Awareness of gastrointestinal disorders among college students

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**ABSTRACT**

**Introduction:** The environment we now live in and many aspects of our lifestyle contribute to the development of disease. A major target of the influence of dietary components, alcohol, microbial organisms, and other ingested materials is to the luminal digestive tract. External factors such as obesity, lack of physical exercise, and tobacco consumption also impact diseases of the luminal gastrointestinal (GI) tract. The aim of this paper is to present the results of a survey that was conducted to evaluate the knowledge and attitudes of the causes and treatment options for GI disorders among college students of age 16–22 years undergraduate and postgraduate students. **Materials and Methods:** The current study was conducted to assess the level of awareness of GI disorders among college students. Hundred college students were contacted through social media such as WhatsApp and email and were asked to participate in the study by filling up an online survey on GI disorder awareness. The questionnaire consisted of 13 questions based on GI disorders and its knowledge. The final sample included 100 college students. **Results:** There is a marked inflation in the frequency of consumption of outside food. Only about 18% are aware that Crohn’s disease, gastric ulcers, and appendicitis are all a part of GI disorders. 80% concluded that our lifestyle and food habits have a greater effect on GI disorders. Among the student population, 60% are not aware of the term colonoscopy. On the basis of the survey, 59% of the students know the preventive measures to avoid GI disorders. **Conclusion:** This survey shows that the college students are partially aware of the outcomes of our lifestyles and the basic symptoms of GI disorders. However, they are unaware of its diagnosis and treatment. Hence, an increased awareness of GI disorders has to be incorporated among the college students due to our current lifestyles.

**KEY WORDS:** Appendicitis, Colonoscopy, Crohn’s disease, Food habits, Gastric ulcers, Gastrointestinal disorders

**INTRODUCTION**

The environment we now live in and many aspects of our lifestyle contribute to the development of disease. A major target of the influence of dietary components, alcohol, microbial organisms, and other ingested materials is to the luminal digestive tract. External factors such as obesity, lack of physical exercise, and tobacco consumption also impact diseases of the luminal gastrointestinal (GI) tract. Important external force that impacts human health and disease is indicated by the microbiome which forms an integral part of the human organism.\(^{[1,2]}\) The luminal GI tract conditions range from malignancies such as squamous cell esophageal cancer and Barrett’s esophagus, idiopathic inflammatory disorders such as inflammatory bowel diseases, and post-infectious syndromes including irritable bowel syndrome (IBS), post-infectious dyspepsia, and other functional GI disorders from certain external factors. Other cause can be the immune-mediated conditions in which food antigens are the driving force behind disease development. These entities include celiac disease, eosinophilic esophagitis, and food allergies.\(^{[3-5]}\) A prime example of a condition mediated by dietary factors is celiac disease. It is believed that environmental factors such as an increase in gluten in the human diet account for its rising prevalence as this disease clearly has a genetic basis, now roughly 1% of genetically susceptible populations in all continents.\(^{[6,7]}\) Therapeutic strategies span from preventing disease by reducing exposure to gluten, modulating the time
of gluten introduction in infants, degrading ingested gluten peptides within the intestinal lumen through endopeptidases, or modulating uptake of these peptides across intestinal tight junctions. Gluten exposure can be reduced by developing strains of wheat with lower levels of gluten. Other treatments in development focus on interfering with the immune events that lead to disease once gluten accesses the lamina propria. The implications for the treatment of many conditions of the large and small intestine that arises from environmental and lifestyle are as basic as ensuring adequate nutrition, regular exercise, and cessation of tobacco use. More researches are being developed to learn and understand the microbiome, dietary, and other factors and their interaction with the human host to develop new treatment strategies that are potential for diseases that result from the environment and lifestyle.

GI disorder is broadly classified as functional and structural disorder. Functional disorders are those in which the GI tract looks normal but does not work properly. They are the most common problems affecting the GI tract (including the colon and rectum). Constipation and IBS are two common examples. Functional GI disorders, including the IBS, account for up to 40% of referrals to gastroenterologists, but accurate data on the natural history of these disorders in the general population are lacking.

Knowledge of the etiology, diagnostic criteria, and treatment of GI disorders appear to be lacking among several adolescents and young adults living in other developing countries.

The aim of this paper is to present the results of a survey that was conducted to evaluate the knowledge and attitudes of the causes and treatment options for GI disorders among college students of age 16–22 years undergraduate and postgraduate students.

MATERIALS AND METHODS

The current study was conducted to assess the level of awareness of GI disorders among college students. Hundred college students consisting of both male and female were randomly selected from the student body of various colleges. Students were contacted through social media such as WhatsApp and email and were asked to participate in the study by filling up an online survey on GI disorder awareness. The questionnaire consisted of 13 questions based on GI disorders and its knowledge. Men and women were contacted through social media groups or separately or through emails that contained a URL link to the study questionnaire. Most students that were invited for the completion of questionnaire responded within a month of initial contact. The final sample included 100 college students.

RESULTS

A total of 100 students participated in this questionnaire-based study conducted through social media such as WhatsApp and emails. The denouement was calculated in percentages and a comparative study was conducted. College students were partially aware of the outcomes of our lifestyles and the basic symptoms of GI disorders. However, they are unaware of its prevention, diagnosis, and treatment. According to the survey, there is a marked inflation in the frequency of consumption of outside food as shown in Figure 1. Only about 18% are aware that Crohn’s disease, gastric ulcers, and appendicitis are all a part of GI disorders [Figure 2]. 80% concluded that our lifestyle and food habits have a greater effect on GI disorders. Among the student population, 60% are not aware of the term colonoscopy [Figure 3]. On the basis of the survey, 59% of the students know the preventive measures to avoid GI disorders [Figure 4]. Majority of the students are not aware of the diagnosis and treatment of GI disorders. Comparatively, 57% are willing to incorporate the required changes to prevent GI disorders.

Figure 1: Frequently consumed food

Figure 2: Awareness of terms related to gastrointestinal disorders
DISCUSSION

The pathophysiology of GI disorders is complicated, with many interrelated factors involved in the development of the disorders. The severity of the symptoms in GID may vary over the time.[19] Stress, physiologic factors, and other extrinsic factors can often be triggering factors for the symptoms of GID. Hypersensitivity is presumed to be closely related to the manifestation of abdominal symptoms, demonstration of direct relationships between such abnormalities and the symptoms has not be easy. Furthermore, life stress and other such psychosocial factors are important in the pathophysiology of GIDs.[20] Because there are almost no treatments that can correct such physiologic abnormalities of the GI tract and thereby relieve the patients’ symptoms, physicians have great difficulty treating patients with those abnormalities. While there are hopes for effective drug treatments, the placebo effect is large and the true efficacy of the available drug treatments is extremely limited.[21] In clinical practice, treatment of GID patients commonly includes advice on stress management and improvement of lifestyle by modification of diet, exercise habits, and other such factors, yet so far there have been almost no surveys of the actual lifestyles of GID sufferers.[22]

The present internet questionnaire study was conducted in the hope that obtaining a clearer picture of the amount of awareness of GID among college students will be helpful in the positioning of advice on lifestyle modification in the strategy for treating GIDs as stated in Figures 1-4.

CONCLUSION

This survey shows that the college students are partially aware of the outcomes of our lifestyles and the basic symptoms of GI disorders. However, they are unaware of its diagnosis and treatment. Hence, an increased awareness of GI disorders has to be incorporated among the college students due to our current lifestyles.

REFERENCES


13. Nakada K, Kawasaki N, Kosone M. Investigation of the eating lifestyle...


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