

Study Regarding GIT Disorders among 4th Year MBBS Students Nishtar Medical University, Multan

1st Dr. Madeeha Saddique 2nd Dr. Iftikhar Ahmed 3rd Dr. Sana Laraib

Abstract:

Increasing cases of students taking medical leave due to GI disorders have been noted with alarming frequency. Thus we carried out a study of GI disorders among students of 4th year MBBS students and compared the results between boarder and non-boarder students to pin point the causative factors related to the percentages calculated from both.

Keywords:

GI disorders, Boarders, Non-boarders, MBBS students NMU.

Objective

To study the prevalence of GI disorders among 4th year MBBS students of NMU, Multan.

Materials and Methods

It was descriptive cross-sectional study of non-probability convenient technique. Study was earned out on 4th year MBBS students, NMU, Multan. Total number of students was 218. Study was conducted from 07-09-2017 to 23-09-2017. Data was analysed using SPSS.

Results

Out of 218 students, 186 suffered from GI disorders, the most common being Gastritis (30.9%), GERD (26.5%), PUD (18.4%), IBS (11.8%), and others (12.5%) most commonly in boarders (67.8%) than nonboarders (56.3%) and gender wise increased in males (66.6%) than in females (58.18%). Students presented with Acidity Dyspepsia (47%). Flatulence (23.5%), Abdominal pain (17%), Vomiting (6.6%), and others (5.9%). Common causes included are family history (40%), smoking (17.5%), not washing hands before a meal (78.8%), stress (50.5%), soft drinks (52.8%) and hostel mess food (51.4%). Only 32% were taking medication for these disorders.

Conclusion

Majority of medical students are having GI disorders and frequency is higher among boarders and those eating from hostel mess and drinking tap water. Major problems are GERD, Gastritis and PUD and associations are stress, family history, not washing hands before meal. Few are taking medications.

1. Introduction

GI disorders impose a substantial burden and are responsible for approximately 8 million deaths per year[5]. These are in particular becoming more common and have been linked to changing environmental factors and behavioral factors brought on by industrialization, changes in diet, increased use of antibiotics, sanitation problems and stress [6]. Common GIT disorders include GERD, IBS, Ulcerative colitis, Crohn's disease, diarrhea, Food poisoning, Jaundice, Dysentery and Typhoid.

A number of studies have highlighted the rapid growth of GIT diseases in Asian populations specially developing countries e.g. Pakistan. Both incidence and prevalence rates have shown a notable rise with scientists pointing out that GIT disorders increasingly the cause of morbidity in Asian countries. Pakistan is in top 5 diarrheal victims in world.

Are the major causes of GIT problems are sanitary problems, decreased immunity and environmental factors [3]. More than 2.5 Million cases occur annually in 2016-2017 in Pakistan [4], In students major cause is stress during exams, irregular and improper meals [11]

Abdominal pain was most common [5]. GIT symptom that prompted a clinic visit (15.9 M visits).GERD was most common GI diagnosis (8.9 M visits).Hospitalization and mortality from Clostridium difficile infection have doubled in last 10 years. Colorectal accounted for more than half of all GI cancers and was major cause of GI related mortality (52,394 deaths). There was 6.9 Million upper, 11.5 Million lower and 228,000 biliary endoscopies

performed in 2009. The total cost of GI endoscopy was \$32.4 billion.

Our research topic is “The frequency of GIT problems in students of 4th year MBBS in NMU, Multan”. It will help us to study the main causes of GI problems and their relationship to food and diet. It will determine whether frequency is greater in those using hostel food or homemade food. It will also help us establish the relationship between environment and GI problems and students psychology and GI problems.

2. Objective of study

- To determine frequency of GIT disorders in 4th year MBBS students in Nishtar Medical University, Multan.

3. Material and Methods

1. Study Design:

Study is Cross-Sectional type.

2. Sampling Technique:

Non-probability convenient technique.

3. Sample Size:

Total 218 students.

4. Study Population:

4th year MBBS students, NMU, Multan.

5. Setting:

Nishtar Medical University, Multan.

6. Duration of Study:

From 07-09-2017 to 23-09-2017.

7. Inclusion Criteria:

4th year MBBS students, NMU, Multan.

8. Exclusion Criteria:

All MBBS students of NMU except 4th year MBBS students.

9. Data Collection:

Data was collected using Structured questionnaire.

10. Data Analysis:

Data was analyzed using:

- Microsoft Office 2013
- Microsoft Word.
- SPSS 20.

4. Data Analysis

The data was entered and analyzed in a computer program SPSS v20 and reports were generated accordingly.

Table No. 1 Frequency Distribution Table Showing Gender wise Distribution of GI Disorders Among Medical Students of 4th year MBBS NMU.

GENDER	Total N = 218	FREQUENCY	%AGE
MALE	N = 108	72	66.6
FEMALE	N=110	64	58.18

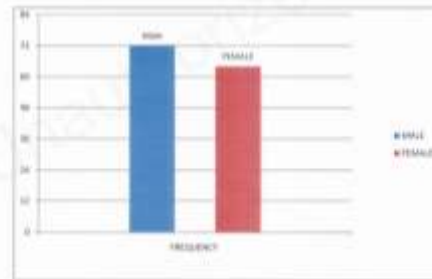


Figure. 1 Frequency Distribution Table Showing Gender wise Distribution of GI Disorders Among Medical Students of 4th year MBBS NMU.

Table No. 2 Frequency Distribution Table Showing Distribution of GI Disorders Among Medical Students of 4th year MBBS NMU.

GENDER	Total N = 218	FREQUENCY	%AGE
Boarders	N = 70+45 = 115	78	67.8
Non Boarders	N = 38+65 = 103	58	56.3

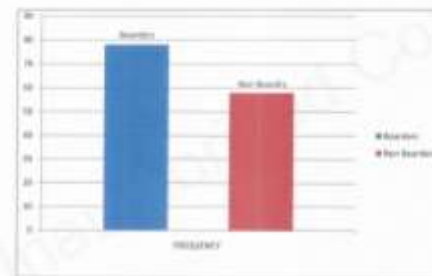


Table No. 2 Frequency Distribution Table Showing Distribution of GI Disorders Among Medical Students of 4th year MBBS NMU.

Table No.3 Frequency Distribution Table Showing Distribution of Different Types of GI Disorders among Medical Students of 4th year MBBS NMU.

GI Disorders	FREQUENCY	%AGE
GERD	16	36.5
Gastritis	42	30.9
Peptic Ulcer Disease	25	18.4
IBS	16	11.8
Others	17	12.5

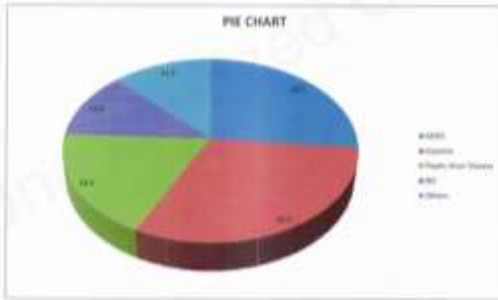


Figure.3 Frequency Distribution Table Showing Distribution of Different Types of GI Disorders among Medical Students of 4th year MBBS NMU.

Table No. 4 Frequency Distribution Table Showing Distribution of Symptoms of GI Disorders Among Medical Students of 4th year MBBS NMU.

Symptoms	FREQUENCY	%AGE
Acidity / Dyspepsia	64	47.00
Flatulence	32	23.5
Vomiting	9	6.6
Abdominal Pain	23	17
Others	6	4.4

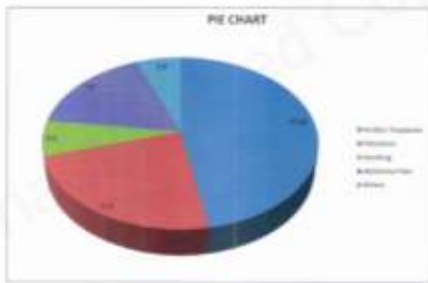


Figure. 4 Frequency Distribution Table Showing Distribution of Symptoms of GI Disorders among Medical Students of 4th year MBBS NMU.

Table No. 5 Frequency Distribution Table Showing Distribution of Presence of Family History of GI Disorders Among Medical Students of 4th year MBBS NMU.

Family History	FREQUENCY	%AGE
YES	85	40
NO	131	60

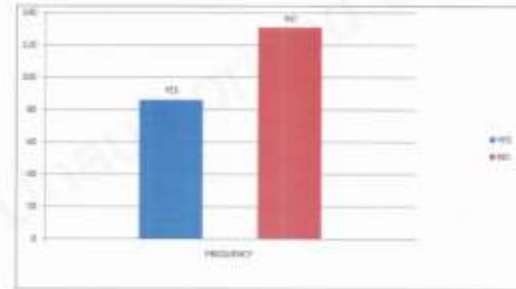


Figure. 5 Frequency Distribution Table Showing Distribution of Presence of Family History of GI Disorders Among Medical Students of 4th year MBBS NMU.

Table No. 6 Frequency Distribution Table Showing Distribution of Smokers / Non Smokers Among Medical Students of 4th year MBBS NMU.

Smoking	FREQUENCY	%AGE
Smokers	38	17.5
Non Smokers	180	82.5

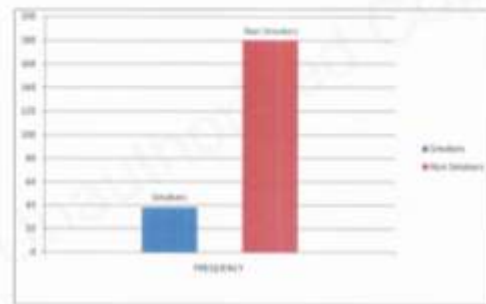


Figure. 6 Frequency Distribution Table Showing Distribution of Smokers / Non Smokers Among Medical Students of 4th year MBBS NMU.

Table No. 7 Frequency Distribution Table Showing Distribution of Hand Washing before Meal among Medical Students of 4th year MBBS NMU.

Hand Washing	FREQUENCY	%AGE
Yes	172	78.8
No	46	21.2

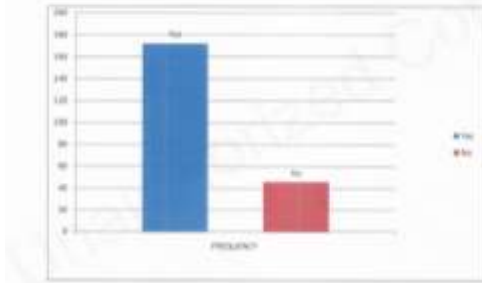


Figure. 7 Frequency Distribution Table Showing Distribution of Hand Washing Before Meal Among Medical Students of 4th year MBBS NMU.

Table No. 8 Frequency Distribution Table Showing Distribution of Stress Leading to GL Disorders Among Medical Students of 4th year MBBS NMU.

Stress	FREQUENCY	%AGE
Yes	110	50.5
No	108	49.5

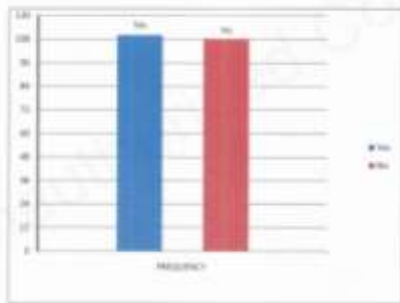


Figure. 8 Frequency Distribution Table Showing Distribution of Stress Leading to GL Disorders among Medical Students of 4th year MBBS NMU.

Table No. 09 Frequency Distribution Table Showing Distribution of Carbonated Drinks Intake Habits Among Medical Students of 4th year MBBS NMU.

Carbonated Drink Intake Habits	FREQUENCY	%AGE
Sometimes	115	52.8
Mostly	67	30.8
Not at All	30	16.4

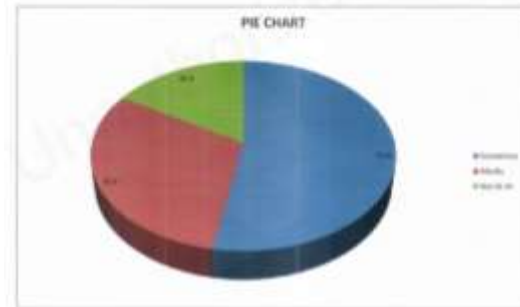


Figure. 09 Frequency Distribution Table Showing Distribution of Carbonated Drinks Intake Habits Among Medical Students of 4th year MBBS NMU.

Table No. 10 Frequency Distribution Table Showing Distribution of Type of Water Intake Among Medical Students of 4th year MBBS NMU.

Type of Water Intake	FREQUENCY	%AGE
Tap Water	54	24.8
Filter Water	137	62.8
Mineral Water	27	12.4

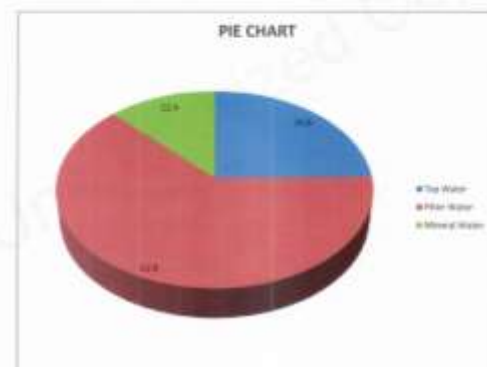


Figure. 10 Frequency Distribution Table Showing Distribution of Type of Water Intake Among Medical Students of 4th year MBBS NMU.

Table No. 11 Frequency Distribution Table Showing Distribution of Different food types Intake Among Medical Students of 4th year MBBS NMU.

Food Types	FREQUENCY	AGE
Vegetables	54	29.8
Meat	52	29.6
Rice	50	28.6
Fast Food	33	25

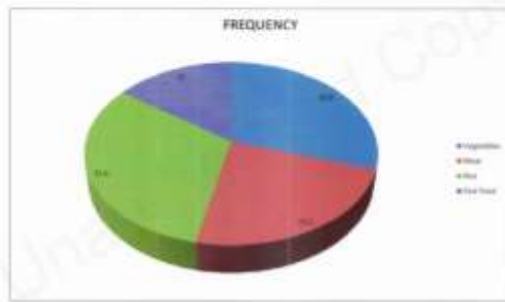


Figure. 11 Frequency Distribution Table Showing Distribution of Different food types Intake Among Medical Students of 4th year MBBS NMU.

Table No. 13 Frequency Distribution Table Showing Distribution of Meals per Day among Medical Students of 4th year MBBS NMU.

Meals Per Day	FREQUENCY	AGE
2 Times / Day	95	43.6
3 Times / Day	116	53.2
More than 3 / Day	7	3.2

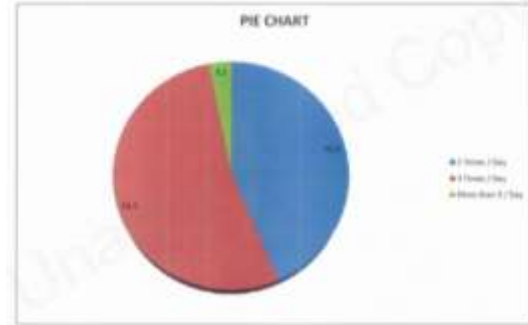


Figure. 13 Frequency Distribution Table Showing Distribution of Meals Per Day Among Medical Students of 4th year MBBS NMU.

Table No. 12 Frequency Distribution Table Showing Distribution of Different food Sources Among Medical Students of 4th year MBBS NMU.

Food Sources	FREQUENCY	AGE
Hostel Mess	112	51.8
Home Made	78	35.8
Restaurant	28	12.8

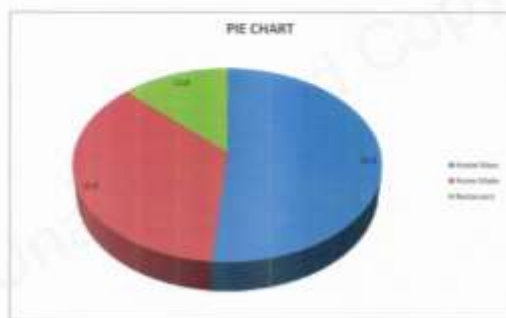


Figure. 12 Frequency Distribution Table Showing Distribution of Different food Sources Among Medical Students of 4th year MBBS NMU.

5. Discussion

The present study is one of its kinds as very meager amount of data is available on GIT disorders among medical students. In this study, prevalence of GIT disorders was found to be 62.38%, more common in age group 20-25 years. Whereas a study conducted in Central India in 2016 showed prevalence to be 63.17%, common in age groups 20-30 years [7].

Our study showed Gastritis to be the most common (26.5%) GIT disorder. Contrary to it study conducted in Central India IBS to be the most common GIT disorder; according to gender prevalence 69.10% in boys and 52.43% in females [7], while in our study Male to Female ratio of prevalence is 66.6%:58.15%. On the contrary, Michaele Fadgyas Stanculetestudy showed that females are more common sufferers [9],

Our study showed that GIT problems are more common in boarders (67.8%) as compared to non-boarder student (56.3%).which is similar to Central India study and study of Michaele Fadgyas Stanculete [7-9].

Most common GI symptom in our study is found to be Acidity (47%) followed by flatulence (23.5%) and abdominal pain (17.1%). It is similar to Central India study on students in which Acidity was the most common (72%) symptom [7],

Major associations found are not washing hands before a meal (78.8%), soft drinks (52.8%), food of hostel mess (51.4%), stress (50.5%), family history (40%) and smoking (17.5%). Only 30.2% of students are taking medications for their disorders.

According to WHO, majority of GIT disorders are attributed to unsafe water, inadequate sanitation, improper hygienic practices [2] of mess workers, food vendors and at the restaurants during cooking or handling of food is associated with occurrence of GIT disorders in medical students.

6. Conclusion

Our study concluded that:

- Almost 75% of students are suffering from GIT disorders,
- Majority presented with Acidity and flatulence.
- Most common GIT disorder being Gastritis.
- GIT disorders are most common in boarders (67.8%).
- Increased incidence in males.
- Common causes are family history, smoking, not washing hands before meals, stress (50.5%), soft drinks, food of hostel mess.

7. Limitations

1. Only 4th year students were involved.
2. Only medical students from Nishtar Medical University are involved.
3. Time of our study was limited.
4. Sample size was small i.e 218.
5. Age-group was limited, the survey was not epidemiologically sound.
6. Time constraints prevented us from gathering more information.
7. The results are not applicable on large scale.

8. Recommendations

1. Health education of students about the cause, consequences and prevention of GIT disorders should be promoted.
2. Daily exercise i.e morning walk, gym, jogging etc.
3. Avoid excessive use of fast food.
4. Avoid smoking and other tobacco uses.
5. There should be proper monthly checkout and renovation of mess and other sanitary facilities.

6. Personal hygiene should be promoted among all students either boarder or non-boarder.
7. Avoid excessive drinking of soft drinks.
8. Take proper sleep at proper time approximately 6-8 hours.

9. References

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