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PREVALENCE OF GERD AND ITS MANAGEMENT IN DIFFERENT HOSPITALS OF LAHORE

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ABSTRACT

Background: Gastroesophageal reflux disease is one of the most common chronic gastrointestinal disorders. It has been reported that GERD affects an estimated 19 million individuals in the US, and it can affect up to one-third of adults. It is one of the most commonly encountered conditions by both primary care physicians and gastroenterologists. To illustrate, a 2005 systematic review found the prevalence of GERD to be as high as 10%-20% in the Western world compared to a prevalence of less than 5% in Asia. **Objectives:** The aim of study was to evaluate the number of patients who seek proper medical treatment other than self- medications and home remedies and to ascertain whether treatment given was alleviating the patient's symptoms, decreasing the recurrence of disease and preventing the development of further complications and its effect on quality of life. **Method**: An observational study was conducted by using convenient sampling technique during the period June 2017 to August 2017. Data was collected by selecting 50 patients from different private and public sector hospitals of Lahore. A structurally designed data collection form was used and filled during face to face interview with patients. Collected data was analyzed and represented in the form of percentage. **Results:** GERD was observed mostly in males (56%) than females (44%). In 64% of patients heart burn occurred mostly two or more times in a week, in 20% it interfered with daily activities, 10% had disturbance in sleep due to it and 6% patients had difficulty or pain in swallowing. 56% of patients treated themselves with home remedies, 30% used OTC products and 14% were those using medicines suggested by friends or family member. **Conclusion:** GERD is a chronic, relapsing disease. Patients have to be managed with either long-term medical treatment or surgery after a thorough analysis of the pros and cons of each modality.

KEYWORDS: GERD, Prevalence, Investigations, Complications, Swallowing.

INTRODUCTION

The reflux of gastric contents into esophagus is a normal physiological phenomenon. Reflux is deemed pathophysiological when it causes esophageal injury or produces symptoms that are troublesome to the patients, mostly heart burn and regurgitation, a condition known as gastroesophageal reflux disease. Primary methods employed for treatment of GERD are lifestyle modifications, OTC medicines and prescription medicines. Avoiding fatty meals at night, having smaller meals, weight loss and avoiding caffeine, smoking etc are various lifestyle modifications recommended by Gastroenterologist. Although various life style factors are associated with GERD but clinical evidence reveals that lifestyle modifications are not recommended as the sole management modality of GERD. Instead, Pharmacological treatment is required to achieve and maintain effective symptoms resolution.[1,2]

Many patients are not aware that they have GERD. Failure to seek professional medical treatment can lead physicians to under-diagnose and under-treat GERD, with consequent poor control of symptoms, lost productivity, reduced quality of life, and an increased incidence of complications in affected patients.[3,4]

GERD can manifest in a wide range of symptoms which can be subdivided into typical, atypical and extra esophageal symptoms. Typical symptoms include acid regurgitation and heartburn. Atypical symptoms include epigastric fullness, epigastric pressure, epigastric pain, dyspepsia, nausea, bloating, belching. Extra esophageal symptoms include chronic cough, bronchospasm, wheezing, hoarseness, sore throat, asthma, laryngitis, dental erosions. Extra esophageal symptoms could be secondary to a host of other conditions and should not uniformly be attributed to a diagnosis of GERD, especially when typical symptoms are absent.[5,6]

There is no gold standard for the diagnosis of GERD. The diagnosis of GERD is typically made by a combination of clinical symptoms, response to acid suppression, as well as objective testing with upper endoscopy and esophageal pH monitoring. Additional confirmatory diagnostic tests include endoscopy, biopsy, barium radiography, examination of the throat and

larynx, esophageal motility testing, emptying studies of the stomach, and esophageal acid perfusion. Of these tests, endoscopy is the only reliable method to diagnose erosive esophagitis and determine its severity.[7,8]

GERD is a chronic disease that typically requires long term management in the form of lifestyle modification, medical therapy and surgical therapy. Lifestyle and diet modification traditionally have included weight loss, head of bed elevation, avoidance of nighttime meals, and elimination of trigger foods such as chocolate, caffeine and alcohol. For nighttime reflux symptoms, patients should elevate the head of the bed and avoid recumbency 3 hour postprandially. The mainstay of treatment of GERD is acid suppression which can be achieved with several classes of medications including antacids, histamine-receptor antagonists (H_2RAs) or proton-pump inhibitors (PPIs). If symptoms persist after attempts at maximizing medical therapy, an evaluation for non-GERD etiologies should be undertaken. An upper endoscopy should be performed next and may reveal an abnormality such as persistent erosive esophagitis, eosinophilic esophagitis, or Barrett's esophagus in roughly 10% of patients in whom empiric PPI therapy fails. Surgical therapy is another treatment option for long-term therapy in patients with GERD and has become more appealing since the introduction of laparoscopic anti-reflux surgery.[9,10,11]

MATERIALS AND METHODS

A hospital based observational study was conducted in different hospitals of Lahore during June 2017 to August 2017. 50 patients were randomly selected and observed in different hospitals of Lahore to evaluate the incidence and Prevalence of GERD.

Inclusion and Exclusion Criteria

Male and Female patients diagnosed with GERD between ages 20 to 60 years were included. Children, Geriatrics and diseases Other than GERD were excluded.

Ethical Considerations

The study was conducted after obtaining ethical approval from the Institute of Pharmacy of Lahore College for Women University. The institute provided ethical approval after assessing informed verbal consent submitted with all components of the research protocol. The verbal consent of questionnaire was asked before data filling. The participants for the study were asked whether they were willing or unwilling after hearing about the consent of the study and this was confirmed by their response shown as yes or no. Data collection was carried out after the confirmation of the willingness of the participant. The data was recorded anonymously in order to ensure confidentiality and privacy of the participant.

RESULTS

Table shows age and gender distribution, health sector and signs and symptoms observed during treatment.

Fig. 1 shows that most common symptom was burning in upper stomach (34%), than bitter taste in mouth (28%), burning behind breast bone was 20% and swelling in upper respiratory tract was 18%.

Fig. 2 shows that 56% of patients treated themselves with home remedies, 30% used OTC products and 14% were those using medicines suggested by friends or family member.

Fig. 3 shows that mostly used OTC medicine was Risek (omeprazole) i.e 64%, then Nexium (20%) and Zantac (16%).

Fig. 4 shows Lifestyle modification and most common was avoiding food that trigger the symptoms like fried, fatty or alcoholic (38%), eating meals in small portions and no overeating was (26%), avoiding food intake at night and lying after meal was (22%) and weight control was recommended in 14% patients.

Fig. 5 shows that Medication therapy was offered in (46%) patients, both medication and lifestyle changes were offered in (34%) and just lifestyle changes in (20%).

Fig. 6 shows that Omeprazole was most commonly prescribed (42%), then omeprazole and zantac together in (26%), zantac alone in (22%) and nexum in 10%.

Fig. 7 shoes that the duration of treatment was mostly from one to eight weeks but one had for 5 days and one had for two weeks.

Fig. 8 shows that most of the patients were unaware of the term of pharmacist (48%), counselling services were provided to (28%) of the patients, (12%) had their prescription being analyzed by pharmacist and (12%) did not find pharmacist during their visit to hospital.

Table 1: Biography.

Gender Distribution Frequency Percentage		
Male	28	56%
Female	22	44%
Age Distribution		
20-30 yrs	5	10%
30-40 yrs	20	40%
40-50 yrs	20	40%
50-60 yrs	5	10%
Signs and Symptoms		
Bitter or acid taste in mouth	14	28%
Swelling in URT	9	18%
Burning feeling in upper stomach	17	34%
Burning feeling behind breast bone	10	20%
Health care sectors		
Private hospitals	33	66%
Public hospitals	17	34%

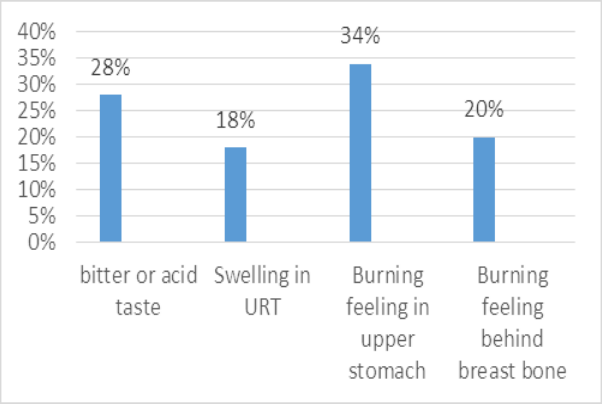

Figure 1: Most occurring symptom.

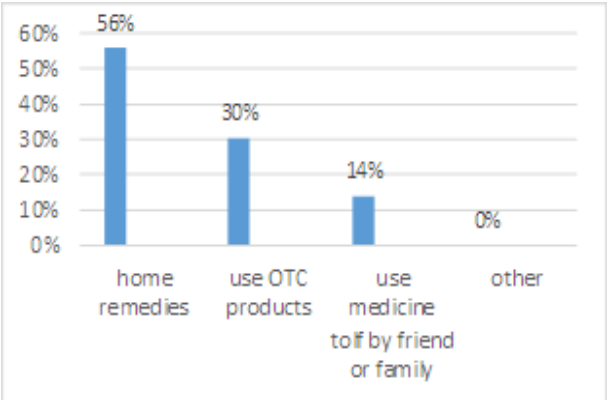

Figure 2: Treatment of symptoms at home.

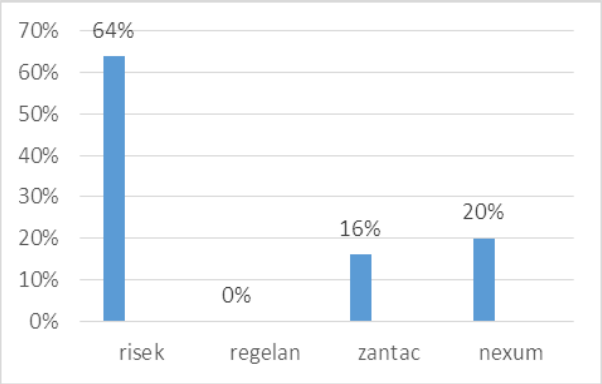

Figure 3: OTC medicine most often used.

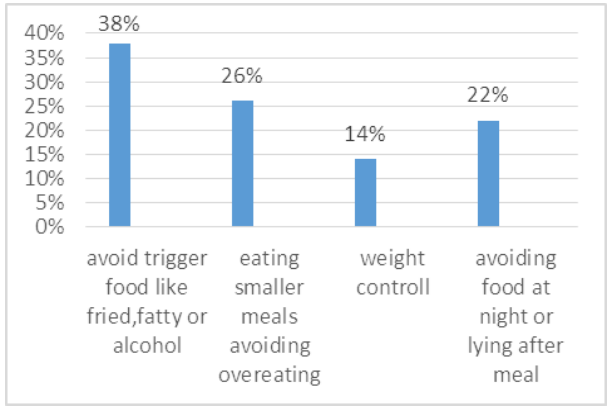

Figure 4: Most effective lifestyle change.

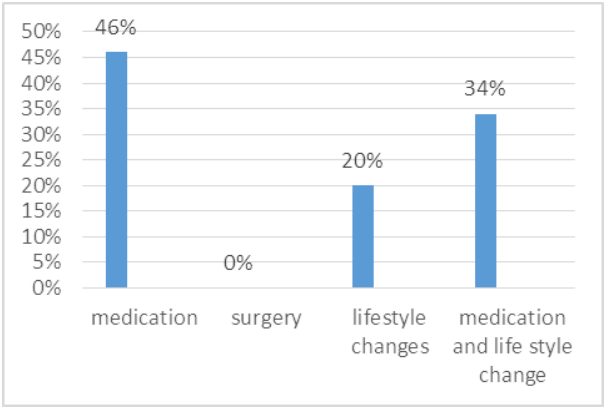

Figure 5: Treatment options given by physician.

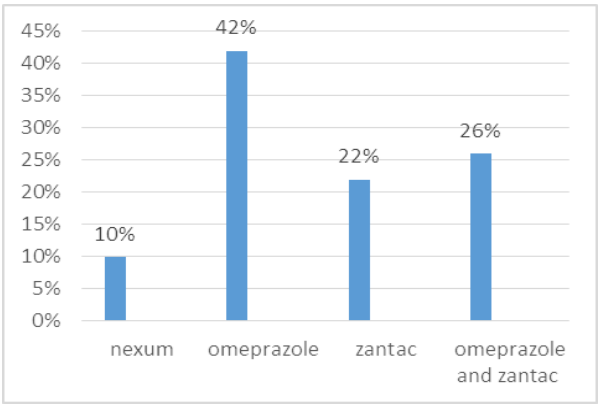

Figure 6: Medicines most often prescribed.

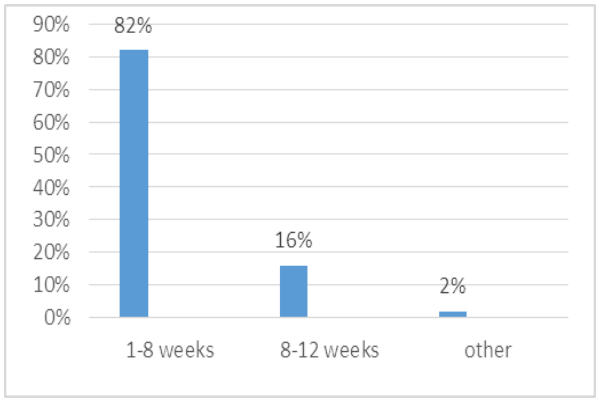

Figure 7: Duration of treatment.

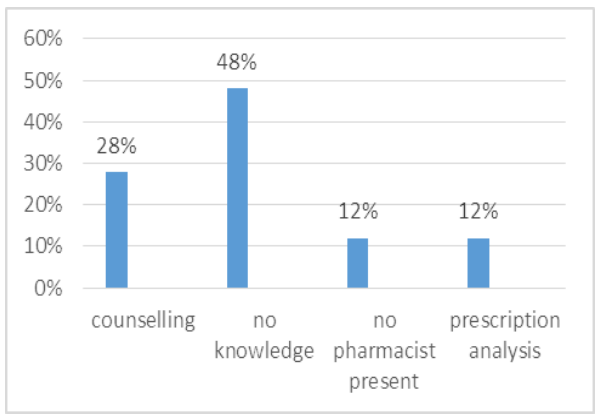

Figure 8: Services of Pharmacist.

DISCUSSION

GERD is a chronic condition requiring long term treatment. Because of low cost and simplicity, life style modification is the first method employed by and must be continued even when more potent therapies are initiated. Potent acid-suppressive therapy is currently most important therapy although healing of esophageal mucosa is achieved with a single dose of PPIs in 80 % of patients but symptoms are more difficult to control especially atypical symptoms. For symptoms control, additional dose or combination therapy with H2RA might be required. Long term follow up studies indicate that PPIs are effective, tolerable and safe medications. Failure of PPI therapy was due to long duration of disease, poor compliance and obesity.

The lack of Gold Standards in diagnosis of GERD presents a clinical dilemma in treating patients with GER. American College of Gastroenterology, American Gastroenterologist Association are clinical guidelines which are evidence based recommendations to help and guide clinical based decisions about GERD. These are updated guidelines for diagnosis and position statement on management of Gastroesophageal reflux disease.

Counseling of patients is the major role of Pharmacist during therapy. As doctors lack time for discussion so presence of pharmacist is necessary in any clinical settings of GERD. They explain importance of dietary changes, compare and contrast different treatment options in terms of cost, effectiveness and safety. The medication review process under taken by pharmacist provides an optimal point for assessing patients with GERD management. Pharmacists are in ideal condition to provide rationale drug therapy to patients.

CONCLUSION

GERD is very common in primary care practice and easy to recognize in its typical form, generally requiring no initial investigations. Treatment at initial level is focused on lifestyle and dietary modifications to avoid GERD triggers and achieve healthy body weight and optimal use of proton pump inhibitors .although PPIs are mainstay of therapy but there remains a role for H2RA or Antacids in patients with mild, infrequent episodic symptoms. A presumptive diagnosis of GERD can be made in patients with typical symptoms of heart burn and regurgitation and the presence of these symptoms is quite specific for GERD. ALMOST one third patients don't consult a physician because they believe symptoms are due to food choices. Patients with GERD reported decrease in quality of life and overall well being.

ACKNOWLEDGMENT

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