



ISSN Print: 2664-8881

ISSN Online: 2664-889X

Impact Factor: RJIF 8

IJMS 2023; 5(1): 01-10

www.medicinejournal.in

Received: 25-03-2023

Accepted: 19-04-2023

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Management of acidity and related symptoms: A market research survey

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DOI: <https://doi.org/10.33545/26648881.2023.v5.i1a.32>

Abstract

Context: Acidity is a common medical complaint of gastrointestinal disease. A modern lifestyle brings along with it a host of problems, including acidity and gastrointestinal issues.

Aims: To understand the related symptoms and management of patients diagnosed with acidity by surveying general physicians and gastroenterologists across India.

Settings and Design: A questionnaire-based survey was conducted between May and December 2021 for a duration of 6 months.

Methods and Material: A total of 198 general physicians and gastroenterologists across India were provided a questionnaire via an online link and requested to answer questions about acidity and its symptoms. The answers to the questionnaire were analyzed as summary statistics.

Statistical analysis used: Descriptive analysis

Results: About 34% were diagnosed with GI disorders and 47% of patients with GI disorders were diagnosed with hyperacidity in routine clinical practice. Heartburn/retrosternal pain (92%) was the most common classical symptom of hyperacidity, followed by epigastric pain (85%), and acid reflux (75%), belching/burping (64%), and flatulence (55%). The majority of doctors (68%) reported that antacids were recommended as the first line of treatment for hyperacidity. Around 80% of respondents reported that anaesthetic antacids are most relevant or relevant in managing hyperacidity. Most physicians (89.4%) prescribed the anaesthetic antacid formulation containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine in their daily practice, and 82.8% reported very good or extremely good experience with its usage.

Conclusions: The survey findings provided insights into understanding the current epidemiology, diagnosis, as well as treatment of hyperacidity across India.

Key Message: Acidity and its related symptoms can strongly influence the quality of life. Early identification and appropriate diagnosis can prevent major complications.

Keywords: Acidity, gastro-oesophageal reflux disease, market research, anaesthetic antacids

Introduction

Acidity or acid reflux is a common and abnormal condition in which acid in the stomach rises into the oesophagus. Gastroesophageal reflux disease (GERD) and other related diseases, are caused by the abnormal reflux of gastric contents into the oesophagus. According to the Montreal definition, GERD is a condition of troublesome symptoms and complications that result from the reflux of stomach contents into the oesophagus [1-3]. This condition is characterized by heartburn felt around the lower chest area, which is caused by the stomach acid flowing back up into the food pipe. GERD is a common gastrointestinal (GI) disease in Western countries, as well as in Asia [2, 3]. The prevalence of GERD was believed to be lower in Indian subjects; the prevalence in an Indian study was 7.6% [4]. A population-based study found a higher prevalence, almost comparable to that in the Western population [5]. Cross-sectional studies show a higher prevalence of reflux symptoms [6].

It is widely accepted that the pathophysiology of GERD is multifactorial, representing different ends of a spectrum varying with the severity of reflux rather than distinct pathophysiological mechanisms [7]. A number of factors have been suggested to cause GERD, including increased compliance of the esophagogastric junction (OGJ) and a higher-pressure gradient across the OGJ [8]. Additionally, differences in the meal distribution or the localization of the acid pocket on top of the meal, as well as a hypotensive lower oesophageal sphincter (LOS), and a defective gastric sling/clasp muscle fibre component,

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may also lead to the occurrence of GERD symptoms [9, 10]. The Asian-Pacific consensus [11], the Montreal definition [1], and the ACG guidelines are the various national and international guidelines for the diagnosis and treatment of GERD [12]. However, the current management and treatment of patients diagnosed with acidity and other related symptoms across India are not well known. With its background, a questionnaire-based survey was conducted to understand various management practices for hyperacidity based on clinical practice by surveying physicians across India.

Subjects and Methods

A structured format survey was conducted among clinical practitioners, general practitioners, and gastroenterologists to participate in the survey for a period of six months in 2021 from May to December. This survey mainly focused on the management of acidity and acidity-related symptoms focused on the use of anaesthetic antacids and the prevention of GI damage. The total sample size planned for the study was 250; due to lockdown restrictions, 198 were enrolled for the survey. Because this survey did not entail any intervention on the subject, ethical clearance by an external ethics review board was not necessary in compliance with local legislation and national requirements. The confidentiality and identity of participating physicians were preserved throughout the survey and data processing. All the participants were informed that participation in the study is voluntary and that the data collected are anonymous, confidential, and restricted for this study only. Written consent was obtained from all the participants before the start of the survey. A questionnaire was provided to the participating physicians in different parts of the country via an online link. The questionnaire (Table 1) focused on the following items: (1) prevalence of patients with GI disorders/hyperacidity; (2) type and severity of symptoms of hyperacidity; (3) recommended lines of treatment for the management of hyperacidity; (4) relapse rate with various treatment modalities (5) relevance and prescription patterns of anaesthetic antacids, including an anaesthetic antacid formulation containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine. The answers to the questionnaire were analyzed and interpreted. Data were analyzed using Microsoft Excel. The outcome variables were calculated as mean and percentage frequency from the collected data.

Results

Prevalence of hyperacidity in Indian clinical practice

In all 198 physicians participated in the survey, of which 48 were from north zone, 45 were from south zone, 57 were from west zone and 48 were from east zone. The participating physicians reported that an average of 35 patients were visiting their clinics per day. In all, 37.4% physicians were consulted by up to 20% patients with gastrointestinal disorders, 27.8% physicians were consulted by 41%-60% patients with hyperacidity, and 33.8% physicians were consulted by 21%-40% patients with chronic hyperacidity (Table 2).

Most physicians agreed or strongly agreed that hyperacidity is a symptom of the underlying GI disorders (85.9%), that it is necessary to provide symptomatic relief to patients with hyperacidity first and then conduct a thorough diagnosis if required (93.4%), that patients attempt various home

remedies and over-the-counter medications before consulting them (88.9%), and that patients often delay consulting physicians, thereby causing increase in the severity of symptoms, and consult them only when the symptoms are unmanageable (87.4%). Majority of the doctors (74.2%) reported the trend that there was a steady increase in patients with hyperacidity during the COVID19 pandemic, whereas 19.7% reported that they have remained almost the same and only 6.0% opined that there was a steady decline.

Physicians' perspectives on the type and severity of hyperacidity symptoms

Figure 1 summarizes the classical symptoms of hyperacidity in decreasing order of frequency as reported by the participating physicians. Most physicians (92.4%) reported heartburn/retrosternal discomfort as the most common symptom, followed by 84.8% reporting epigastric pain, 74.7% reporting acid reflux, 63.6% reporting belching/burping, and 54.5% reporting flatulence (Figure 1A). Epigastric pain was reported to be the predominant symptom in 41%-60% of patients according to 32.8% of physicians, bloating/flatulence was reported to be the predominant symptom in 21%-40% of patients according to 38.4% physicians, and heartburn/retrosternal discomfort was reported to be the predominant symptom in 41%-60% of patients according to 32.8% physicians (Figure 1B).

When asked about severity classification of symptoms, 87.4% of physicians responded that they classified patients with hyperacidity based on mild, moderate, or severe symptoms. Parameters considered during severity classification included symptom severity at presentation as reported by patients (78.8% physicians), type of symptoms (70.2%), duration of suffering (64.7%), frequency of episodes (57.6%), and presence of other comorbidities (27.3%) (Figure 2). According to the participating physicians, the mean proportional split of hyperacidity patients by severity stage was 38.5% with mild hyperacidity, 39.3% with hyperacidity, and 22.2% with severe hyperacidity. Most doctors (94.4%) stated that their treatment protocol changes as per severity classification.

Physicians' management practices for hyperacidity

Figure 3 shows the recommended and lines of treatment for various drug classes in the management of hyperacidity. Antacids alone were recommended as the 1st line of treatment by majority of the physicians (67.7%), followed by proton pump inhibitors (PPIs) alone (55.1%), antacids + PPIs (53.5%), PPIs + prokinetics or antacids + PPIs + prokinetics (42.9%), histamine type 2 receptor antagonists (H2RAs) alone (37.9%), and antacids + H2RAs (35.4%). The most preferred 2nd and 3rd lines of treatment were antacids + H2RAs (37.4%) and PPIs + prokinetics (19.7%), respectively.

It was observed that the mean relapse rate for acidity after using H2RAs was 41.4%, whereas that after taking PPIs was 30.3% (Table 3). Nocturnal acid breakthrough was experienced by up to 40% of patients with hyperacidity receiving H2RAs and PPIs according to 67.2% and 83.3% physicians, respectively (Table 3).

Prescription patterns of anaesthetic antacids

Majority of the physicians (79.8%) reported that anaesthetic antacids are relevant or most relevant for the management of hyperacidity. Further, physicians reported that an average of

48.3% patients are prescribed anaesthetic antacids liquids for the management of hyperacidity.

Table 4 summarizes physicians' perspectives on the patient profiles recommended for anesthetic antacid preparations. Majority of the physicians (89.4%) suggested that anaesthetic antacids can be prescribed to both genders, and >50% of physicians stated that they can be recommended to patients in the ages groups of 21-30, 31-40, 41-50, and 51-60 years. Heartburn/retrosternal discomfort (96.5%), epigastric pain (82.8%), acid reflux (81.8%), belching/burping (69.7%), and flatulence (60.1%) were the leading symptoms at presentation for which these antacids could be recommended according to the participating physicians, while 71.7% physicians states that anaesthetic antacids should be recommended as 1st line therapy in combination with PPIs. The mean (standard deviation [SD]) duration of treatment recommended with anaesthetic antacids by the participating physicians was 4.6 (5.76) weeks, while 83.3% of the physicians agreed that a high acid neutralisation capacity (ANC) of a formulation has a role to play in the efficacy of the anaesthetic antacids.

Majority of the physicians (89.4%) stated that they prescribed the anaesthetic antacid formulation containing

magnesium hydroxide, dried aluminium hydroxide gel, oxetacaine and simethicone (long gas relief).

Most of the physicians (82.8%) reported that their usage experience with this antacid has been very good or extremely good, with 78.3% reporting that their usage experience with respect to taste/flavour to be good or extremely good. Based on clinical experience, patients' preferred flavours in descending order as reported by the participating physicians were fruit punch (62.7%), orange (41.8%), lime/lemon (24.9%), chocolate mint (11.3%), and fennel (10.7%).

Most physicians (91.0%) reported that they had not yet experienced any concerns about the anaesthetic antacid containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine. Of the remaining 9% physicians, 37.5% were concerned about taste, 18.8% about cost, 12.5% about availability, and 6.3% about packaging issues (Figure 4A). Among reasons for not using this antacid, lack of awareness was reported by 66.7% of physicians, awaiting peer review experiences was reported by 19.0% physicians, and absence of scientific evidence and non-relevance to practice by 4.8% each (Figure 4B).

Table 1: Survey questionnaire

No.	Question					
Q1	On an average, how many patients do you consult in a typical day?					
	a) 0-20	b) 21-40	c) 41-60	d) 61-80	e) 81-100	f) >100
Q2	What proportion of these patients are diagnosed with any GI disorders?					
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%	
Q3	Of these GI disorder patients, what proportion consult you for hyperacidity?					
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%	
Q4a	Most of the times, hyperacidity is a symptom of the underlying GI disorders					
	a) Strongly disagree	a) Disagree	c) Somewhat agree	d) Agree	Strongly agree	
Q4b	It is necessary to providing symptomatic relief to patients with hyperacidity symptoms and then conducting a thorough diagnosis, if required					
	a) Strongly disagree	a) Disagree	c) Somewhat agree	d) Agree	Strongly agree	
Q4c	Most of the hyperacidity patients, try various home remedies and OTC medications themselves before reaching me					
	a) Strongly disagree	a) Disagree	c) Somewhat agree	d) Agree	Strongly agree	
Q4d	Hyperacidity patients often delay their visit to physicians, thus causing increase in the severity of symptoms. In fact, only when the symptoms are unmanageable, they reach doctors					
	a) Strongly disagree	a) Disagree	c) Somewhat agree	d) Agree	Strongly agree	
Q5	How has been the trend of hyperacidity patients post the lockdown imposed due to the pandemic last year?					
	a) Steady increase in the number of hyperacidity patients	b) Remained almost the same		c) Steady decline in the number of hyperacidity patients		
Q6	What proportion of your hyperacidity patients are suffering from chronic hyperacidity?					
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%	
Q7	In your opinion what are the classical symptoms of hyperacidity?					
	a) Heartburn/retrosternal discomfort	b) Belching/burping	c) Acid reflux	d) Headache		
	e) Flatulence	f) Epigastric pain	g) Others			
Q8	What proportion of hyperacidity patients have epigastric pain as a predominant symptom?					
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%	
Q9	What proportion of hyperacidity patients have bloating/flatulence as a predominant symptom?					
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%	
Q10	What proportion of hyperacidity patients have heartburn/retrosternal discomfort as a predominant symptom?					
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%	
Q11	Do you also classify your patients with hyperacidity as mild/moderate/severe?					
	a) Yes			b) No		
Q12	What parameters do you consider while doing this severity classification?					
	a) Severity of symptoms at presentation (as mentioned by the patient)	b) Type of symptoms (e.g. only heartburn, heartburn + reflux etc.)		c) Duration of suffering		
	d) Frequency of episodes		e) Presence of other comorbidities		f) Others	
Q13	Please give me a proportional split of hyperacidity patients across these severity stages?					
	a) Mild		b) Moderate		c) Severe	
Q14	Does your treatment protocol change as per the severity classification?					
	a) Yes			b) No		

Q15	What proportion of patients are recommended the below drug types?				
	a) Only antacids	b) Only H2RAs	c) Only PPIs	d) PPIs + prokinetics	
	e) Antacids + H2RAs	f) Antacids + PPIs	g) Antacids + PPIs + prokinetics	h) Others _____	
Q16	What is the line of treatment (1 st , 2 nd , or 3 rd) in which each of the below mentioned drug types are commonly recommended in hyperacidity				
	a) Only antacids	b) Only H2RAs	c) Only PPIs	d) PPIs + prokinetics	
	e) Antacids + H2RAs	f) Antacids + PPIs	g) Antacids + PPIs + prokinetics	h) Others _____	
Q17a	What is the relapse rate for acidity after treatment with the following options?				
	a) H2RAs		b) PPIs		
Q18	What proportion of patients with hyperacidity on H2RA therapy experience nocturnal acid breakthrough?				
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%
Q19	What proportion of patients with hyperacidity on PPI therapy experience nocturnal acid breakthrough?				
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%
Q20	How relevant are anaesthetic antacid preparations in the management of hyperacidity?				
	a) Not at all relevant	b) Somewhat relevant	c) Relevant	d) Highly relevant	e) Most relevant
Q21	What proportion of patients with hyperacidity are prescribed anaesthetic antacid liquids?				
	a) 0%-20%	b) 21%-40%	c) 41%-60%	d) 61%-80%	e) 81%-100%
Q22	What is the ideal patient profile for prescribing anaesthetic antacid liquids?				
	By gender				
	a) Males		b) Females		c) Both
	By age group (years)				
	a) <20	b) 21-30	c) 31-40	d) 41-50	e) 51-60 f) >60
	By symptoms at presentation				
	a) Heartburn/retrosternal discomfort	b) Belching/burping	c) Acid reflux	d) Headache	
	e) Flatulence	f) Epigastric pain	g) Others _____		
	By position in the treatment line				
	a) 1 st line monotherapy		b) 1 st line combination therapy with H2RAs		c) 1 st line combination therapy with PPIs
	d) 2 nd line therapy post failure of plain antacids		e) Others _____		
Q23	What is the ideal duration (in weeks) of treatment with anaesthetic antacids? _____				
Q24	Do you believe that higher ANC of a formulation has a role to play in the efficacy of anaesthetic antacids?				
	a) Yes		b) No		c) Do not know/cannot say
Q25	Have you prescribed an anaesthetic antacid containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine?				
	a) Yes		b) No		
Q26	How was your usage experience with the anaesthetic antacid containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine?				
	a) Not at all good	b) Somewhat good	c) Good	d) Very good	e) Extremely good
Q27	How was your usage experience with the anaesthetic antacid containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine in terms of taste/flavour?				
	a) Not at all good	b) Somewhat good	c) Good	d) Very good	e) Extremely good
Q28	As per your clinical experience what flavors are best acceptable by patients for anaesthetic antacids?				
	a) Orange	b) Fruit punch	c) Chocolate mint	d) Fennel	e) Lime/lemon f) Other (_____)
Q29	Have you come across any concerns about the anaesthetic antacid containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine from your patients?				
	a) Yes		b) No		
Q30	What are the types of concerns you have come across for the anaesthetic antacid containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine?				
	a) Taste issues		b) Availability issues		c) Cost
	d) Packaging issues		e) Others _____		f) None
Q31	What are your reasons for not using the anaesthetic antacid containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine in your practice?				
	a) Not aware of this antacid		b) Do not find it relevant in my practice		c) It is not backed up by scientific evidence
	d) Waiting for peers to use it and share their experiences		e) Others _____		

Table 2: Prevalence of gastrointestinal disorders and hyperacidity

Parameter	Respondents (N = 198)					
	0-20	21-40	41-60	61-80	81-100	Mean (SD)
Average no. of daily patients						
Proportion of physicians, n (%)	49 (24.8)	92 (46.5)	46 (23.2)	10 (5.0)	1 (0.5)	35.4 (16.33)
Proportion of patients	0%-20%	21%-40%	41%-60%	61%-80%	81%-100%	
Patients diagnosed with any GI disorders, n (%)	74 (37.4)	67 (33.8)	38 (19.2)	12 (6.1)	7 (3.5)	34.0 (21.31)
Patients consulting for hyperacidity, n (%)	54 (27.3)	26 (13.1)	55 (27.8)	54 (27.3)	9 (4.5)	46.7 (26.82)
Patients with chronic hyperacidity, n (%)	47 (23.7)	67 (33.8)	63 (31.8)	14 (7.1)	7 (3.5)	39.8 (20.75)

GI, gastrointestinal; SD, standard deviation

Table 3: Relapse and nocturnal acid breakthrough rates with H2RAs and PPIs

	Proportion of respondents (N = 198)	
	H2RAs	PPIs
Relapse rate, mean (SD)	41.4 (20.27)	30.3 (18.64)
Patients with nocturnal acid breakthrough rate, n (%)		
0%-20%	36 (18.2)	92 (46.5)
21%-40%	97 (49.0)	73 (36.9)
41%-60%	49 (24.7)	29 (14.6)
61%-80%	14 (7.1)	4 (2.0)
81%-100%	2 (1.0)	0 (0.0)

H2RA, H2 receptor antagonist; PPI, proton pump inhibitor; SD, standard deviation

Table 4: Physicians' perspectives on the patient profiles recommended for anesthetic antacid preparations

Patient characteristics, n (%)	Respondents (N = 198)
Gender	
Male	12 (6.1)
Female	9 (4.5)
Both	177 (89.4)
Age group (years)	
<20	41 (20.7)
21-30	118 (59.6)
31-40	139 (70.2)
41-50	159 (80.3)
51-60	117 (59.1)
>60	94 (47.5)
Symptoms at presentation	
Heartburn/retrosternal discomfort	191 (96.5)
Epigastric pain	164 (82.8)
Acid reflux	162 (81.8)
Belching/burping	138 (69.7)
Flatulence	119 (60.1)
Headache	37 (18.7)
Others	2 (1.0)
Line of treatment	
1 st line monotherapy	77 (38.9)
1 st line combination therapy with H2RAs	66 (33.3)
1 st line combination therapy with PPIs	142 (71.7)
2 nd line therapy post-failure of plain antacids	64 (32.3)
Others	3 (1.5)

H2RA, H2 receptor antagonist; PPI, proton pump inhibitor

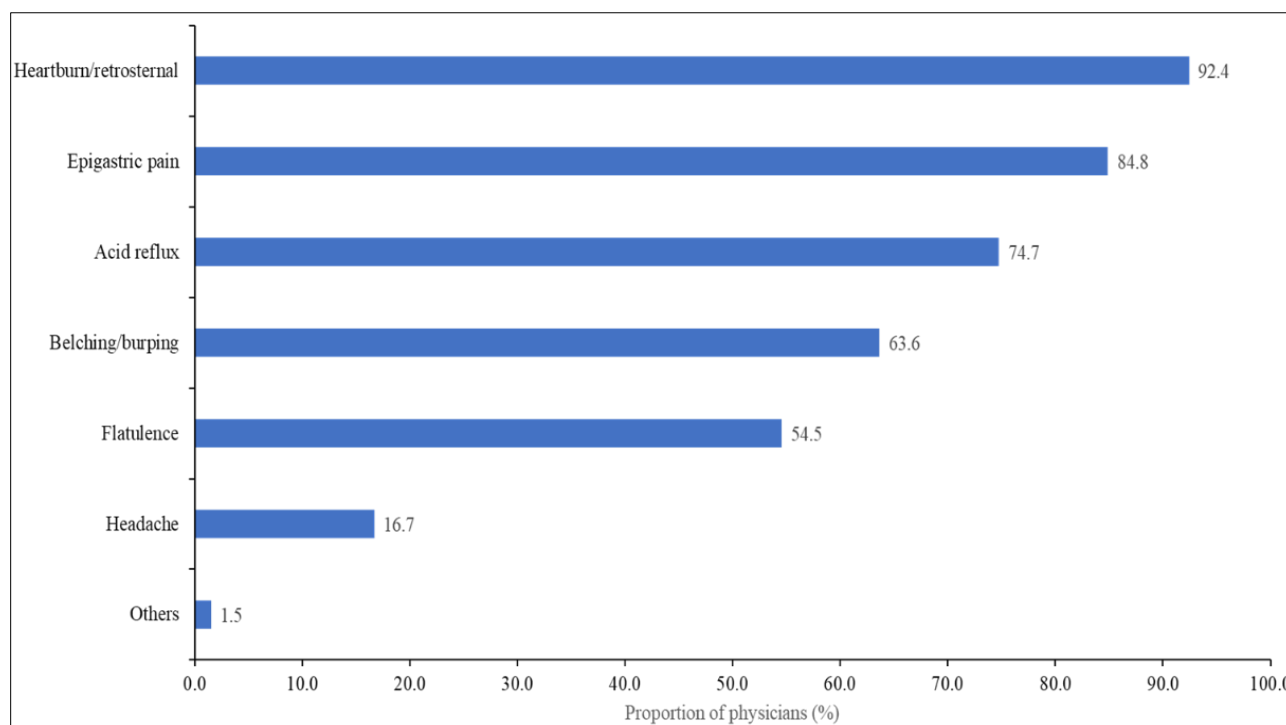


Fig 1 a: Physicians' perspectives on prevalence of classical symptoms in patients with hyperacidity

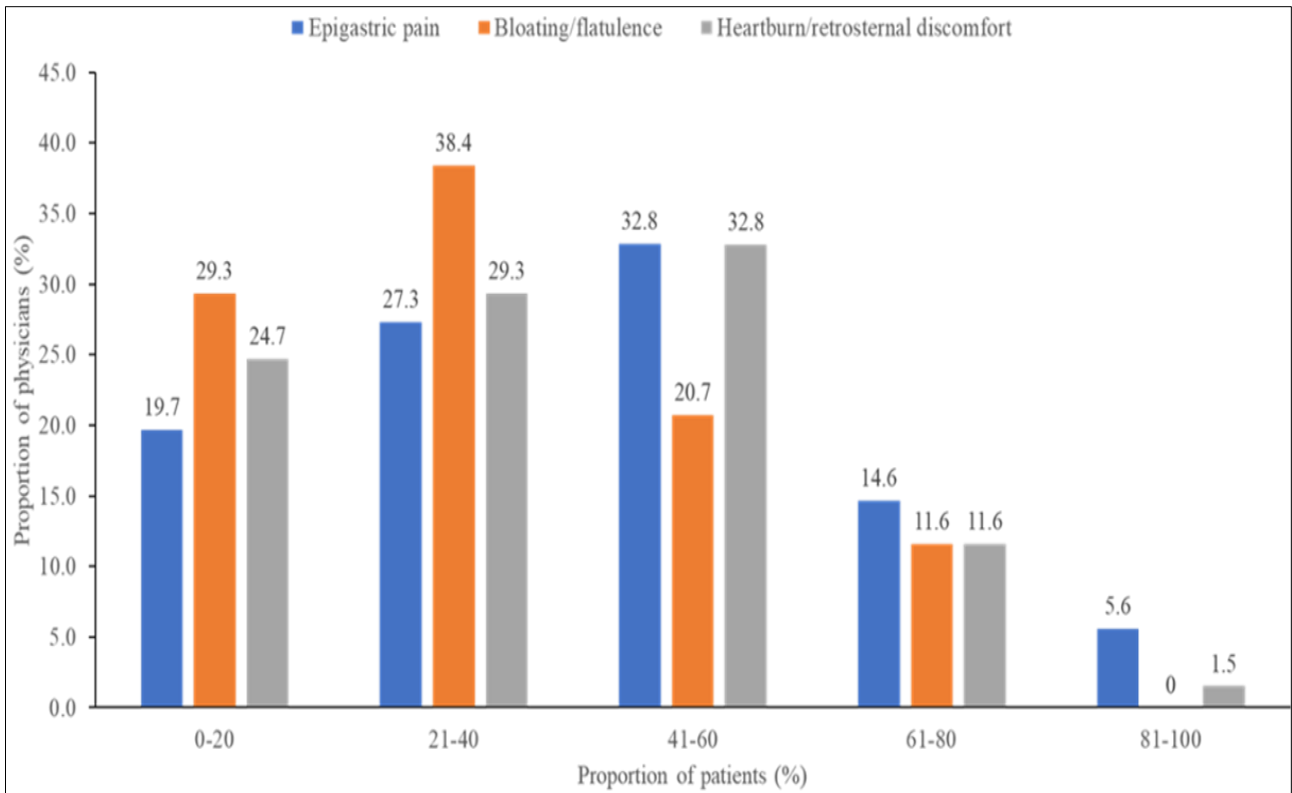


Fig 1 b: Proportion of patients with epigastric pain, bloating/flatulence, and heartburn/retrosternal discomfort as predominant symptoms

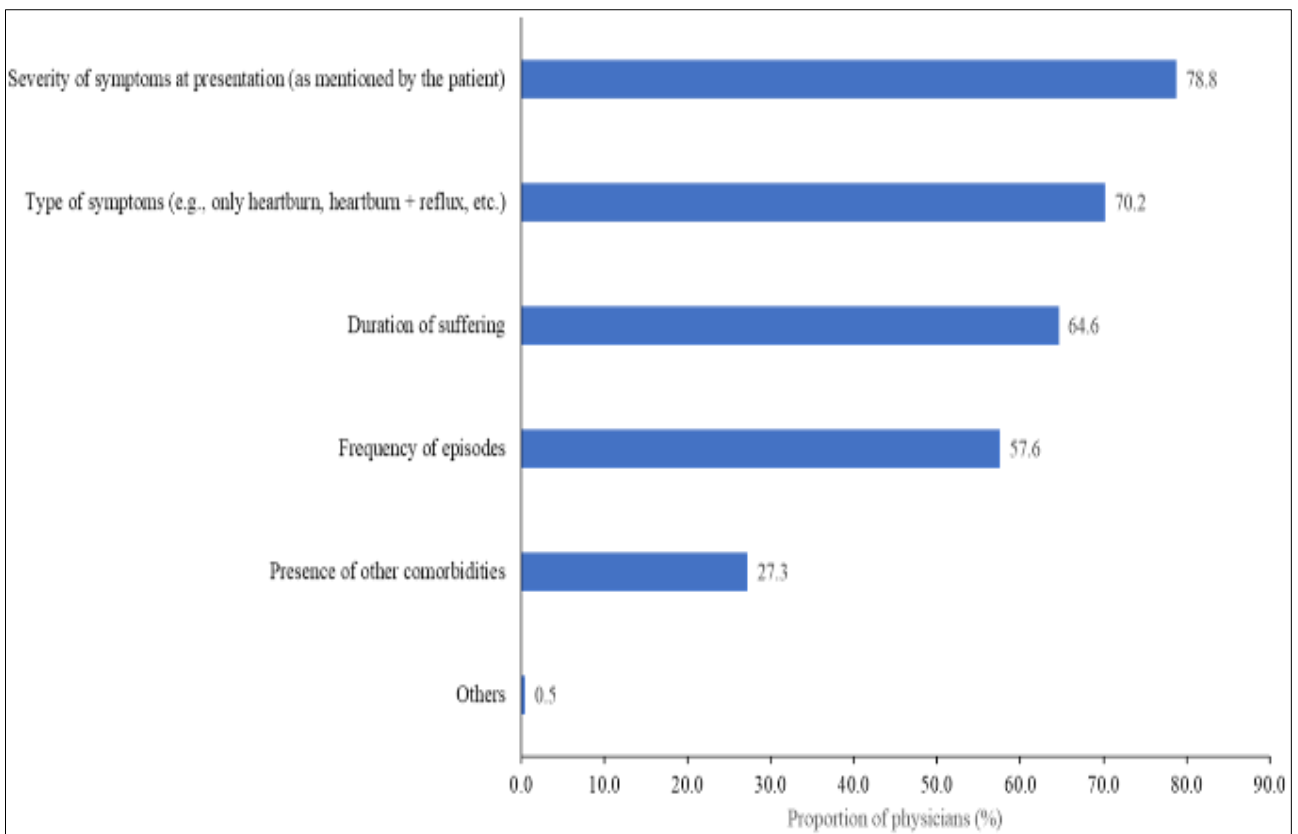


Fig 2: Considerations for severity classification

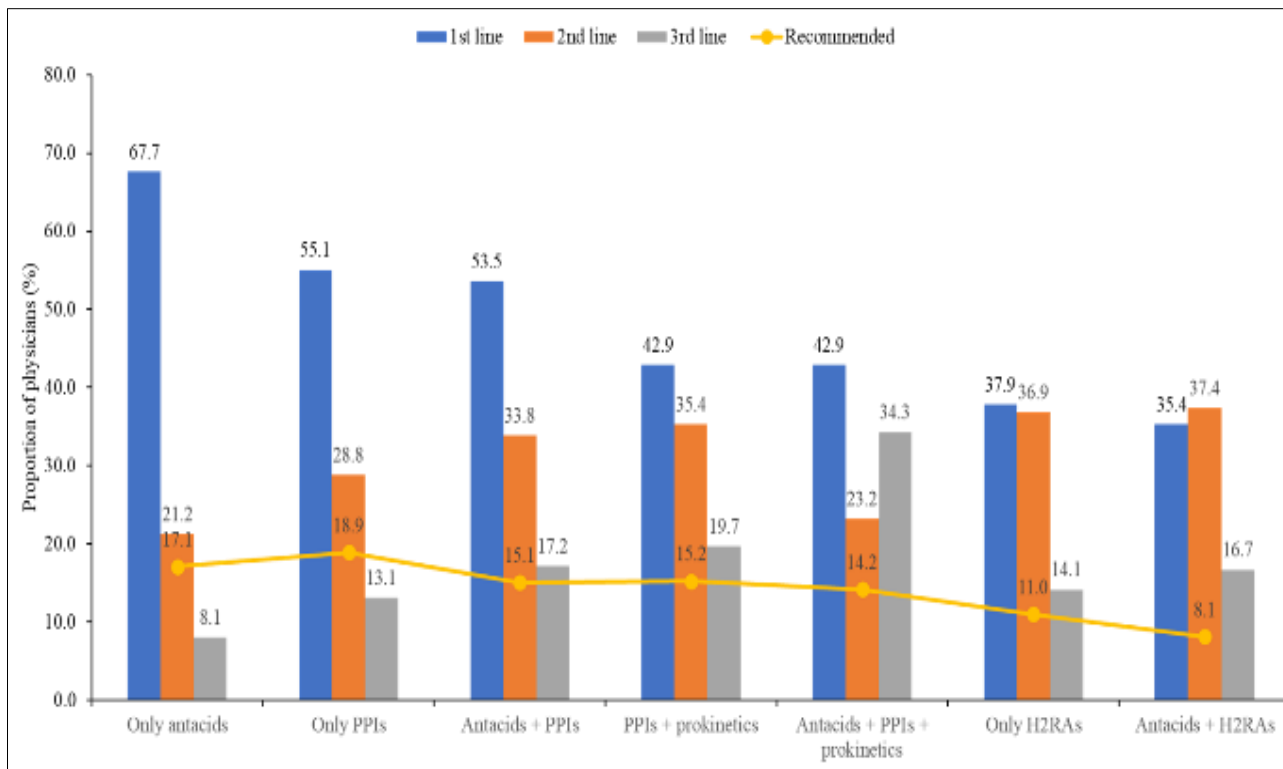


Fig 3: Recommended treatment and line of treatment by drug class

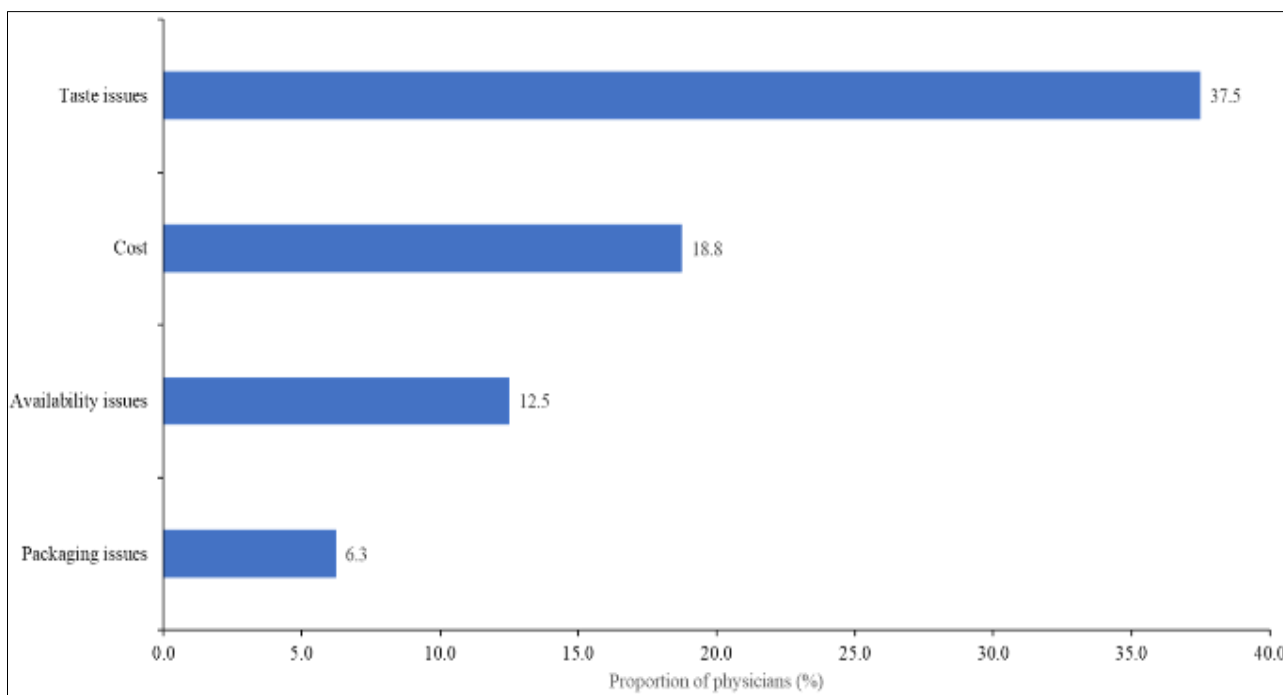


Fig 4: Challenges with anesthetic antacid formulation containing magnesium hydroxide, dried aluminium hydroxide gel, simethicone, and oxetacaine A) Concerns with use

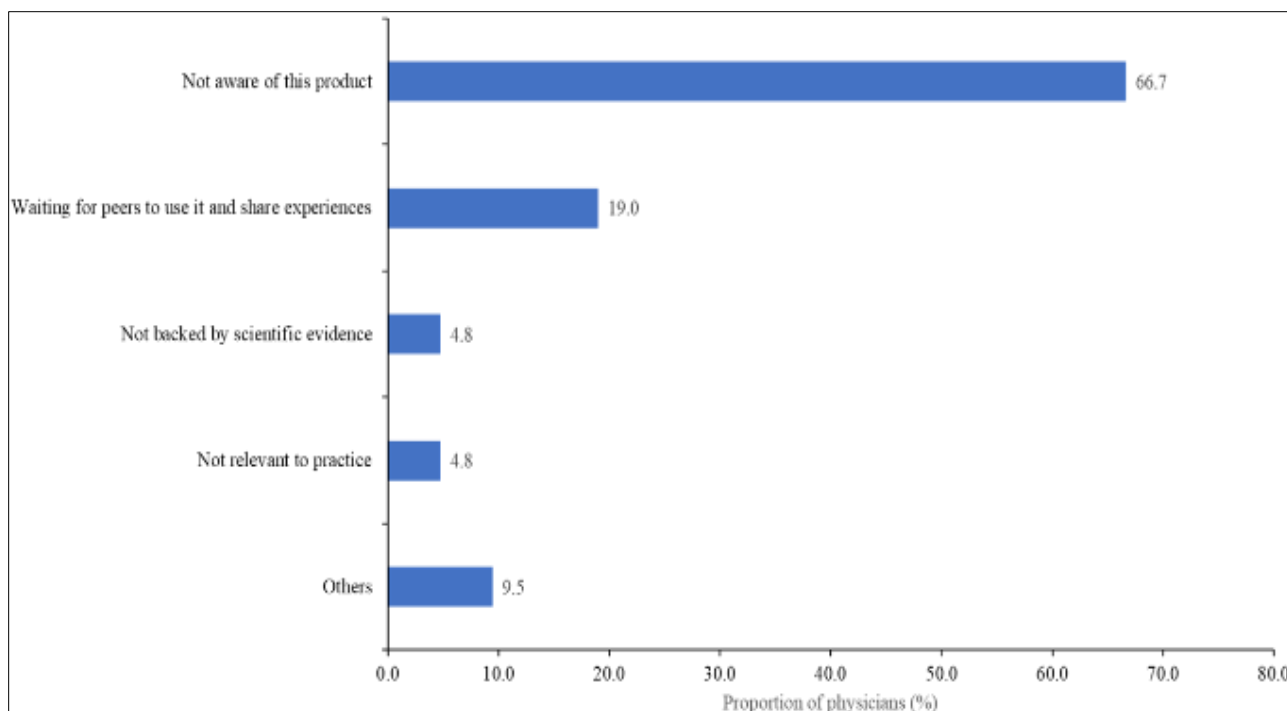


Fig 4: b) Reasons for failure to use

Discussion

The present market research survey was conducted to understand the management of acidity and its related symptoms across India based on routine clinical practice. In the present survey, physicians reported that an average of 35 patients visited their clinics per day; up to 20% of patients with GI disorders were encountered by 37.4% physicians, 41%-60% of patients with hyperacidity were encountered by 27.8% physicians, and 33.8% patients with chronic hyperacidity were treated by 33.8% physicians. Further, a steady increase in the number of patients with hyperacidity was observed during the pandemic by 74.2% physicians. The prevalence of GERD in southern India is comparable with the range found in Western countries (8.8%–27.8%) but much higher than that in East Asia [13]. In Asia, the prevalence of GERD has gradually been increasing [14], which may be attributed to the growing economy and lifestyle changes occurring in many Asian countries. These findings were in accordance with our study findings.

In our survey, most physicians (88.9%) opined that patients attempt various home remedies and over-the-counter medications before consulting specialists, while 87.4% expressed concerns that patients delay their visits leading to increase in symptom severity and 85.9% opined that hyperacidity is a symptom of underlying GI disorders.

One of the main signs of GERD is heartburn, which is brought on by changes in the oesophageal-stomach barrier. Majority of patients with GERD experience pain as a result of delayed diagnosis, which also contributes to Barrett's oesophagus and esophageal strictures. Most physicians (92.4%) reported that heartburn/retrosternal discomfort epigastric pain (84.8%), and acid reflux (74.7%) were classical symptoms of hyperacidity. Most physicians recognize heartburn as the chief symptom of GERD, followed by acid regurgitation. Therefore, most physicians rely on a detailed explanation of heartburn during medical interviews for the diagnosis of GERD. Only in Korea was acid regurgitation a more frequent (47%) chief complaint than heartburn (27%). This is further supported by a study

of approximately 25,536 Koreans that showed that acid regurgitation is more common than heartburn in patients with GERD, particularly among women [15]. Similar findings were also observed in other Korean studies [16, 17].

Acid reflux can range from mild to moderate to severe, and GERD is the chronic, more severe form of acid reflux. In our survey, 87.3% of the physicians experienced hyperacidity among their patients; proportional split of patients with mild, moderate and severe hyperacidity was 38.5%, 39.3%, and 22.2%, respectively.

In the present survey, patient profiles suitable for treatment with anaesthetic antacids were age groups 21-60 years, and those with heartburn/retrosternal discomfort, belching/burping, and acid reflux as symptoms at presentation.

Acid peptic diseases (APDs) are prevalent worldwide; changing lifestyles and dietary habits may be attributable to the rising disease burden. A systematic review of 28 studies indicated ethnic and geographical variations in the prevalence of GERD (18.1%–27.8% in North America, 8.8%–25.9% in Europe, and 2.5%–7.8% in East Asia) [18]. A survey of 1000 clinicians from India showed a high prevalence of GERD (39.2%), peptic ulcer disease (37.1%), and non-ulcer dyspepsia (25.2%) with nearly 50% of patients requiring prompt endoscopy [19]. Specific symptoms need to be identified accurately in order to avoid underdiagnosis or over-treating APDs. Medications available for treating these acid-related diseases are PPIs, H2RAs, antacids, sucralfate, and prostaglandin analogues [20]. PPIs continue to be the "gold standard" therapy for both initial as well as long-term GERD treatment [11, 1]. In the present survey, management practices of physicians with antacids, PPIs, antacids + PPIs, PPIs + prokinetics, antacids + PPIs + prokinetics, H2RAs, and antacids + H2RAs were evaluated. Majority of the physicians (67.7%) reported that antacids were the most preferred first line of treatment, H2RAs alone (36.9%) and antacids + H2RAs (37.4%) were the most preferred second line of treatment, and antacids + PPIs + prokinetics were the most preferred the third line of

treatment. It was observed the relapse rate for acidity for H2RAs was 41.4%, whereas the relapse rate for acidity for PPIs was found to be 30.3%. In a study by Fujiwara *et al.*, most physicians used a PPI as the first-line treatment for erosive esophagitis, which is contradictory with our study findings [21]. The reasons for the relatively lower rate of PPI use as the first-line treatment for non-erosive reflux disease (NERD) are unknown; however, one reason may be because some physicians consider NERD to be a mild form of erosive esophagitis.

Antacids are the most common self-prescribed medications. The use of antacids probably began in the first century when Celsus used neutralizing earths for abdominal distress. Its use in the treatment of peptic ulcers began in 1856, with William Brinton used bicarbonate of potash and also bismuth to treat gastric ulcers leading to the first pathological descriptions of gastric ulcers by Jean Cruveilhier in Paris in 1835. In the present survey, physicians opined that the ideal duration of treatment with anaesthetic antacids is ~5 weeks, and most (83.3%) agreed that a high ANC of the formulation plays a role in the efficacy of anaesthetic antacids.

Conclusion

Acidity is a frequent clinical issue that is associated with severe morbidity and a possible decline in quality of life. The key to preventing complications is early symptom identification. The results of this survey will help clinicians in identifying GERD symptoms in patients who are most at risk as well as developing treatment strategies that are more suitable for high-risk populations.

Presentation at a meeting: Not applicable

Source(s) of support: The survey was funded by Abbott India Ltd.

Conflicting Interest (If present, give more details): The author received a research grant from Abbott for participation in the survey. Manish Chinia is a member of Indian Society of Gastroenterology.

Ethical policy and Institutional Review board statement: Not applicable as there was no direct intervention to patients in the survey.

Acknowledgements: Not applicable

Contribution Details

Role	Manish Chinia
Concepts	Yes
Design	Yes
Literature search	Yes
Data acquisition	No
Data analysis	No
Statistical analysis	No
Manuscript preparation, editing and review	Yes

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