

# Assess Socio-Demographic Characteristics of Patients with GERD Symptoms

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**Abstract:** *Background:* Despite a common disorder of gastro-esophageal reflux disease (GERD) in Bangladesh, population based data is unavailable. This epidemiological study was designed to determine the prevalence of GERD and its association with socio-demographic and lifestyle factors. *Objective:* The aim of the study was to assess socio-demographic characteristic of patients with GERD symptoms. *Methods:* The descriptive study was conducted in the department of Medicine of Mymensingh Medical College and Hospital, Mymensingh, Bangladesh to find out the Socio-Demographic Characteristic of Patients with GERD. 384 cases were randomly. Clinical examination and evaluation were done from October 2012 to April 2013. Statistical analysis of the results was obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-22). *Results:* 384 populations were age frequency among total population 199 (51.82%) from 18-38 years, 130 (33.85%) from 39-59 years and 55 (14.32%) from 60 years of age and above. The study was seen that 188 (48.95%) were male and 196 (51.05%) were female. Among the study population of 384 cases 72 (18.75%) person had symptoms score more than 4, i.e. presence of GERD symptoms and 312 (81.85%) cases has symptoms score less than 4, i.e. absence of GERD symptoms. 13.88% GERD patient having history of taking tobacco leaf/battle nut/smoking, while only 10.25% general people having similar habit 4.16%. *Conclusion:* Young age in any form may be a risk for GERD. Need to concentrate about heart-burn which showed a major symptoms for both male and female. More concentration should be given on chronic cough for male of GERD patient.

**Keywords:** Socio-Demographic, Gastro-Esophageal Reflux Disease (GERD), Symptoms, Prevalence

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## 1. Introduction

GERD symptoms play a key role in diagnosing the problem in view of the limitations of objective medical testing. The symptoms may not be objective evidence of oesophagitis for patients who have GERD. Burning the heart and or regurgitation of the acid are considered a reasonably specific diagnostic symptom. In comparison to the western world, in Asian countries GERD has traditionally been considered less common. [1-8] GERD data in Asia are limited in population. [6-8] If therapy is not responded to, if

alarm symptoms suggest complications, or if diagnostics are confirmed before anti-reflux procedure, further diagnostic evaluation is necessary. Some Asian studies have shown an increasing trend in GERD prevalence. [7-9] Studies also found that asthma, voice hoarseness, dyspepsia, atypical chest pain and nonobstructive dysphagia are associated with GERD. The GERD association to certain socio-demographic factors such as age, gender, training, occupation, smoking, body mass index (BMI), the lifestyle and others were assessed by these descriptive and longitudinal surveys. In relation to socio-cultural factors, and environmental factors

that can have an epidemiological impact, significant differences exist between the urban and rural population of Bangladesh. Bangladesh lacks data on different aspects of GERD. Knowledge of GERD's prevalence estimates and associated risk factors in our population could contribute to the definition of local health needs and to improving patient management.

## 2. Methods

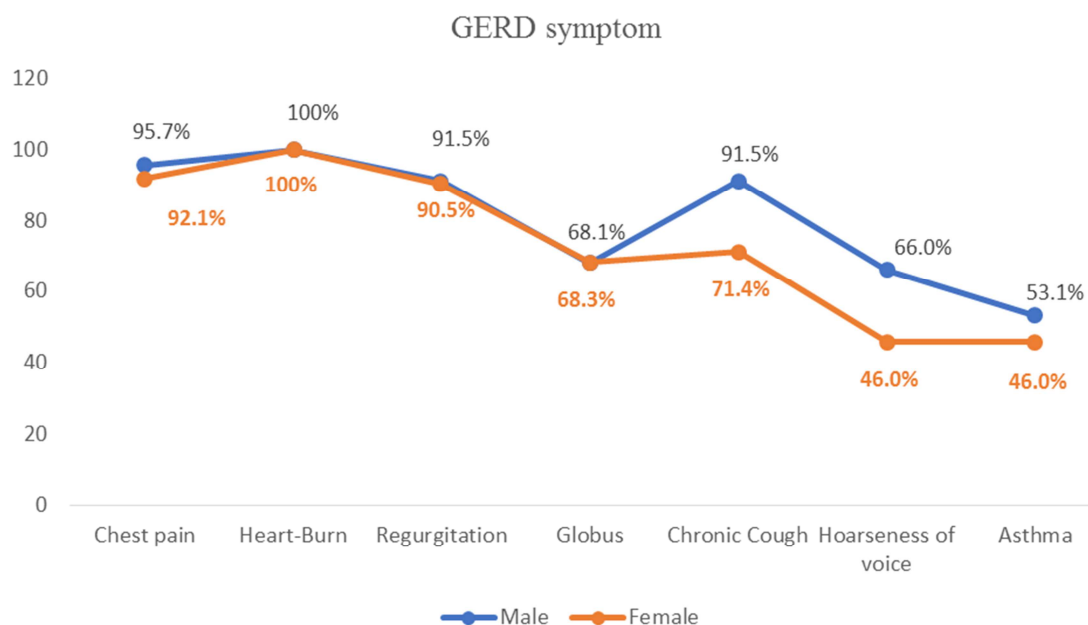
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Sciences (SPSS-22).

## 3. Results

*Table 1. Socio demographic profile and GERD symptom Distribution.*

Age Distribution (years)	n=384	%
18 to 38 years	199	51.82
39 to 59 years	130	33.85
>59 years	55	14.32
Total	33	100
Sex Distribution		
Male	188	48.95
Female	196	51.05
Total	384	100
GERD Symptom Distribution		
Present	72	18.75
Absent	312	81.25
Total	384	100



*Figure 1. GERD symptom pattern among male and Female.*

## 4. Discussion

One of the most common health issues in the Western world is gastroesophageal reflux disease (GERD) [9] and as a chronic condition, GERD places a significant burden on patients and the health-care system. [10] For GERD, there is no gold standard diagnostic test. Most commonly used tests, such as upper GI endoscopy and 24-hour oesophageal pH monitoring, are insensitive and have several limitations. [11-13] The GERD questionnaire-based diagnosis is accurate, with high sensitivity and specificity. [14] Multiple logistic analyses revealed that GERD was inversely related to education level. In our study, the increased prevalence of GERD among people with a low level of education is consistent with the findings of Diaz-Rubio M *et al* [15] and Rahman MM *et al* [16] from Spain. A lack of knowledge

about healthy lifestyle choices and a limited ability to change lifestyle factors that contribute to GERD symptoms may play a role [15]. Education and health-related awareness may play a role in this. Our study found a higher prevalence of GERD among married, widowed, and widowers, which differs from the findings of Rahman MM *et al* [16]. A psychosocial factor could play a role here. Symptom analysis revealed that the top five GERD-related symptoms were heartburn (100%), regurgitation (90.9%), chest pain, chronic cough, and globus. Wong *et al* [7] reported acid regurgitation as the most common symptom in a Chinese population, but in our study population, heartburn was the most common symptom, with regurgitation coming in second. Women were more likely to experience heartburn and/or acid regurgitation on a daily and weekly basis. Other symptoms, such as hoarseness of voice and chronic cough, were more common in men. Cigarette smoking could be a factor. Except for heartburn and/or acid

regurgitation, no significant differences in symptom pattern were found across age groups. These two symptoms have been found to worsen with age. In conclusion, this questionnaire-based community survey revealed that GERD is a common condition in our community, despite the fact that the disease burden is lower than in the Western world. GERD is more common in women, people over the age of 59, in cities, and in lower socioeconomic groups with lower levels of education. GERD was not found to be significantly associated with BMI or smoking. More research is needed, preferably with some investigations, involving different populations in different parts of the country, to accurately estimate the disease burden and plan appropriate health care.

## 5. Limitation of the Study

This was a descriptive study with a small sample size. So, the findings of this study may not accurately reflect the situation in the entire country.

## 6. Conclusions

Young age in any form may be a risk for GERD. Need to concentrate about heart-burn which showed a major symptoms for both male and female.

## 7. Recommendation

This study can be used as a pilot for a much larger study involving multiple centers that will provide a nationwide picture, validate the regression models proposed in this study for future use, and highlight points to ensure better management and adherence.

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