

## Article: Clinical outcome dyspeptic patients underwent upper endoscopy for outpatients and hospitals in Dhi Qar Governorate for the period 2022-2023.

Dr. Faez Khalaf Abdulmuhsen<sup>1</sup>, Dr. Adeeb Abdulally Abdulhussien<sup>2</sup>, MSC Zainab M. Farhan<sup>3</sup>, Soror Ayad Khudhair<sup>4</sup>, Hassan abbas saeed<sup>5</sup>, Zahraa Noori Nayef<sup>6</sup>

<sup>1</sup>. Assist. prof Consultant, FACP, FIBMS CABM-MED, FIBMS G&H internal medicine Department college of Medicine university of Thi-Qar

<sup>2</sup>. Lecturer, college of medicine, Thi-Qar University

<sup>3</sup>. Thi-Qar Health Department - Imam Hussein Teaching Hospital, peace be upon him.

[adeeb-abdl@utq.edu.iq](mailto:adeeb-abdl@utq.edu.iq), [zainab.farhan@nust.edu.iq](mailto:zainab.farhan@nust.edu.iq)

Cite this paper as: Faez Khalaf Abdulmuhsen, Adeeb Abdulally Abdulhussien, Zainab M. Farhan, Soror Ayad Khudhair, Hassan abbas saeed, Zahraa Noori Nayef (2024) Article: Clinical outcome dyspeptic patients underwent upper endoscopy for outpatients and hospitals in Dhi Qar Governorate for the period 2022-2023. *Frontiers in Health Informatics*, 13 (3), 1576-1588.

### Abstract

#### **Background:-**

Functional (FD) is the most common cause of dyspeptic symptoms. It refers to a heterogeneous group of symptoms located in the upper abdomen. The prevalence of dyspepsia is variable in different populations and is related to the different definitions of dyspepsia as inclusion criteria, variation in the survey population and environmental factors. Epidemiologically some risk factors have been identified and underlying psychological disturbances have been shown to be important factors in FD. Age and ethnicity do not appear to be predictive of dyspepsia. A majority of patients suffering from significant levels of abdominal pain that interrupt daily activities and treatment remains unsatisfactory in this Chronic condition. **Methods and Results :** The study was conducted in the Department of Endoscopy, at Al-Hussein teaching Hospital, near the College of Medicine, in the Governorate of Diwali, southern Iraq, from July 2022 to March 2023. It is hospital-based observational study. Patients of dyspepsia with or without alarm features were screened. Upper gastrointestinal (UGI) endoscopy was done in the 662 patients. The most common age was between 21-60 years old, the females were 412 (62.2%) and the males were 250 (37.8%). **Conclusion:** Dyspepsia is a native common entity in day-to-day practice. The presence of alarm symptoms is statistically associated with more organic lesions on endoscopy. Dyspepsia in ages above 50 years is commonly associated with underlying organic lesions or malignancy. UGI endoscopy is as impel proceed are that can be undertaken for early diagnosis of benign as well as malignant lesions in patients presenting with dyspepsia.

**Keywords:-** UGI, Endoscopy, dyspepsia, proton pump inhibitor, NSAIDs)

#### **Objectives :**

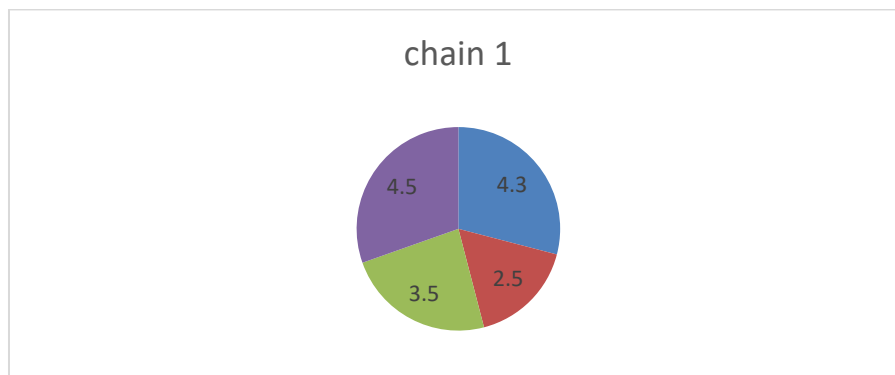
1. Analyze colonoscopic findings in patients with severe hematochezia, specifically identifying sources of bleeding.
2. Risk Stratification by Age and Gender: Determine if particular age groups or genders are more susceptible to colonic bleeding etiologies.

3. Assess the effectiveness of diagnostic methods, such as colonoscopy, in diagnosing and treating LGIB.

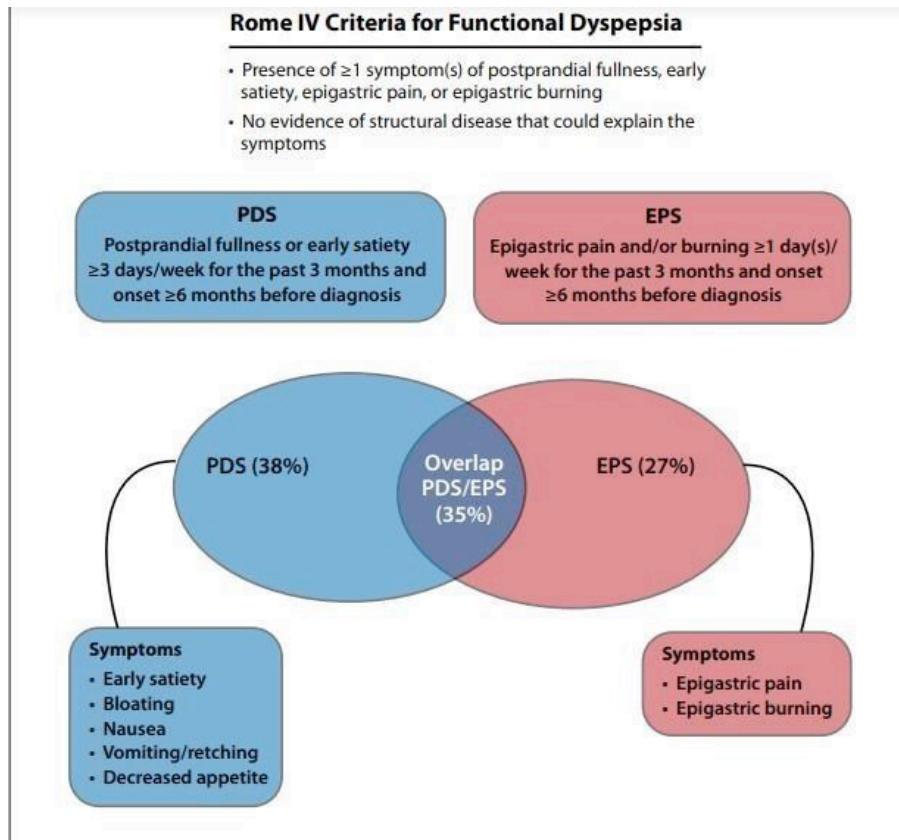
**I:Introduction :-**

Dyspepsia comes from the Greek word sand, which literally means "difficult digestion." Dyspepsia can dyes and peeps occur due to organic causes, but the majority of patients suffer from function AL dyspepsia(FD). It is broadly characterized as upper-abdominal pain or discomfort with symptoms including epigastria pain, postprandial fullness, early satiety, anorexia, belching, nausea and vomiting, upper-abdominal bloating, and even heartburn and regurgitation<sup>1</sup>. People with function dyspepsia have a significantly reduced quality of life when compared to the general population. In are cent community survey of several European and North American populations, more than 50% of dyspepsia sufferers were on medication most of the time and approximatly30%of dyes peptic reported taking days off work or schooling due to their symptoms<sup>2</sup>.

Several consensus definitions of dyspepsia and FD have been proposed. Earlier definitions considered dyspepsia to consist of all upper abdominal and retrosternal sensations<sup>3</sup>. Over time, dyspepsia criteria have narrowed to include symptoms from the gastro-duodenal area rather than the esophagus. The Rome I and II consensus committees described dyspepsia as pain or discomfort in the upper abdomen. The Rome II committee recommends diagnosing GERD if heartburn is the primary symptom, rather than dyspepsia<sup>4</sup>.



**Fig 1: The Rome I and II defined dyspepsia as pain or discomfort centered in the Upper abdomen**

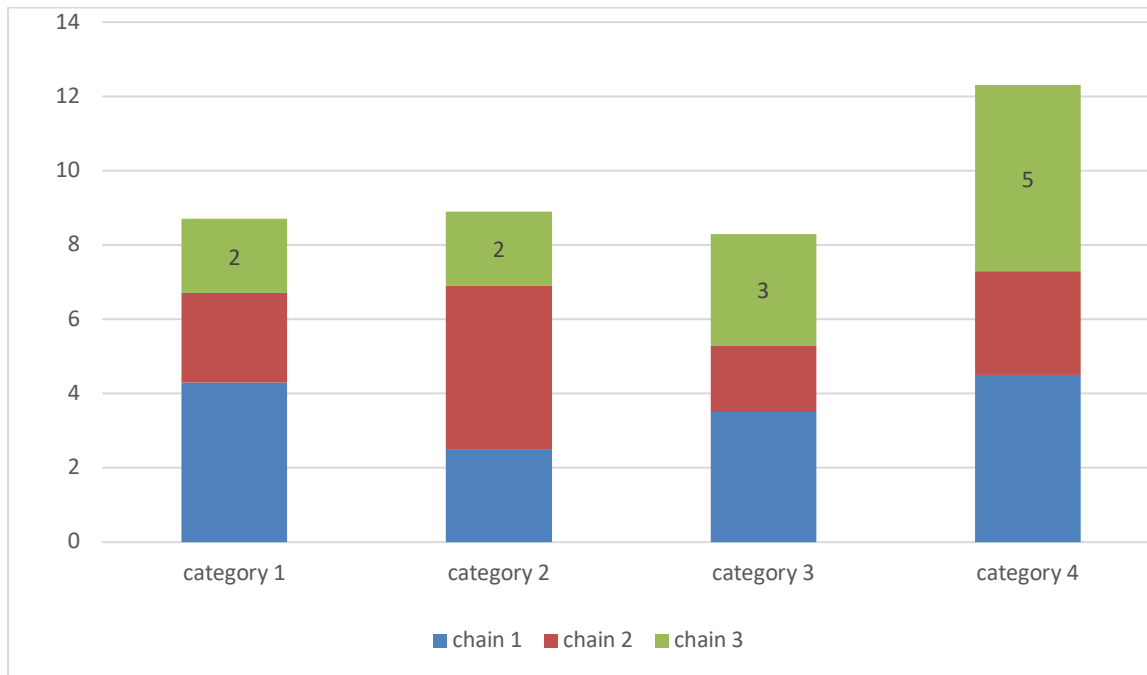


**Fig 2: Rome IV Criteria for Functional Dyspepsia**

**II. Methodology :**

**Study design :**

The study was conducted in the Department of Endoscopy, at Al-Hussein teaching Hospital, near the College of Medicine, in the Governorate of Dhi Qar, southern Iraq, from July 2022 to March 2023. It is hospital-based observational study. Patients of dyspepsia with or without alarm features were screened. Upper gastrointestinal (UGI) endoscopy was done in the 662 patients. The most common age was between 21-60 years old, the females were 412 (62.2%) and the males were 250 (37.8%).



**Fig 3: the design of the Study conducted in the laboratory.**

### III .Results and Discussion

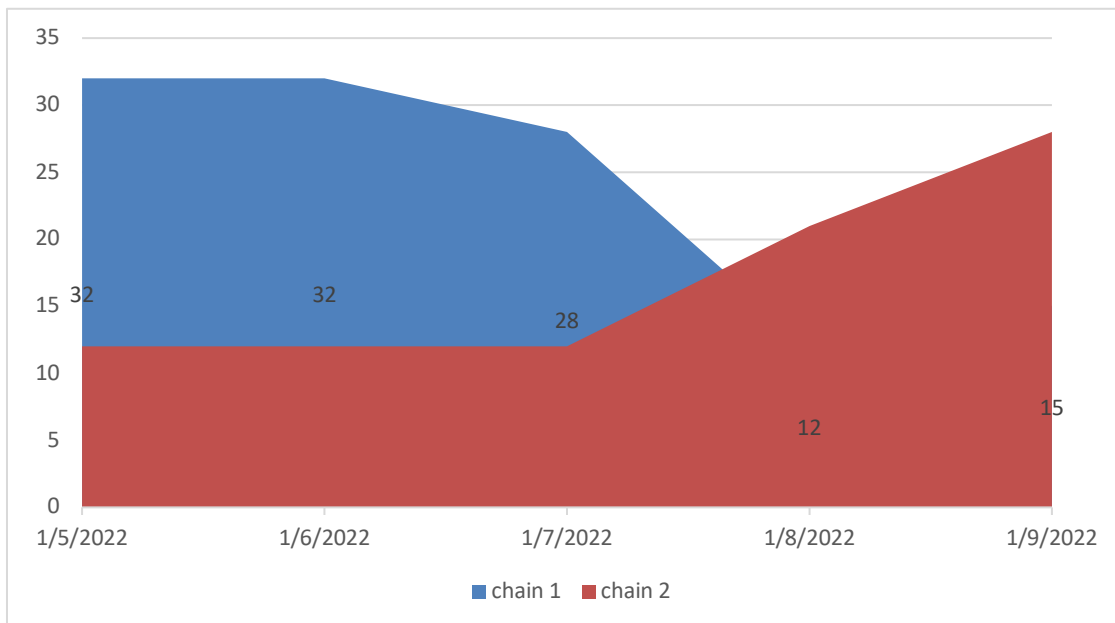
#### 3.1 : Results :-

##### 3.1.1 :- Study of population :

It is advised that the initial course of treatment for a patient exhibiting dyspeptic symptoms be endoscopy. Gastric ulcers (1.6–8.2%), duodenal ulcers (2.3–12.7%), oesophagitis (0–23.0%), and gastric malignancies (0–3.4%) are the most often observed significant endoscopic abnormalities. Healing of the organic cause does not always lead to full symptom relief, hence the relationship between the organic causes of dyspepsia and dyspepsia symptomatology can frequently be unclear. The poor or nonexistent connection between erythematous/exudative duodenitis or gastritis and symptoms further demonstrates the ambiguous or moderate endoscopic inflammatory gastro-duodenal abnormalities and dyspeptic symptoms. With the probable exception of peptic ulcer disease and duodenitis detected by endoscopy, endoscopic results in individuals with dyspepsia do not exhibit a clinically significant correlation with dyspeptic symptoms when compared to age- and sex-matched controls. It is still very subjective to draw the distinction between organic and functional dyspepsia, which is mostly based on endoscopic results.

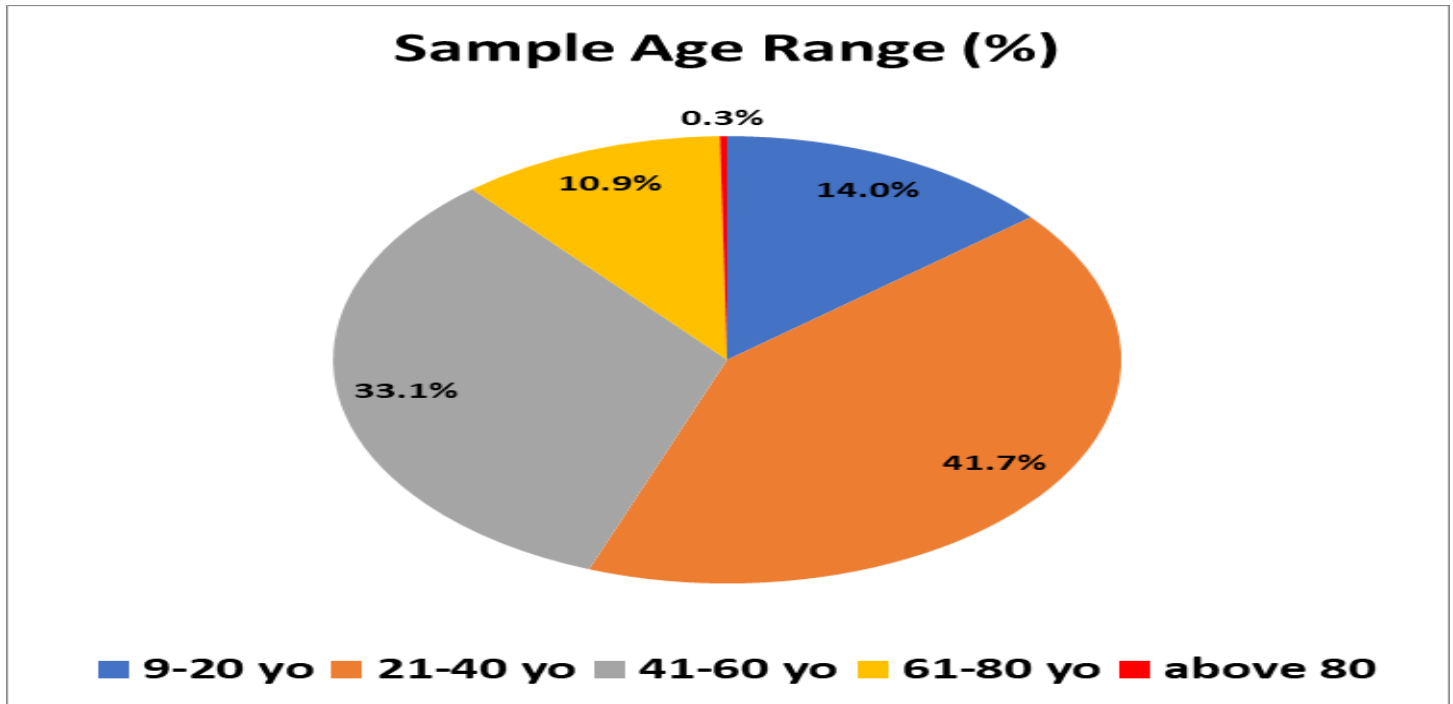
**3.1.1.1: Describe the sample size:**

Age range	Count	Percentage (%)
9-20 y	93	14.0%
21-40 y	276	41.7%
41-60 y	219	33.1%
61-80 y	72	10.9%
above 80	2	0.3%
<b>Total</b>	<b>662</b>	<b>100.0%</b>



**chart 1: Describe the sample size**

chart 2: describe sample age range %



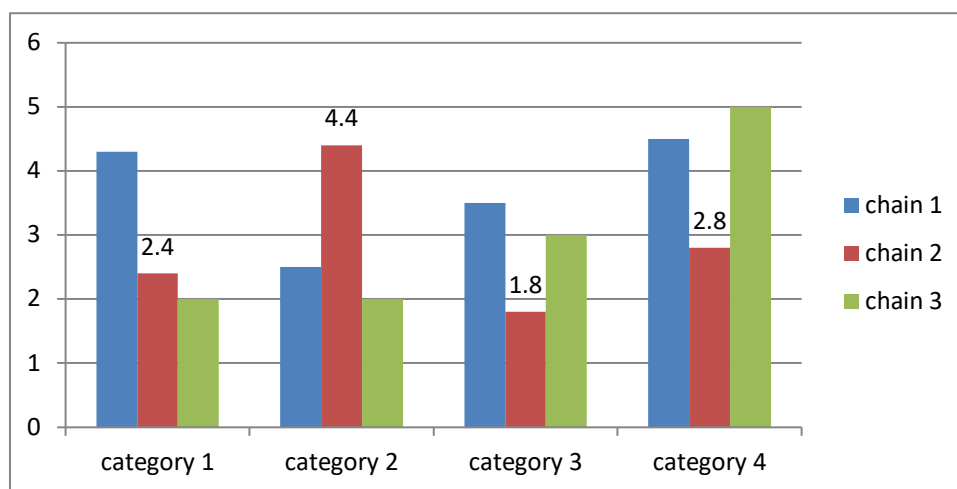
3.1.1.2 :Sample Gender:

Chart 3: describe sample gender

3.1.1.3: Sample History per gender and Age:

History	Female					Female total	male					Male total	total
	9-20 y	21-40 y	40-60 y	60-80 y	Above 80 y		9-20 y	21-40 y	40-60 y	60-80 y	Above 80 y		
Dyspepsia	31	73	56	15		175	7	50	40	25	1	123	298
Dyspepsia + irritable	1	8	15	3		27		12	8	3		23	50
Dyspepsia	3	5	8	1		17		3		2		5	22

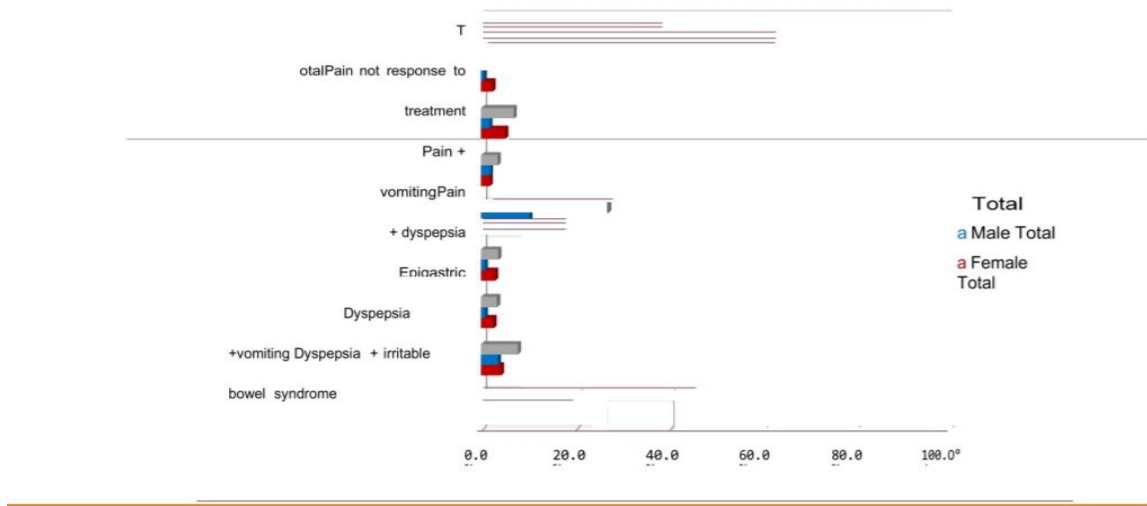
+vomiting														
Dyspepsia does not	6	10	3			19	2	2		1		5	24	
Epigastric pain	19	51	36		7	113	8	23	25	11		67	180	
Pain + dyspepsia	2	3	4		2	11		5	7			12	23	
Pain + vomiting	9	10	13		1 1	34	1	9	2			12	46	
Pain not responding	4	10	1		1	16		2	1			3	19	
Total	75	170	136	30	1	412	18	106	83	42	1	250	662	



**Fig 4: distribution samples per gender and age**

Dyspepsia is a chronic ailment for which there is now no acceptable therapy. Most patients have high amounts of stomach pain that interfere with their everyday activities, but the condition is seldom deadly<sup>5</sup>. Because of the high rate of job absenteeism, low productivity, and utilization of health care resources, it places a heavy cost on society. Thus, the effects of dyspepsia on a number of Western populations have been used to evaluate the

condition's impact. quality of life in relation to health (HRQOL)<sup>6</sup> One research was negative, but two were "positive" in that they demonstrated a substantial decline in HRQOL, at least in certain areas, between patients with functional dyspepsia and controls. Physical domain scores generally decreased in a manner akin to that of mental domains<sup>7</sup>.



3.1.1.4: Rate History response per gender and Age

Fig 5. Sample History per gender and Age

History %	Female					Fem ale total	male					Mal e tota l	total
	9-20 y	21-40 y	40-60 y	61-80 y	Ab ove 80 y		9-20 y	21-40 y	40-60 y	61-80 y	Ab ove 80 y		
Dyspepsia	4.7	11.	8.5	2	3		1.1	7.6	6.0	3.8			45.0 %
	%	0%	%	%	0.0 %	26.4 %	%	%	%	%	0.2 %	18.6 %	

<b>Dyspepsia + irritable bowel syndrome</b>	<b>0.2%</b>	<b>1.2%</b>	<b>2.3%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>4.1%</b>	<b>0.0%</b>	<b>1.8%</b>	<b>1.2%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>3.5%</b>	<b>7.6%</b>
<b>Dyspepsia +vomiting</b>	<b>0.5%</b>	<b>0.8%</b>	<b>1.2%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>2.6%</b>	<b>0.0%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.8%</b>	<b>3.3%</b>
<b>Dyspepsia not response to treatment</b>	<b>0.9%</b>	<b>1.5%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>2.9%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.8%</b>	<b>3.6%</b>
<b>Epigastric pain</b>	<b>2.9%</b>	<b>7.7%</b>	<b>5.4%</b>	<b>1.1%</b>	<b>0.0%</b>	<b>17.1%</b>	<b>1.2%</b>	<b>3.5%</b>	<b>3.8%</b>	<b>1.7%</b>	<b>0.0%</b>	<b>10.1%</b>	<b>27.2%</b>
<b>Pain + dyspepsia</b>	<b>0.3%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>1.7%</b>	<b>0.0%</b>	<b>0.8%</b>	<b>1.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>1.8%</b>	<b>3.5%</b>
<b>Pain + vomiting</b>	<b>1.4%</b>	<b>1.5%</b>	<b>2.0%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>5.1%</b>	<b>0.2%</b>	<b>1.4%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>1.8%</b>	<b>6.9%</b>
<b>Pain not response to treatment</b>	<b>0.6%</b>	<b>1.5%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>2.4%</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.5%</b>	<b>2.9%</b>
<b>Total</b>	<b>11.3%</b>	<b>25.7%</b>	<b>20.5%</b>	<b>4.5%</b>	<b>0.2%</b>	<b>62.2%</b>	<b>2.7%</b>	<b>16.0%</b>	<b>12.5%</b>	<b>6.3%</b>	<b>0.2%</b>	<b>37.8%</b>	<b>100.0%</b>

### 3.1.1.5: Relation between Sample History and Conclusion

History	Conclusion														
	Gastric erosion	Gastritis	Gastropathy	GERD + hiatus hernia	Lax cardia	Mallory Weiss	Mild duodenitis	Mild serration of	Non conclusive	Non fasting	Normal	Pangastropathy	Ulcerated tumor	Un cooperative	Total
Dyspepsia	0.2 %	0.0 %	5.8%	6.5%	17.4 %	0.0 %	0.8 %	0.5 %	0.2 %	0.3 %	5.0%	7.0%	0.0 %	1.2 %	44.7 %
Dyspepsia + irritable bowel syndrome	0.0 %	0.2 %	0.5%	0.5%	3.0%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	1.2%	2.3%	0.0 %	0.0 %	7.6%
Dyspepsia +vomiting	0.0 %	0.0 %	0.3%	0.3%	1.5%	0.0 %	0.2 %	0.0 %	0.2 %	0.0 %	0.2%	0.8%	0.0 %	0.0 %	3.3%
Dyspepsia not response to treatment	0.0 %	0.0 %	0.6%	0.8%	1.5%	0.0 %	0.0 %	0.0 %	0.2 %	0.2 %	0.2%	0.2%	0.0 %	0.2 %	3.7%
Epigastric pain	0.2 %	0.2 %	1.8%	2.7%	10.5 %	0.3 %	0.2 %	0.2 %	1.1 %	0.3 %	2.9%	5.5%	0.2 %	1.5 %	27.4 %
Pain + dyspepsia	0.0 %	0.0 %	0.6%	0.5%	1.4%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.5%	0.6%	0.0 %	0.0 %	3.5%
Pain + vomiting	0.2 %	0.2 %	0.8%	0.6%	2.9%	0.2 %	0.2 %	0.0 %	0.2 %	0.0 %	0.5%	1.5%	0.0 %	0.0 %	7.0%
Pain not response to treatment	0.0 %	0.0 %	0.3%	0.0%	2.0%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.2%	0.3%	0.0 %	0.0 %	2.7%
<b>Total</b>	<b>0.5 %</b>	<b>0.5 %</b>	<b>10.7 %</b>	<b>11.9 %</b>	<b>40.2 %</b>	<b>0.5 %</b>	<b>1.2 %</b>	<b>0.6 %</b>	<b>1.7 %</b>	<b>0.8 %</b>	<b>10.5 %</b>	<b>18.1 %</b>	<b>0.2 %</b>	<b>2.9 %</b>	<b>100.0 %</b>

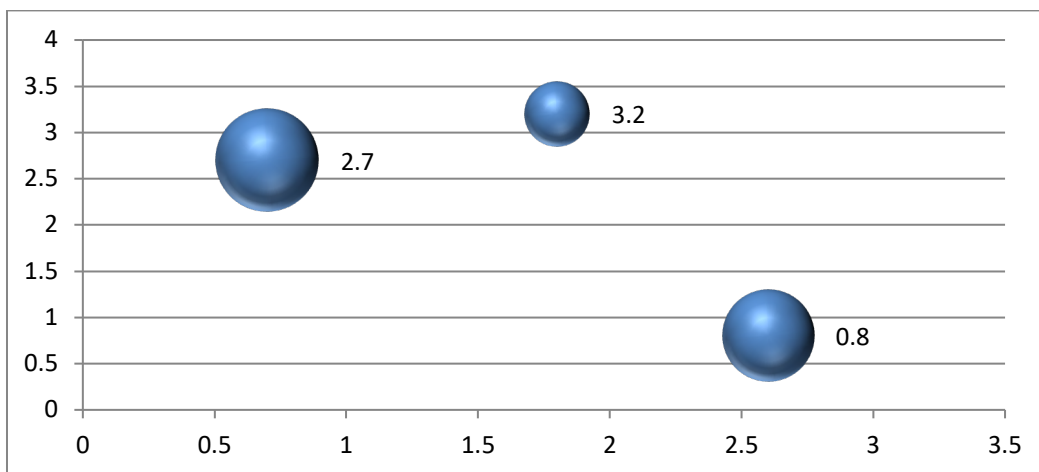


Chart 4 : distribution relation between Sample History and Conclusion

### 3.2 Discussion

412 (62.2%) and 250 (37.8%) of the 662 individuals who were included in this study were female. 21–40 years old (41.7%) was the most prevalent age in this survey, followed by 41–60 years old (33.1%). Nine years old was the lowest age and eighty-two was the highest. 180 patients (27.2%) reported having symptoms of epigastric pain; 298 reported postprandial fullness and indigestion; 50 reported dyspepsia and IBS; 22 reported dyspepsia and vomiting; 46 reported pain and vomiting; 24 reported dyspepsia that did not respond to treatment; and 19 reported pain that did not respond to treatment.

40.2% of instances had lax cardiac, followed by gastropathy (11.9%), normalcy (10.5%), pangastropathy (2.9% of patients who were not cooperative), and nonconclusive findings (1.7%). 1.2% for non-fasting, 0.8% for mild duodenitis, 0.6% for duodenal mild secretion, 0.2% for ulcerated tumor, 0.5% for gastritis, 0.5% for erosion of the gastritis, and 0.5% for Mallory Weiss syndrome. Individuals with endoscopic findings of lax cardiac (40.2%) are mostly complaining of dyspepsia (17.4%), dyspepsia with IBS (3.0%), pain with vomiting (2.9%), and epigastric discomfort(10.5%)<sup>8</sup>.not reacting to the prescribed measures (2.0%). In the research, individuals who reported experiencing epigastric discomfort had a 0.2% chance of having UGI cancer. According to the study's findings, dyspepsia was the most typical patient presentation. The endoscopy results for this patient showed mild duodenitis (0.8%), pangastropathy (7.0%), GERD and hiatus hernia (6.5%), gastropathy (5.8%), and lax cardiac disease (17.4%)<sup>6</sup>. Lax cardiac (40.2%) was the most prevalent benign lesion, followed by pangasteropathy (18.1%), GERD, and hiatus hernia (11.9%). Women are also more likely to report FD symptoms over time, according to our study. In addition to being more distressing than men, women with FD also show stronger correlations with psychosocial variables, such as abuse. Although there are more female FD patients than male patients in the majority of therapy trials, no research has specifically looked at whether female FD patients respond better to existing medications than male FD patients do<sup>9,10</sup>.

#### **IV: Conclusion:**

Dyspepsia is a condition that is somewhat frequent in daily practice. On endoscopy, there are statistically more organic lesions when warning signs are present. When a person is over 50, dyspepsia is frequently linked to underlying organic lesions or cancer. When a patient has dyspepsia, a simple technique called a UGI endoscopy can be used to diagnose benign and malignant lesions early on.

#### **V : RECOMMENDATIONS**

- For patients who are 50 years of age or older, or who exhibit alarm characteristics, we advise initial dyspepsia.
- Depending on the incidence of H pylori infection in their community, we advise dyspeptic patients under 50 years old who do not exhibit alarm symptoms to either start with a "test and treat" strategy for H pylori infection or to get empirical therapy with a PPI. In cases when the prevalence of H pylori exceeds 20%, it is advised to "test and treat."
- We propose that PPI acid suppression trials be made available to dyspeptic patients who are younger than 50 years of age, do not exhibit alarm characteristics, and have a negative H pylori test result.
- We recommend endoscopy for individuals with dyspepsia who test negative for the H pylori virus and do not improve with empirical PPI treatment.

#### **VI: REFERENCES**

- Drossman, D. A., & Hasler, W. L. (2016). Rome IV—functional GI disorders: disorders of gut-brain interaction. *Gastroenterology*, 150(6), 1257-1261.
- Talley, N. J., & Ford, A. C. (2015). Functional dyspepsia. *New England Journal of Medicine*, 373(19), 1853-1863.
- Tack, J., & Talley, N. J. (2013). Functional dyspepsia—symptoms, definitions and validity of the Rome III criteria. *Nature reviews Gastroenterology & hepatology*, 10(3), 134-141.

- Vakil, N., Halling, K., Ohlsson, L., & Wernersson, B. (2013). Symptom overlap between postprandial distress and epigastric pain syndromes of the Rome III dyspepsia classification. *Official journal of the American College of Gastroenterology| ACG*, 108(5), 767-774.
- Sarnelli, G., Caenepeel, P., Geypens, B., Janssens, J., & Tack, J. (2003). Symptoms associated with impaired gastric emptying of solids and liquids in functional dyspepsia. *Official journal of the American College of Gastroenterology| ACG*, 98(4), 783-788.
- Akhta, A., & Shheen, M. (2004). Dyspepsia in African and American and hispani patient. *J Natl Med Assoc*, (96), 635-640.
- Khan, N., Shabbir, G., Zarif, M., & Khattak, M. I. (2007). Upper gastrointestinal endoscopic assessment of patients presenting with dyspepsia. *Journal of Postgraduate Medical Institute*, 21(3).
- Paré, P. (1999). Systematic approach toward the clinical diagnosis of functional dyspepsia. *Canadian Journal of Gastroenterology and Hepatology*, 13(8), 647-654.
- Locke III, G. R. (1999, October). Nonulcer dyspepsia: what it is and what it is not. In *Mayo Clinic Proceedings* (Vol. 74, No. 10, pp. 1011-1015). Elsevier.
- Wiklund, I., Carlsson, R., Wiklund, I., Carlsson, R., Carlsson, J., & Glise, H. (2006). Psychological factors as a predictor of treatment response in patients with heartburn: a pooled analysis of clinical trials. *Scandinavian journal of gastroenterology*, 41(3), 288-293.