

# A Multifaceted Weight Loss Program is Effective for Management of Obesity Related Gastrointestinal Disorders in a Community Based Gastroenterology Practice

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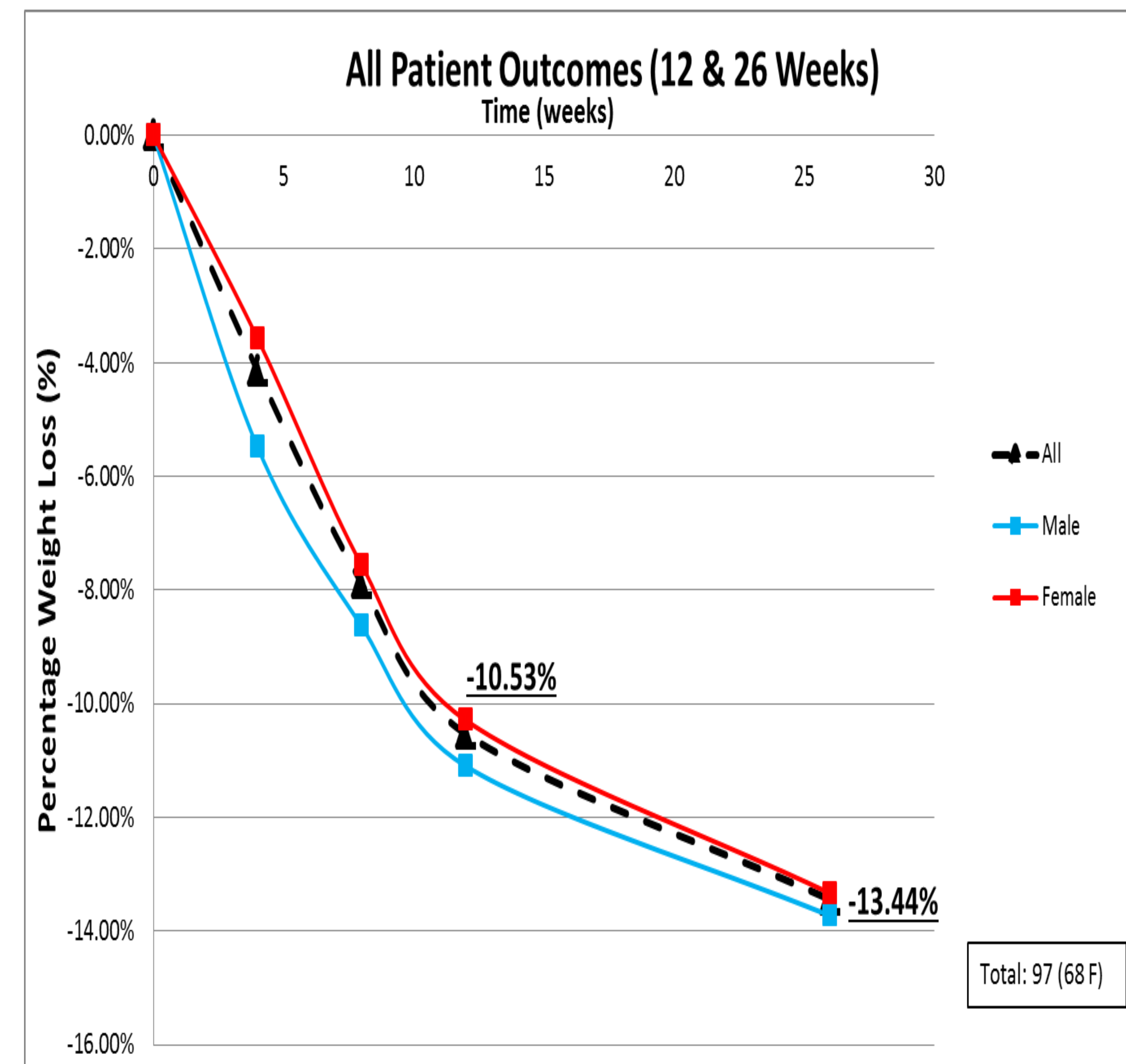
## Introduction

- Obesity related gastrointestinal disorders including Non-Alcoholic Fatty Liver Disease (NAFLD) and Gastroesophageal Reflux Disease (GERD) are more frequent and usually present earlier than diabetes mellitus type 2 and cardiovascular disorders.
- We evaluated the outcomes of a gastroenterologist supervised weight loss program aimed at achieving a 10% total body weight (TBW) loss at 3 months, a known determinant of improved NAFLD and GERD.

## Methods

- Patients with NAFLD and GERD seen at the clinic between May, 2017 to January, 2019 were offered participation in a medically supervised weight loss program comprised of a calorie restricted meal replacement diet, supervised medical fitness program, and weekly behavioral support groups.
- This was followed by slow reintroduction of whole food plant-based or Mediterranean diet.

Patient Characteristics	Number of Patients (%)
Mean Age (years)	56 ± 11
BMI (Kg/m <sup>2</sup> )	38 ± 5.5
Race	
White	91 (94%)
Black	2 (2%)
Asian	1 (1%)
Refused	3 (3%)
Ethnicity	
Hispanic	2 (2%)
Non-Hispanic	92 (95%)
Refused	3 (3%)
Primary Diagnosis	
NAFLD	33 (34%)
NAFLD & GERD	64 (66%)
Co-morbid Conditions	
Type 2 Diabetes Mellitus	27 (28%)
Hyperlipidemia	46 (47%)
Hypertension	53 (53%)



Behavioral Support Groups Attendance (%)	Number of Patients (n)	Mean Percentage TBW Loss at 3 Months (%)	Percentage of Patients Achieving ≥10% TBW Loss at 3 Months (%)
> 50%	28	11.9% ± 4.0%	68%
10%-50%	19	10.9% ± 4.4%	63%
< 10%	20	9.5% ± 4.3%	55%
No Attendance	30	10.0% ± 4.7%	63%

## Discussion

- Over 60% of enrolled patients have achieved a clinically significant TBW loss of at least 10% at 3 months.
- Our results also suggest that incorporating weekly behavioral support groups into the program may be a useful adjunct to achieving a clinically significant weight loss in this patient population.
- Studies are ongoing to determine the sustainability of this weight loss over 1 year.

## Results

- One hundred and fifty-three patients presented for their baseline office visit, 56 patients dropped out within 12 weeks of enrollment, and 97 patients with NAFLD (64 patients had both NAFLD and GERD) continue to participate in the program to date.
- At 3 months, 63% of patients had lost at least 10% of TBW.
- Attending > 50% of behavioral support groups was associated with a statistically significant higher TBW loss at 3 months when compared to no attendance (11.9% versus 10%, P-value= 0.042).

## References

- Andres Acosta MD et. al. White Paper AGA: POWER — Practice Guide on Obesity and Weight Management, Education, and Resources. Clinical Gastroenterology and Hepatology 2017;15:631–649.
- Vilar-Gomez E, Martinez-Perez Y, Calzadilla-Bertot L, et al. Weight Loss Through Lifestyle Modification Significantly Reduces Features of Nonalcoholic Steatohepatitis. Gastroenterology 2015;149:367–378.