UNIVERSITY OF BABYLON COLLEGE OF MEDICINE



Gastrointestinal Upset disorders

In Medical Stagiare

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ABSTRACT:

Background: GIT disorders are one of the common health problems in our community and are influenced by many factors.

Aim to study :to determine the incidence of GIT disorders in final year medical students of Babylon medical university, risk factors, sign and symptoms.

Material and methodology :cross_sectional descriptive analytic study of (95) students was done at Babylon medical university with their answers to prepared form

Results: A total of 95 students,95 was valid with (41.1%)male and (58.9%)female.

Conclusion :the frequency of GIT upset is high in final year medical students especially at 21 to 38 years old with (22.1% and 40%) respectively. The most common issue is IBS Symptoms of nausea, vomiting, abdominal pain, abdominal distention, heartburn, flaunting, with many cases like stress of examination

Key words :GIT disorders, medical students, stress, nausea, vomiting, diarrhea, constipation, heartburn.

INTRODUCTION:

Is a functional bowel disorder characterized by abdominal pain or discomfort and altered bowel habits in the absence of detectable structural abnormalities. No clear diagnostic markers exist for IBS; thus the diagnosis of the disorder Is based on clinical presentation. In 2016, the Rome III criteria for the diagnosis of IBS were updated to Rome IV (Table 320-1). Throughout the world, about 10–20% of adults and adolescents have symptoms consistent with IBS, and most studies show a female predominance. IBS symptoms tend to come and go over tIme and often overlap with other functional disorders such as fibromyalgia, headache, backache, and genitourinary symptoms. Severity of symptoms varies and can significantly Impair quality of life, resulting in high health care costs. Advances in basic, mechanistic, and clinical investigations have improved our understanding of this disorder and its physiologic and psychosocial determinants. Altered gastrointestinal (GI) motility, visceral hyperalgesia, disturbance of brain–gut interaction, abnormal central processing, autonomic and hormonal events, genetic and environmental factors, and psychosocial disturbances are variably involved, depending on the individual. This progress may result in improved methods of treatment.

Functional Dyspepsia:

Nearly 25% of the populace has dyspepsia at least six times yearly, but only 10-20% present to clinicians. Functional dyspepsia, the cause of symptoms in >70% of dyspeptic patients, is defined as bothersome postprandial fullness, early satiety, or epigastric pain or burning with symptom onset at least 6 months before diagnosis in the absence of organic cause. Functional dyspepsia is subdivided into postprandial distress syndrome, characterized by meal-induced fullness and early satiety, and epigastric pain syndrome, which presents with epigastric pain or burning which may or may not be meal-related. Most cases follow a benign course, but some with H. pylori infection or on nonsteroidal

anti-inflammatory drugs (NSAIDs) develop ulcers. (Harrison's Principles of Internal Medicine.

Functional Abdominal Pain Syndrome:

FAPS represents a pain syndrome attributed to the abdomen that is poorly related to gut function, is associated with some loss of daily activities, and has been present for at least 6 months. The pain is constant, nearly constant, or at least frequently recurring. The principal criterion differentiating FAPS from other functional gastrointestinal disorders, such as irritable bowel syndrome (IBS) and functional dyspepsia, is the lack of symptom relationship to food intake or defecation. FAPS commonly is associated with a tendency to experience and report other somatic symptoms of discomfort, including chronic pain thought to be related to the gynecologic or urinary systems. Psychological disturbances are more likely when pain is persistent over a long period of time, is associated with chronic pain behaviors, and/or dominates the patient's life.1 In psychiatric nosology, FAPS would qualify as a somatoform pain disorder and satisfy a pain criterion toward the diagnosis of somatization disorders.

Functional vomiting :

Is characterized by frequent episodes of recurrent vomiting that are not self-induced or medication-induced. It occurs in the absence of eating disorders, major psychiatric diseases, abnormalities in the gut or central nervous system, or metabolic diseases that could explain the symptom1. It's a condition that falls under the category of functional gastroduodenal disorders.

Functional heartburn:

Is defined as the presence of the same heartburn symptoms that are caused by gastroesophageal reflux disease but without any evidence of abnormal esophageal acid exposure, physiologic acid reflux exposure that highly correlates with symptoms and recognized esophageal motility disorders. Thus, functional heartburn is not caused by gastroesophageal reflux disease or a well-defined esophageal motility disorder.

OBJECTIVE:

-To determined the frequency of functional GIT disorder in 6th stage medical student. -To determined the accompanying symptoms and compare it with their behaviours, eating habits, perferances and lifestyle.

*Table(1-13)

People who have had a chronic disease before entering medical college	Number of people	Percentage
Yes	14	14%
No	86	86%
Total	100	100%

*Table(2-13)

Gender	Number of people	Percentage
Male	42	42%
Female	58	58%
Total	100	100%

*Table(3-13)

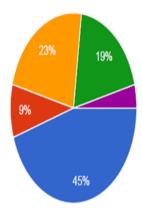
Age(in years)	Number of people	Percentage
18-21	4	4%
22-25	87	87%
26-29	9	9%
Total	100	100%

*Table(4-13)

The symptoms associated with GIT upset	Number of samples	percentage
Diarrhea	10	10%
Constipation	4	4%
Abdominal pain	19	19%
Nausea and vomiting	10	10%
Heartburn	6	6%
No symptoms	51	51%
Total	100	100%

*Table(5-13)

Type of gastrointestinal upset	Number of people	Percentage
Irritable Bowel Syndrome (IBS)	45	45%
Functional abdominal pain	23	23%
Functional dyspepsia	9	9%
Functional heartburn	19	19%
Functional vomiting	4	4%
Total	100	100%



IBS
Functional dyspepsia
Functional abdominal pain
Functional heartburn
Functional vomiting

*Table(6-13)

Patient council specialist	Number of samples	Percentage
Yes	32	32%
No	68	68%
Total	100	100%

*Table(7-13)

The complains effect on student study	Number of samples	Percentage
Yes	58	58%
No	42	42%
Total	100	100%

*Table(8-13)

Symptoms increase during exam	Number of samples	percentage
Yes	87	87%
No	13	13%
Total	100	100%

*Table(9-13)

Effect on study time	Number of samples	percentage
Effect	59	59%
Non effect	41	41%
Total	100	100%

*Table(10-13)

Symptoms improve at time of holiday	Nmber of samples	Percentage
Yes	86	86%
NO	14	14%
Total	100	100%

*Table(11-13)

Stay on medication	Number of samples	Percentage
Yes	28	28%
No	72	72%
Total	100	100%

*Table(12-13)

The type of food in medical college effect on symptoms	Nmber of samples	Percentage
Effect	54	54%
Non effect	46	46%
Total	100	100%

*Table(13-13)

Type of food at home better than college	Nmber of samples	Percentage
Yes	71	71%
No	29	29%
Total	100	100%

DISCUSSION:

Our study was equated with other studies conducted Iraqi medicine colleges. A cross-sectional study was conducted at Babylon university,college of medicine. with theobjective of assessing the frequency of gastrointestinal upset in 6th stage of medical college. Out of 100 students interviewed found (14%) complain from chronic gastrointestinal diseases(1-13)* and about 58(58%)were females complain from episodes of git upset (2-13)*,Majority of them aged between 22-25 years (3-13)*. Abdominal pain was found in 19 students (19%) out of which 6 students (6%) also complained of heartburn. The study concluded that the percentage of students having weekly episodes of heartburn was significantly higher than that in general medical student $(4-13)^*$. features, with regard to functional disorders in medical student. subjects reported the symptoms that occurs during exam such as: , diarrhea, constipation, abdominal pain, Nausea and vomitin, heartburn these symptoms increase during exam in (87%) of these students (8-13)*. A higher prevalence of no symptoms in students was a (51%) difference between sexes. Dyspepsia and IBS were identified by clinical criteria in 9% and 45% subjects respectively. About (32%) of student due to effect their life (7-13)* and effect on study time (58%)of these students councils the specialist about this problem(6-13)* due to their complain effect on their study and their degrees on examination (58%). And they stay on medications (28%) to relieve the symptoms. The percentages have been show the symptoms improve at time of holiday about (86%).and due to irregular life style and dependent in majority of their nutrition on fast food in medical college which effect on symptoms about (54%)(12-13)*.and the screening show the food at home it benefit and doesn't increase the symptoms in about 71 of 6th medical students (71%)(13-13)*.

CONCLUSION:

The frequency and percentage of gastrointestinal disorders (Irritable bowel syndrom, abdominal pain ,heartburn) was greater in Final year medical students particularly Irritable Bowel syndrom and abdominal pain . The most symptoms associated withe GIT upset (no symptoms , abdominal pain , diarrhea) etc . The percentage of GIT disorders increased espically in 22-25 age of students . There were more cases in females in contrast to males . The ratio of GIT disorders, especially Irritable bowel syndrom and abdominal pain was strikingly high in students eating food from medical collage however student eating from home show improved in symptoms . The students who were during exam showed more fractions of disorders as compared to students who are in holiday time showed improved in symptom . The percentage of GIT disorders at studay time showed increased in symptoms .Majority of these student dont have chronic disease before entring medical college . This complains of GIT upset effect Significantly on student study . Majority of these student had a council specialist . However low percentage of these student stay on medication.

LIMITATIONSRE:

Irritable Bowel Syndrome (IBS):

Most studies regarding Irritable Bowel Syndrome (IBS) have their limitations in having involved only a small number of patients and lacking complete understanding of factors that influence the disease outcome.IBS-AR suffers from serious limitations. First, as IBS encompasses a constellation of symptoms that vary from subject to subject, a binary endpoint does not effectively capture the treatment response of a product on critical individual symptoms. Second, the sample size required to detect statistically significant differences between groups is largest when the outcome is binary (i.e. yes/no). A considerable increase in power, with a concomitant reduction in sample size, may be obtained if a continuous or ordinal endpoint can be used . There are other limitations of the crossover design. This design is not appropriate in interventions with a prolonged carry-over effect, which may result in a lingering treatment effect of the first intervention after the washout period. The duration of the washout period should always be longer than the time required for a treatment effect to diminish after discontinuing product use. **Functional Dyspepsia:**

As a gastrointestinal disease that plagues many people, FD has gradually developed into a chronic disease, bringing a heavy burden to the medical and health field. Since the Rome I standard was put forward, the related research on FD has also experienced rapid growth, but no research has comprehensively analyzed the

current situation and development trend of FD. This study is the first to use themethod of bibliometrics to analyze the development, changes, and research hotspotsof FD in the past 20 years, to provide research reference for peers. Although thisstudy provides a detailed analysis of the FD research field, there are somelimitations. First, this study only searched the WOS Core Collection, ignoringdatabases such as Embase and Medline; however, these databases contain a largeamount of literature. This may lead to incompleteness of the included literature.Second, we limit the language of the research to English and the type of research toreviews or articles, which may lead to the omission of some high-qualitydocuments.

Functional Abdominal Pain Syndrome:

This study also has some limitations. First, our study population was recruitedfrom Medical College in Babylon, which may limit the generalizability of thesefindings due to potential regional differences between our study population andStagiaires from other provinces in Iraq. Therefore, our findings may not reflect thereality of the Stagiaire population in Iraq. We plan to conduct a multiregional studyin the future to learn the role of academic stress in stagiaires with FAPDs all overIraq. Our study is useful in educating students not to underestimate their role in theiracademic health, and we will conduct studies to develop guidelines on educationand assess the positive effects on symptoms after students change their behaviours.

Functional Heartburn:

One limitation of our study is the lack of outcome prospective data as noinformation on the response to a standardised therapeutic approach in the described patient groups are currently available. However, considering the previous response oPPI treatment referred to by the majority of our patients before entering the studywe can argue that patients with abnormal distal oesophageal acid exposure and/orpositive symptom association and dyspeptic symptoms do respond better toantisecretive treatment compared to patients with negative symptom association and yspeptic symptoms. Evaluating patients on a Mediterranean diet could also be regarded as a shortcoming of the present study with the argument that it was not reflux ogenic enough to induce symptoms

RECOMMENDATIONS:

Based on the findings of the study on gastrointestinal problems in 6th stage medical students at Babylon University College of Medicine, these are some recommendations: 1.Health Education: Implement health education programs to raise awareness among medical students about gastrointestinal health, including the importance of maintaining a healthy diet, regular exercise, hydration, and stress management techniques.

2.Stress Management: We provide students with stress management tools and resources to help them cope with the pressures of exams and academic demands, which can contribute to gastrointestinal symptoms.

3.Nutrition Counseling: Offer nutrition counseling services to educate students on the impact of their dietary choices on gastrointestinal health. Encourage them to make healthier food choices and reduce reliance on fast food.

4.Regular Physical Activity: Promote regular physical activity among students to improve digestion, reduce stress, and enhance overall well-being.

5.Access to Specialists: Ensure that students have easy access to specialists, such as gastroenterologists, for evaluation and management of chronic gastrointestinal conditions. Encourage students to seek professional help when needed.

6.Supportive Environment: Create a supportive environment where students feel comfortable discussing their gastrointestinal concerns and seeking help without fear of judgment or stigma.

7.Regular Health Screenings: Encourage students to undergo regular health screenings to monitor their gastrointestinal health and detect any potential issues early on.

8.Healthy Lifestyle Choices: Emphasize the importance of maintaining a healthy lifestyle, including adequate sleep, regular meal times, hydration, and avoiding excessive consumption of caffeine and alcohol.

9.Study Environment: Provide students with a conducive study environment that promotes healthy habits, such as balanced nutrition, hydration, and breaks during study sessions to prevent excessive stress.

10.Follow-Up Care: Ensure that students receive appropriate follow-up care for their gastrointestinal symptoms, including medication management and monitoring of symptoms over time.By implementing these recommendations, we can support the gastrointestinal health and overall well-being of its 6th stage medical students. It is important to prioritize student health and promotes physical and mental well-being.

References: -Davidson,Seanson,Harrison's,Meksap textbooks -WHO,CDC,Medscape,Myoclinic websites



