physicians, the most commonly preferred dosing regimen was 400 mg twice daily (44.66%), though around 10% reported tailoring the dose based on how patients responded. A few physicians (9.09%) also noted noticeable improvements in quality of life and a reduction in bloating after treatment. Furthermore, these real-world observations support the findings of major clinical trials like TARGET 1, 2, and 3, which showed that rifaximin effectively eases key IBS-D symptoms including bloating, abdominal discomfort, and irregular bowel patterns.^{13,16} Rifaximin stands out due to its ability to deliver lasting symptom relief even after the treatment has ended, an advantage that is well-supported by both clinical studies and real-world experience. When compared to antibiotics like metronidazole, neomycin, and ciprofloxacin, Rifaximin is more effective because it acts locally in the gut with minimal systemic absorption, resulting in fewer side effects and better overall tolerance.¹⁸ Unlike other antibiotics, Rifaximin helps restore balance to the gut microbiota without causing widespread disruption, due to its targeted action within the digestive tract. It has also shown effectiveness in managing small intestinal bacterial overgrowth (SIBO), which is frequently associated with IBS-D.¹⁸ Given the varied nature of IBS-D symptoms, not all patients respond the same way, highlighting the importance of personalizing treatment based on individual needs.

Overall, these insights highlight a positive shift in the evolving approach to managing IBS-D, suggesting greater potential for improved patients' outcomes. The growing emphasis on microbiome focused strategies and the rising preference for targeted treatments like rifaximin indicate a meaningful shift toward more individualized and effective care. While research continues to explore the root causes of IBS, the lack of dependable biomarkers still poses diagnostic challenges which underscores the critical role of physician expertise. Among available treatments, rifaximin stands out as a preferred choice for managing diarrhoea-predominant IBS due to its demonstrated effectiveness, minimal systemic absorption, and strong safety record. Its role is also well-supported by international treatment guidelines. Looking ahead, advancing research, increasing clinician awareness, and prioritizing patient-specific approaches will be essential to improve outcomes and reduce the common trial-and-error burden in IBS care. Although this study had certain limitations, as it is a cross-sectional, questionnaire-based survey relying on self-reported data, which may introduce response biases. Voluntary participation could lead to selection bias, limiting generalizability to all practising physicians.

CONCLUSION

This survey highlights a high burden of IBS in out-patient clinical settings, with significant physicians' reliance on

clinical judgment and increasing recognition of the microbiome and psycho-social influences. Rifaximin stands out as the preferred and frequently prescribed treatment for IBS-D, with widespread endorsement of its efficacy. These findings reflect a real-world, guideline-aligned, approach to IBS-D management, stating the importance of Rifaximin as a key component in current therapeutic management strategies.

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