# Impact of Anxiety or Depression Treatment on Patient Reported Symptom Severity and Quality of Life in those with Gastroparesis

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#### INTRODUCTION

Despite the evolution of treatment options for gastroparesis, there is evidence to suggest that mental health, a key component in the management of these patients, is not being adequately addressed. Our objective was to assess whether patients in our institution with a diagnosis of gastroparesis have improved outcomes when comorbidities such as anxiety and depression are controlled with psychotherapy or psychotropic medication

## **METHODS**

Patients identified from review of ICD codes of gastroparesis and anxiety, or depression were recruited and underwent structured phone interviews. Patients with no diagnosis of gastroparesis and/or depression or anxiety were excluded as well as those deceased, no response and numbers out of service. The PAGI-SYM which characterized severity of gastrointestinal symptoms and PAGI-QOL – which examined the impact of symptoms to quality of life were utilized. Subscale scores were calculated by averaging across items comprising the subscale; scores vary from 0 (none or absent) to 5 (very severe). A total score for each questionnaire as computed as well. As most survey data were in the form of Likert scales and ordinal variables, spearman rank correlation was used to determine associations between PAGI scores and treatment, compliance and follow up for anxiety or depression. A p-value < 0.05 was considered statistically significant. Stata (Version 17; StataCorp, College Station, TX) was used for all analyses.

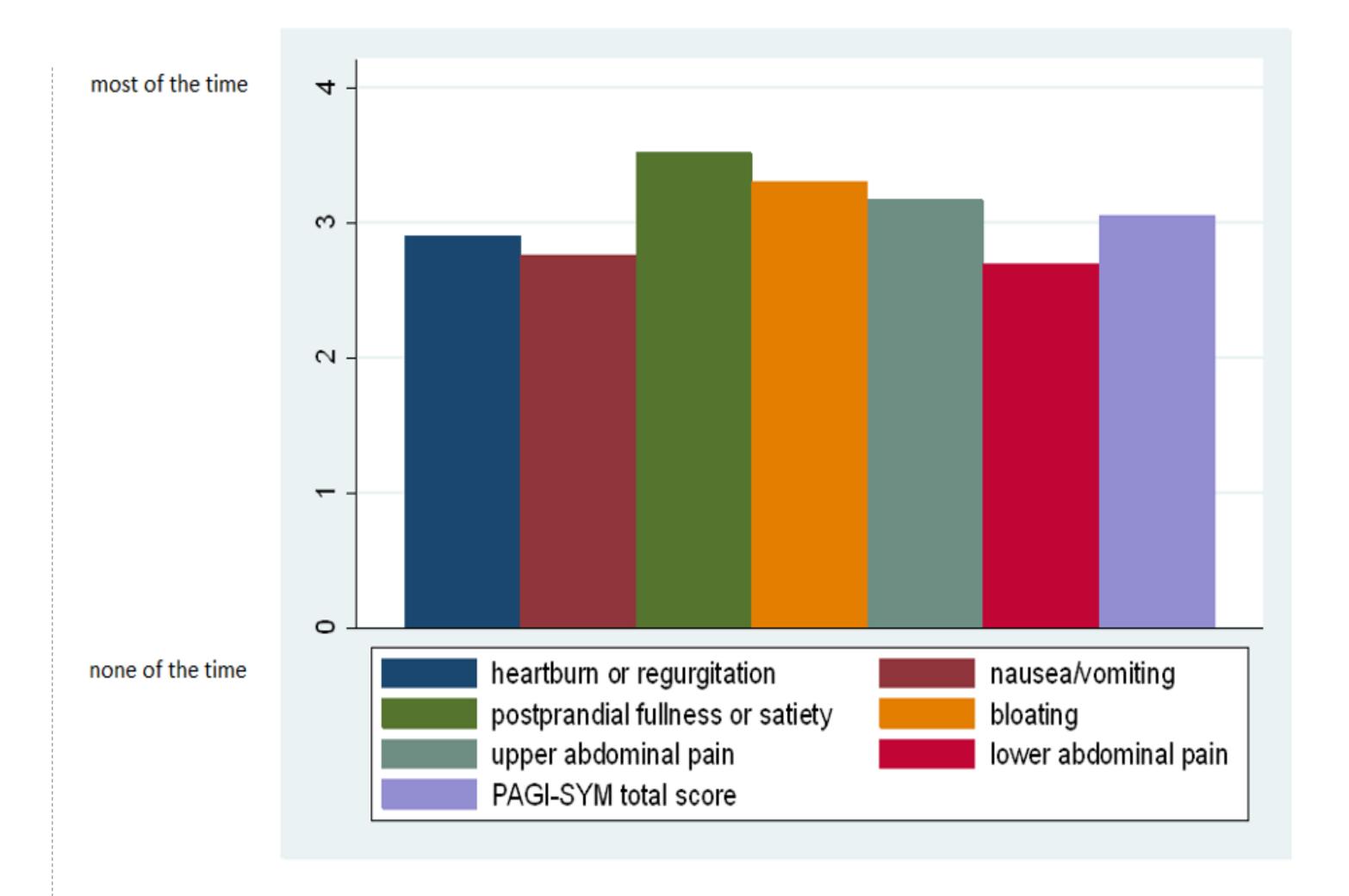


Figure 1: Mean scores by subscale and total Patient Assessment of Gastrointestinal Disorders-Symptom Severity Index (PAGI-SYM)

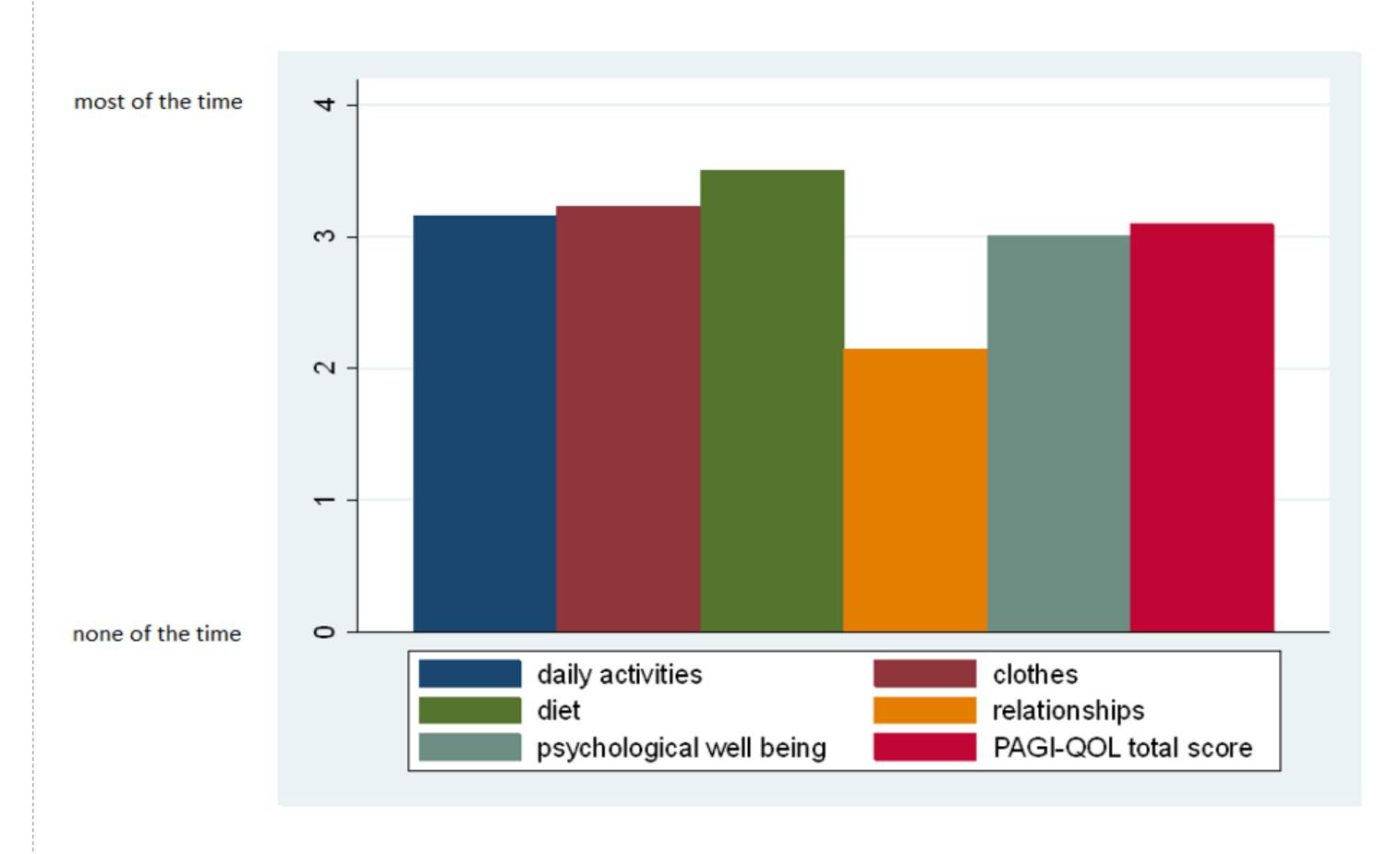


Figure 2: Mean scores by subscale and total Patient Assessment of Upper Gastrointestinal Disorders-Quality of Life (PAGI-QOL)

#### RESULTS

A total final sample of 33 patients was analyzed. The mean age was 48.4±10.6 and 88% were female. Seventy percent were African American while 24% were Caucasian. Ninety-one percent were diagnosed with depression, 9% had anxiety alone while 67% had both. More than half followed up with a psychiatrist (53%) with 82% taking medications for their anxiety or depression. However, only 55% of the patients were compliant with their psychiatric medications. In the PAGI-SYM score, postprandial fullness, bloating and upper abdominal pain were all within the 3 range (affected a good bit of time) while the rest of the symptoms were <3, the mean total PAGI-SYM score was 3.1±1.3 (Figure 1).

Most of the PAGI-QOL scales scores were also in the 3 range and the most affected scale was the dietary aspect (3.5±1.3) while the least affected was relationships (2.2±1.7). The mean total PAGI-QOL score was 3.1±1.2 (see Figure 2). There was a significant positive correlation between PAGI-QOL scores and PAGI-SYM (0.52 p<0.05) with higher symptoms associated with higher effects on quality of life. However, there were no significant correlations between PAGI-QOL and PAGI-SYM scores with receiving treatment for psychiatric illness, medication compliance, and follow-up with a psychiatrist for anxiety or depression.

## CONCLUSIONS

Gastrointestinal symptoms were directly correlated with impact on quality of life, but there were no significant correlations with psychiatrist follow up, treatment, medication use for anxiety or depression.

