

**ORIGINAL ARTICLE****The Prevalence of 4 Common Gastrointestinal Disorders in The Patients Referring to Internists in Vali-Asr Hospital Within 2 Years****Mohammad Yaqub Rajput\***

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\*Corresponding author: Mohammad Yaqub Rajput, E mail: [shabnamrajput2014@gmail.com](mailto:shabnamrajput2014@gmail.com)**ABSTRACT**

*The aim of this study was determining the prevalence of 4 common gastrointestinal disorders in the population of Fasa city. It can help to other researches to find the risk factors of the most common gastrointestinal diseases in this population to help eliminating them. In this descriptive and cross-sectional study, we studied and evaluated all patients with diagnosis of Reflux, Peptic ulcer, inflammatory bowel disease and Gallstone, who had gone to doctor and were treated. A questionnaire was used and the mentioned data was extracted. For analyzing the data, descriptive statistics method and SPSS Ver.11 software were used. Of all the check lists, the most common problems of patients were: 778 cases (53.2%) IBD, 506 cases (34.6%) reflux, 100 cases (6.8%) peptic ulcer and 77 cases (5.2%) gallstone. According to the results of the present study, 4 common digestive diseases under study in male patients were reflux, peptic ulcer, IBD and gallstone, respectively. while in females were IBD, reflux, peptic ulcer and gallstone 4 mentioned diseases are of the most common digestive diseases and they have a huge financial burden to the society in order to control and treat these diseases. Therefore, it is suggested that future studies should be conducted specifically to investigate common risk factors in men and women, so a step is taken for reducing the prevalence of these diseases.*

**Key words:** reflux – gall stone – peptic ulcer – IBD

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**INTRODUCTION**

A functional disorder or disease occurs when the main abnormality is the way the body works. Gastrointestinal motility is defined by the movements of the digestive system, and the transit of the contents within it [1-3].

Functional GI and motility disorders generally cannot be diagnosed in a traditional way. No inflammatory, infectious, or structural abnormality can be seen by commonly used examination, x-ray, or laboratory test. Functional gastrointestinal (GI) disorders affect millions of people of all ages – men, women, and children. They are the most commonly presented GI illnesses seen by doctors in primary care or gastroenterology.[4-6] 4 common gastrointestinal diseases includes:

**Reflux**

Gastro-esophageal reflux disease (GERD) is one of the most commonly occurring diseases affecting the upper gastrointestinal tract. The incidence of GERD is increasing in the developed world; upwards of 10% of the population experience heartburn daily. Symptoms can range from mild to severe. There is no difference between the percentage of men and the percentage of women that are affected by GERD. GERD is a disease which has a significant effect on one's activities of daily living as well as an economic effect on individuals and society.[7,8]

Symptoms of reflux, such as heartburn, are among the most common digestive ills. Such frequent symptoms may indicate a person has GERD, or gastro-esophageal reflux disease. Aside from being painful, GERD can harm the esophagus over time or even lead to esophageal cancer [9, 10].

## PEPTIC ULCER

Peptic ulcer disease is a common benign (nonmalignant) ulceration of the epithelial lining of the stomach (gastric ulcer) or duodenum (duodenal ulcer). About 6% of patients attending a dentist office will have peptic ulcer disease.<sup>12,13</sup> there are approximately 500,000 new cases and 4,000,000 recurrences each year in the United States. The estimated annual direct cost for treatment of patients with ulcer disease is approximately \$8 billion to \$10 billion (US). Data indicate that the lifetime prevalence of peptic ulcers ranges from 11 to 14% for men and 8 to 11% for women. The 1-year point prevalence of active gastric and duodenal ulcers in the United States is about 1.8%.

12-15

## Inflammatory Bowel Disease

Inflammatory bowel disease (IBD) is a general classification of inflammatory processes that affect the large and small intestines. Ulcerative colitis and Crohn's disease together make up inflammatory bowel disease. The annual incidence of IBD in the United States ranges from 3.9 to 10 new cases per 100,000 persons. Incidence rates for both diseases are higher in urban areas than in rural areas. Crohn's disease occurs less frequently than ulcerative colitis, but both are slightly on the rise.<sup>[14]</sup>

Northern European and English women appear to have a 30% increased risk of developing ulcerative colitis or Crohn's disease. IBD more frequently affects Caucasians, and Ashkenazi Jews, especially those originating in Middle Europe, Poland, or Russia, exhibit a particularly high IBD risk.<sup>12,13,15,16</sup>

## Gallstones

Only a quarter of people with gallstones typically require treatment. That's fortunate, because every year nearly 1 million Americans are diagnosed with these little pebbles, which are primarily made of cholesterol and bile salts. Gallstones can get blamed for symptoms caused by other, more elusive culprits, such as irritable bowel syndrome. Obesity is a risk factor for gallstones, and it's theorized that they develop because of a shortage of fiber and an excess of fat in the western diet. Losing weight—then regaining it—also seems to set the stage for gallstones.<sup>[12,14]</sup>

The social and economic costs of gastrointestinal disorders are enormous. The symptoms of these disorders can cause discomfort, ranging from inconvenience to deep personal distress. For those with severe symptoms the disorders can be debilitating, leaving them unable to fully participate in life and work. There is a pressing need to support more research. Gastrointestinal disorder research remains severely underfunded. Less than 1% of digestive disease research funding, through the National Institutes of Health (NIH), is allocated for functional disorders <sup>[16]</sup>. The aim of this study was determining the prevalence of 4 common gastrointestinal disorders in the population of Fasa city. It can help to other researches to find the risk factors of the most common gastrointestinal diseases in this population to help eliminating them.

## MATERIALS AND METHODS

In this descriptive and cross-sectional study, we studied and evaluated all patients with diagnosis of Reflux, Peptic ulcer, inflammatory bowel disease and Gallstone, who had gone to doctor and were treated. For gathering the information, a questionnaire (for the use of researcher) was used, which the following information were extracted from check lists.

Patient's name – age – gender

The frequency of digestive disorders, differentiated by gender.

The frequency of urban and suburban patients.

For analyzing the data, descriptive statistics method and SPSS Ver.11 software were used.

## RESULT

From total of 1461 cases of the study, 1151 cases (78.8%) were related to city of Fasa, 90 cases (6.2%) Sheshdeh, 84 cases (5.8%) Zahed shahr, 70 cases (4.8%) Dogan, 36 cases (2.5%) Jalian, 14 cases (1%) Imamzade, and 16 cases were related to other villages. (Table 1).

Of all the cases of the study, 950 patients (65.9%) were male and 500 patients (34%) were female and gender of 11 patients (0.8%) was not specified in the check list.

Of all the check lists, the most common problems of patients were respectively: 778 cases (53.2%) IBD, 506 cases (34.6%) reflux, 100 cases (6.8%) peptic ulcer and 77 cases (5.2%) gallstone.

Table 1

Percent	Statistical frequency	Area
77.8	1151	Fasa
6.2	90	Sheshdeh
5.8	84	Zahedshahr
4.8	70	Duggan
2.5	36	Jelian
1	14	Shrine
2	16	Other villages
100	1461	Total

Table 2

Percent	Statistical frequency	disorder
53.2	778	IBD
34.6	506	reflux
6.9	100	Peptic ulcer
5.3	77	Gall stone
100	1461	total

Most complaints reported for male from total of 950 male patients were 422 cases (44.4%) with reflux, 298 cases (31.4%) peptic ulcer, 122 cases (12.9%) IBD, and 108 cases (11.3%) with gallstone. Among female patients from total of 500 cases, most complaints were in 377 cases (75.4%) IBD, 45 cases (9%) reflux, 39 cases (7.8%) peptic ulcer, and cases (7.8%) gallstone.

The mean age in the most common complaints of patients, in IBD was 29.76, reflux 58.11, peptic ulcer 51.38 and gallstone 54.32.

### DISCUSSION AND CONCLUSION

In these 4 common diseases, IBD was most frequent in age group below 30 years and 3 other diseases were most frequent in age group higher than 50 years.

Also, the biggest digestive problems were related to population of Fasa city and the lowest of them was related to residents of Imamzade.

Inflammatory bowel disease that is caused by disturbance in the immune responses to environmental factors in people who are genetically predisposed, can be divided into two types of Crohn's disease and ulcerative colitis. Statics show that 4.1 million people in America and 2.2 million people in Europe suffer from IBD [17], in addition, each year 300,000 new cases are added to the statics. Male to female ratio is equal [18, 19], which in our study, the prevalence of this disease in women was higher than men. Various studies suggest that IBD peak age is 15-35 years old and the other peak is 60-80 years old [17], which is consistent with our study. The annual cost of caring for IBD patients in America, which include surgery, medicines, hospitalization and pain relief, is 6.2 to 8.1 million dollars each year. [18].

Esophageal reflux disease is the disorder of the gastrointestinal tract. Symptoms occur due to the back flow of stomach acid and other stomach contents, which itself is caused by deficiency of esophageal junction. In 7%, that are mainly based on GERD on western countries, the prevalence of typical symptoms gets diagnosed. (20) If the findings, endoscopic of GERD in diagnosing the prevalence of this disease also reaches 2%. [21] Epidemiological studies have shown that incidence of GERD and its complications (adenocarcinoma of the esophagus and cardia) are increasing. While, the prevalence of helicobacter pylori infection and its accompanying diseases (peptic ulcer and lower gastrointestinal cancer) are decreasing in western countries. Studies have suggested that there is no difference in the prevalence of this disease between men and women. [22-26] While in our study, the prevalence of this disease in men was higher than women and it is inconsistent with our study.

Gallstone is the most common disorder of the biliary system, that results in hospitalization of patients. [27] Today, this disease causes significant health – economic burden for health care system even in western countries, 10% of people in communities, as far as is said 20 European and American, have gallstone. (28, 29) It should be noted that the cost of treatment of gallstones in the US is more than 6 billion dollars annually, which regarding the cost and burden of disease considered as second after reflux. (30) also, it is estimated that each year 1 million new patients become diagnosed with gallstone in US approximately. [31] Studies have suggested that the prevalence of the disease in women is higher than men [32], which in our study the prevalence was higher in men compare to women.

Despite remarkable advances in medical science in recent years, peptic ulcer disease continues to remain as one of the most common and costly human diseases. (33) so that, the prevalence of this disease estimate as 2% and during life of each person's life as 10%. [34] Various studies have reported the prevalence of the disease in men is more than women [35] which findings our study confirms this too. 4 mentioned diseases are of the most common digestive diseases and they have a huge financial burden to the society in order to control and treat these diseases. Therefore, it is suggested that future studies should be conducted specifically to investigate common risk factors in men and women, so a step is taken for reducing the prevalence of these diseases.

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