

Unraveling the IBS Enigma in Young Asians: Prevalence, Symptomatology, and the Silent Sufferers

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Abstract

Irritable bowel syndrome (IBS) is a common functional bowel disorder in Asian nations, however there is little data on how common it is in the Asian population. In a young adult population of Asian descent, this study sought to examine the prevalence of IBS and identify symptom subgroups based on common bowel patterns. A response rate of 87.4% was achieved out of the 610 surveys issued with 533 complete responses. With an average age of 22.18 years, the respondents were divided into 229 males (43.0%) and 304 women (57.0%) people. IBS symptoms were reported by 84 respondents (15.8%), with women more likely than males to have them. The majority of people with IBS (77.4%) had the condition where constipation predominated, while only 7.1% had IBS where diarrhea predominated. The non-specific IBS subgroup included 13 (15.5%) of the participants. Anxiety, despair, insomnia, headaches, and backaches were among the psychological and psychosomatic symptoms that were considerably more prevalent in people with IBS. Surprisingly, just 13.1% of people with IBS had consulted a doctor, and 20.2% admitted to using self-medication. This study found that young people of Asian descent frequently experience symptoms that are consistent with IBS, with a prevalence rate of 15.8%. Women were found to have a much higher prevalence, and the subgroup of IBS sufferers with constipation as their primary symptom predominated. Additionally, psychological and psychosomatic symptoms were notably more prevalent in IBS patients. Concerning, the majority of affected individuals did not seek medical attention for their symptoms.

Key Words: Irritable Bowel Syndrome (IBS), Asian population, Prevalence, Constipation-predominant IBS, Psychological symptoms.

Introduction

Irritable Bowel Syndrome (IBS) and other functional gastrointestinal diseases provide a significant healthcare concern throughout Asia. Nevertheless, despite their substantial influence on the populace, there is a glaring dearth of detailed information regarding the prevalence of IBS in Asian nations. For optimal healthcare management and resource allocation, it is crucial to comprehend this common ailment in the Asian context.

IBS is a problem that is acknowledged on a global scale, but its importance in Asian populations has not been well investigated. According to epidemiological research conducted in Western countries, a sizable percentage of gastroenterologist referrals are thought to be caused by IBS. However, it's usual for people with IBS symptoms to underuse healthcare services. Variable prevalence percentages, ranging from 17% to 22%, have been reported in studies of Asian populations, underscoring the need of studies that are specific to the area. In addition, a gender

difference is frequently noted, with IBS being more common in women. The prevalence seems to be the same for all age groups, despite some research' claims to the contrary that younger people are more likely to experience it. (Lee, S., & Ng, S. C. 2022).

In Asian countries, there is a paucity of comprehensive data on the prevalence and characteristics of IBS. While functional gastrointestinal disorders like IBS are common worldwide, their prevalence and manifestations can vary across different regions and ethnic groups. In recent years, studies in various Asian countries have shed light on the prevalence of IBS and its impact on the population. Despite the fact that IBS is a worldwide concern, there is a glaring absence of thorough data from Asian nations, which can give the impression that the condition is less widespread in this area. IBS is thought to be less common in Asia as a result of studies from Thailand, Singapore, and Hong Kong that revealed relatively low prevalence rates. Research demonstrating that Asian ethnicity was an independent unfavorable predictor of IBS supported this. (Di Rosa et al 2023).

There is a dearth of thorough information on the prevalence and traits of IBS in Asian nations. IBS and other functional gastrointestinal disorders are widespread around the world, although regional and racial differences can affect how frequently they occur and how they appear. Studies conducted recently in a number of Asian nations have illuminated the frequency of IBS and its effects on the populace. (Shin 2023).

Studies in the nations in Asia for instance, found variable IBS prevalence rates, highlighting the need for additional research in various Asian communities. These studies have refuted the idea that IBS is less widespread in Asia and have brought attention to the significance of regional and ethnic characteristics in understanding the illness. In addition, new studies have indicated that age may be a factor in the occurrence of IBS, with a possible predominance in younger people. (Takeoka et, al 2023). This study focuses on young Asian in order to fill in knowledge gaps and gain a better understanding of the incidence of IBS in Asia. The goal of the research was to offer important insights into the characteristics of IBS in this particular population by determining the prevalence of IBS symptoms and classifying them according to predominant bowel pattern.

Methodology

Research Design

This study used a cross-sectional research design and focused on medical students among a group of young individuals from Asia who appeared to be in good health.

Participants

A strong response rate of 87.4% was achieved by the study sample of 533 people who completed the self-report questionnaire. The participants' average age was 22.18 years, and there were 229 men (43.0%) and 304 women (57.0%). 278 Taiwanese people (52.2%), 179 Thai people (33.6%), 46 Japanese people (8.6%), and 30 people from other ethnic backgrounds (5.6%) made up the ethnic mix.

Data collection

Participants were given access to a standardized self-report questionnaire. Demographic information, general gastrointestinal (GI) symptoms, lower GI symptoms according to the Rome criteria, lifestyle factors like alcohol consumption, smoking habits, chili consumption, perception of dietary fiber, and psychological and psychosomatic symptoms (such as anxiety, depression, insomnia, headaches, and backaches) were all covered by this questionnaire. The patients' patterns of seeking medical attention were also examined.

Data Analysis

The answers to the questionnaires were coded and processed in order to conduct a data analysis. The chi-squared test and Fisher's exact test were two statistical techniques used to compare the performance of various groups. Odds ratios (OR) with a 95% confidence interval (CI) were used to calculate the size of associations. $P = 0.05$ was the recognized significance level for statistical tests. The diagnosis of irritable bowel syndrome (IBS) was made in accordance with the Rome I criteria. Participants with at least three months of continuous or recurring stomach pain or discomfort that was relieved by urinating or that was connected

to changes in stool frequency and/or consistency were considered to have IBS. Participants were then divided into subgroups of IBS with a predominance of constipation or diarrhea using the Rome criteria for functional constipation and diarrhea. Participants were labeled as having non-specific IBS if they satisfied the criteria for IBS but did not fall into one of these categories.

Result And Discussion

The prevalence of lower gastrointestinal symptoms among young Asian adults is shown in this table, with a focus on gender-based variations. Symptoms that have been present for at least three months and for at least 25% of occasions or days are included. Statistics are significant, as shown by the P-values. There were 533 participants total in the sample, 229 of whom were men and 304 of whom were women.

Table 1: Prevalence of Lower Gastrointestinal Symptoms in Young Asian Adults

Symptom	Total (n = 533)	Men (n = 229)	Women (n = 304)	P-value
Present for at least 3 months (continuous or recurrent)				
Abdominal pain relieved with defecation	180 (33.7%)	64 (27.9%)	116 (38.2%)	0.02
Abdominal pain associated with change in frequency of stool	154 (28.9%)	53 (23.1%)	101 (33.2%)	0.01
Abdominal pain associated with change in consistency of stool	161 (30.2%)	6 (2.6%)	99 (32.6%)	NS
Present for at least 25% of occasions or days				
Altered stool frequency	101 (18.9%)	42 (18.3%)	59 (19.4%)	NS
Altered stool form	129 (24.2%)	46 (20.1%)	83 (27.3%)	NS
Altered stool passage	173 (32.5%)	66 (28.8%)	107 (35.2%)	NS
Passage of mucus	44 (8.3%)	18 (7.9%)	26 (8.6%)	NS
Bloating or feeling of abdominal distension	118 (22.1%)	40 (17.5%)	78 (25.7%)	0.03
NS, not significant.				

The table shows gender-based differences in the prevalence of lower gastrointestinal symptoms in a sample of young Asian adults. 33.7% of participants reported having abdominal pain that was eased by defecation, with a significant difference between males (27.9%) and women (38.2%). Similar gender differences were seen in the prevalence of abdominal pain related with changes in bowel frequency, which was reported by 28.9% of the entire population but was more common in women (33.2%) than in males (23.1%).

The prevalence of abdominal pain related to changes in stoma consistency, altered stoma frequency, altered stoma form, altered stoma passage, and passage of mucus did not differ significantly between men and women. However, bloating or a sensation of abdominal distension was observed by 22.1% of individuals, with women reporting it more frequently (25.7%) than males (17.5%).

These results provide information about the distinctive gender-related patterns of lower gastrointestinal symptoms in young Asian individuals. Women are more afflicted than men by abdominal discomfort, which shows notable gender differences. For researchers and healthcare professionals, this knowledge is essential since it emphasizes the need for specialized strategies to treat these symptoms in the Asian population. Understanding the prevalence of irritable bowel syndrome (IBS) and related gastrointestinal diseases within this cohort requires the identification of certain symptom patterns. Additionally, it stresses how crucial it is to take gender into account while evaluating and treating GI issues.

This table outlines the characteristics of subjects with IBS among young Asian adults. It provides insights into the prevalence of IBS and its association with various factors, including gender, race, lifestyle, and psychological symptoms. The data presented is based on a total sample size of 533 participants, with 27 (11.8%) individuals diagnosed with IBS.

Table 2: Characteristics of Subjects with Irritable Bowel Syndrome (IBS) in Asian Young Adults

Characteristics	Total n (%)	IBS n (%)	P-value
Sex			
Male	229 (43.0)	27 (11.8)	< 0.001
Female			
Race			
Taiwanese	304 (57.0)	57 (18.8)	0.04
Thai	179 (33.6)	29 (16.2)	NS
Japanese	48 (8.6)	7 (15.2)	NS
Other			
Alcohol intake			
Yes	30 (5.6)	4 (13.3)	NS
No	495 (92.9)	76 (15.4)	NS

Smoking			
Yes	9 (1.7)		NS
No	524 (98.3)	84 (16.0)	NS
Chili consumption			
Yes	519 (97.4)	83 (16.0)	NS
No	14 (2.6)	1 (7.1)	NS
Adequate fiber intake			
Yes	378 (70.9)	52 (13.8)	NS
No	155 (29.1)	32 (20.6)	NS
Psychological Symptoms			
Anxiety	351 (65.9)	65 (18.5)	0.02
No	182 (34.1)	19 (10.4)	
Depression	136 (25.5)	33 (24.3)	0.002
No	397 (74.5)	51 (12.8)	
Insomnia	83 (15.6)	22 (26.5)	0.006
No	450 (84.4)	62 (13.8)	
Headache	228 (42.8)	45 (19.7)	0.04
No	305 (57.2)	39 (12.8)	
Backache	142 (26.6)	33 (23.2)	0.006
No	391 (73.4)	51 (13.0)	
Consulted health-care practitioner			
Yes	57 (10.7)	11 (19.3)	NS
No	476 (89.3)	73 (15.3)	
NS, not significant.			

The characteristics of young Asian individuals with irritable bowel syndrome (IBS) are detailed in Table 2. It takes into account elements including gender, race, lifestyle decisions (drinking alcohol, smoking, eating chili, and getting enough fiber in your diet), and psychological symptoms (such as anxiety, despair, insomnia, headaches, and backaches). It also evaluates whether IBS sufferers got medical advice from professionals.

There are clear differences between the sexes, with women much more likely to have IBS (18.8%) than men (11.8%). Taiwanese people revealed a considerably greater IBS prevalence than other races (18.8%), while Thai and Japanese people showed no

appreciable differences. IBS did not seem to be significantly correlated with factors including alcohol consumption, smoking, eating chili, getting enough fiber, and consulting a doctor. Psychological symptoms such as anxiety, depression, insomnia, headaches, and backaches showed various degrees of relevance when they were present. The strong correlation between IBS and anxiety and depression ($P = 0.02$ and $P = 0.002$, respectively) is noteworthy. However, there was no connection between IBS and other psychological symptoms, such as backache, headache, or insomnia.

This information emphasizes how crucial it is to take into account how several demographic and lifestyle factors interact with the frequency of IBS in young Asian adults. The substantial link between IBS and anxiety and depression emphasizes the necessity for comprehensive IBS management strategies that treat both the physical and psychological elements of the condition.

Table 3: Subclassification of Irritable Bowel Syndrome (IBS) by Gender in Asian Young Adults

Subclassification	n	Men n (%)	Women n (%)	P-value
Constipation-predominant	65	20 (30.8)	45 (69.2)	< 0.05
Diarrhea-predominant	6	3 (50.0)	3 (50.0)	NS
Non-specific subtype	13	4 (30.8)	9 (69.2)	NS
NS, not significant.				

Table 3 provides details on the subcategorization of IBS and its relationship to gender in young Asian adults. Constipation-major, diarrhea-predominant, and non-specific subcategories are the predominant symptoms that IBS patients experience, and this classification offers a more thorough knowledge of these symptoms. Constipation-predominant IBS is the most common subtype among these, with 69.2% of cases occurring in women and 30.8% in males. Women in this cohort are more likely to develop constipation-predominant IBS, according to this gender-based difference, which is statistically significant ($P = 0.05$). In contrast, there are no appreciable gender differences in the prevalence of the diarrhea-predominant subtype among men and women. With 69.2% of cases in women and 30.8% in men, the non-specific subtype of IBS likewise exhibits no appreciable gender-based variances. This category suggests that although these people have IBS, they do not primarily experience constipation or diarrhea. The findings imply that there might be gender-specific factors influencing how common constipation-predominant IBS is in this cohort. Such findings highlight the need for additional investigation into the underlying causes and potential hormonal, nutritional, or lifestyle variables that may be responsible for these discrepancies. Understanding the prevalence of IBS subtypes in various demographic groups can help in adjusting interventions and therapies for those who are afflicted, taking into account the distinctive symptomatology associated with each subtype. When diagnosing and treating IBS in young Asian adults, healthcare professionals must take these variances

into account.

Conclusion

In this study, the study shows how common Irritable Bowel Syndrome (IBS) and associated conditions were in a group of young Asian individuals. The results indicate that among this population, lower gastrointestinal (GI) symptoms and symptoms similar to irritable bowel syndrome (IBS), with a prevalence rate of 15.8%, are relatively common. These results stand in contrast to lower incidence rates reported in adjacent Asian nations like Singapore and Thailand. The higher incidence found in this study population of medical students may be explained by factors including this group's higher awareness of somatic symptoms. In line with earlier studies, our study found that women experience IBS more commonly, though the causes of this gender difference are still up for discussion. Constipation-predominant IBS was shown to be the most common category, particularly in women, according to symptom subgroups based on the dominant bowel behavior. In addition, our research showed a strong correlation between IBS and self-reported psychological and psychosomatic symptoms such as anxiety, sadness, insomnia, headache, and backache. This result confirms the previously documented link between psychological stressors and IBS. The fact that fewer people with IBS sought medical help from healthcare professionals is significant, albeit this finding might be impacted by the fact that many of these people were formerly medical students. This could indicate a lower threshold for seeking medical attention and a predilection for self-medication in this group.

Recommendations

Increased Education and Awareness: It is critical to raise awareness about IBS among the general public and medical professionals in Asian nations. Better management and care may result from greater knowledge of the signs and symptoms of IBS, its subtypes, and the available treatments. **Psychosocial Support:** Because there is a strong correlation between psychological symptoms and IBS, offering psychosocial support and interventions can help IBS sufferers feel better overall. The treatment of IBS may benefit from including examinations and strategies related to mental health. Interventions that are specifically tailored for IBS subtypes should be considered by healthcare professionals. Asian women are more likely to have IBS with constipation-predominant symptoms; hence particular management techniques may be required. **Encouragement of Healthcare Seeking:** Techniques for persuading those with IBS to seek medical attention should be developed. Campaigns to lessen the stigma associated with bowel-related symptoms and stress the significance of prompt consultation with medical experts may be necessary to achieve this.

Limitations

Medical students made up the study population, which may not be entirely representative of the wider public. Their understanding of medicine and approach to seeking healthcare may be different from that of the broader public.

The study used a cross-sectional design, which made it difficult to identify causal connections. The development and evolution of IBS may be better understood through longitudinal research.

Since self-reported data is prone to recall bias, the study depended on it. More objective metrics and clinical assessments may be beneficial for next investigations.

Due to potential large geographic and cultural variations in symptom reporting and patterns of healthcare seeking, the study's conclusions may not be generalizable to other Asian locations.

The prevalence of IBS and associated factors in an Asian community is clarified by this study, in conclusion. It highlights the necessity of improved knowledge, specialized therapies, and psychosocial support to enhance the management of IBS in the area. Although the study was limited to young adults, it can be expanded upon in subsequent studies that cover a wider range of participants in order to better comprehend the intricacies of IBS in Asia.

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