

## INTRODUCTION

- Gastroparesis (GP) and functional dyspepsia (FD) consist of a similar spectrum of upper gastrointestinal disorders differentiated by delayed gastric emptying in GP.
- Both GP and FD are associated with significant psychiatric disorders, including anxiety and depression.

## AIM

- The goal of the study was to compare the prevalence of psychiatric disorders and prescription of psychotropic medications between GP and FD.

## METHOD

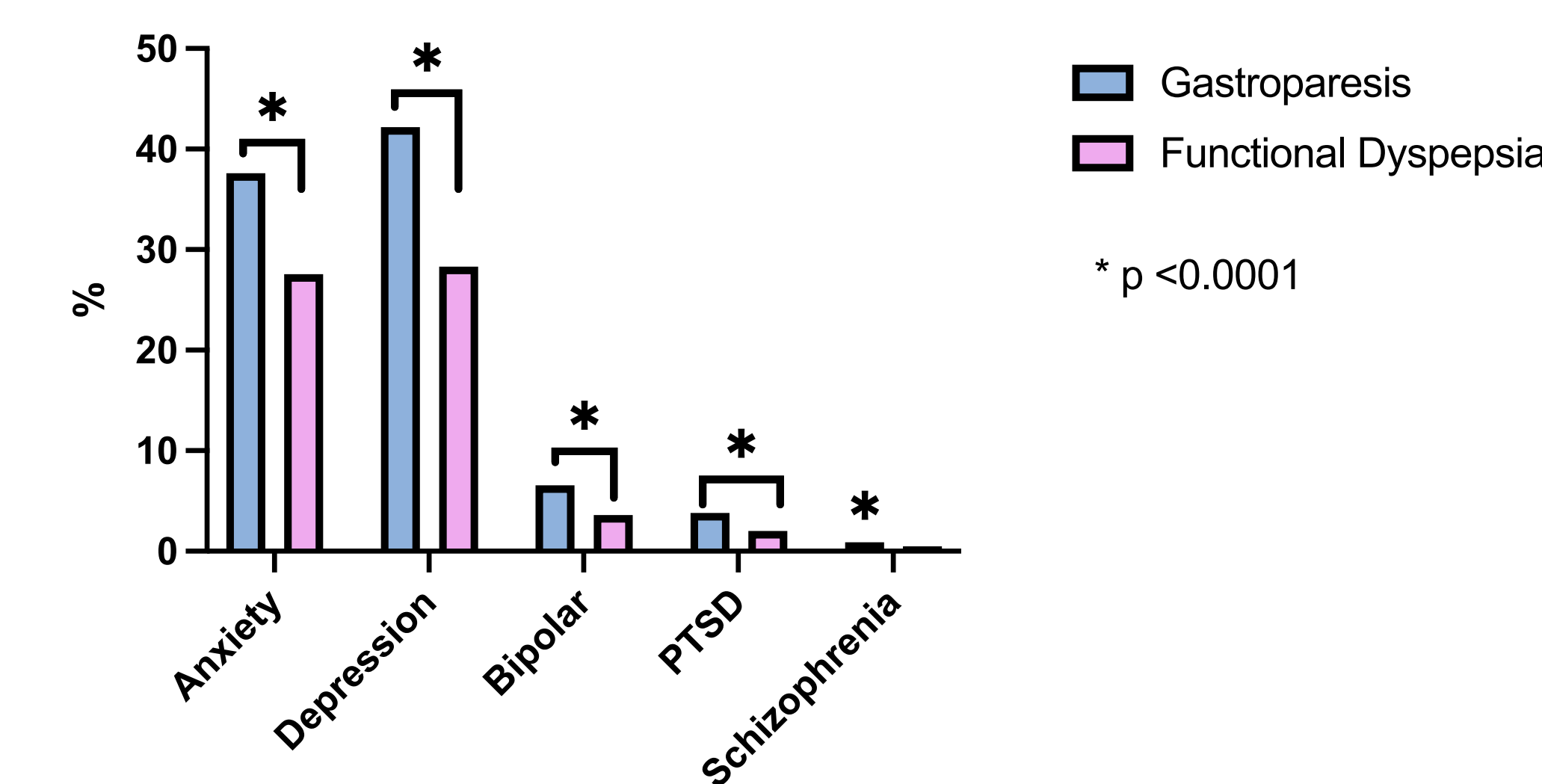
- A population-based study was performed using IBM Explorys (1999-2022), a large pooled de-identified database with a patient information from more than 300 hospitals across the US
- We selected adult patients who have completed a gastric emptying study in the past and further divide them into GP and FD cohort groups.
- GP cohort consists of adult patients with a diagnosis of gastroparesis, with exclusion criteria: cyclical vomiting syndrome, psychoactive substance abuse, eating disorder, factitious disorder, malignant tumor of esophagus and stomach, neoplasm of abdomen, gastric or intestinal obstruction, IBD, adhesion of intestine, carcinomatosis, perforation of intestine, Roux-en-Y gastrojejunostomy, and gastrectomy.
- FD cohort was similarly constructed with additional exclusion criteria: gastroparesis, gastrointestinal ulcer, brain neoplasm and pancreatitis.
- Psychiatric disorder diagnosis and psychotropic medications were collected.
- The number of patients and respective percentages were obtained.
- Odds ratios (ORs) with 95% confidence interval were used to compare the cohorts.

## RESULTS

- We identified 17,570 patients with GP and 60,230 patients with FD.
- There was a higher prevalence of psychiatric disorders in GP compared with FD, including anxiety (37.62% vs 27.56%), depression (42.17% vs 28.32%), bipolar disorders (6.55% vs 3.62%), post-traumatic stress disorders (PTSD, 3.81 % vs 2.01%) and schizophrenia (0.91% vs 0.48%) (all p value <0.0001).
- A significant proportion of patients with GP and FD were on selective serotonin reuptake inhibitors (SSRI, 47.58% vs 34.19%) and benzodiazepines (BZ, 68.13 vs 55.24%).
- Psychotropic medications were more commonly prescribed for patients with GP than FD, including tricyclic antidepressants, SSRI, serotonin–norepinephrine reuptake inhibitor, Mirtazapine, Buspirone, antipsychotic agents and BZ (combined OR range 1.65-2.41, p<0.0001).

**Table 1 Psychiatric disorders and medications in gastroparesis and functional dyspepsia**

	Gastroparesis (N=17,570)	%	Functional dyspepsia (N=60,230)	%	OR	P	
Psych	Anxiety	6610	37.62%	16600	27.56%	1.53-1.64	P < 0.0001
	Depression	7410	42.17%	17060	28.32%	1.78-1.91	P < 0.0001
	Bipolar	1150	6.55%	2180	3.62%	1.73-2.01	P < 0.0001
	PTSD	670	3.81%	1210	2.01%	1.76-2.13	P < 0.0001
	Schizophrenia	160	0.91%	290	0.48%	1.56-2.31	P < 0.0001
Med	TCA	3400	19.35%	7360	12.22%	1.65-1.80	P < 0.0001
	SSRI	8360	47.58%	20590	34.19%	1.69-1.81	P < 0.0001
	SNRI	3140	17.87%	6430	10.68%	1.74-1.91	P < 0.0001
	Mirtazapine	1410	8.03%	2250	3.74%	2.10-2.41	P < 0.0001
	Buspirone	1430	8.14%	2990	4.96%	1.59-1.81	P < 0.0001
	Antipsychotic agents	5360	30.51%	10360	17.20%	2.03-2.20	P < 0.0001
	Benzodiazepine	11970	68.13%	33270	55.24%	1.67-1.79	P < 0.0001



## CONCLUSIONS

- GP is associated with more psychiatric disorders than FD. Psychotropic medications are more commonly prescribed for patients with GP compared with FD.

## REFERENCES

1. Van Oudenhove L, Aziz Q. The role of psychosocial factors and psychiatric disorders in functional dyspepsia. Nat Rev Gastroenterol Hepatol 2013;10:158-67.
2. Hasler WL, Parkman HP, Wilson LA, et al. Psychological dysfunction is associated with symptom severity but not disease etiology or degree of gastric retention in patients with gastroparesis. Am J Gastroenterol 2010;105:2357-67.

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