IMPACT OF A METABOLIC AND BARIATRIC SURGERY PROGRAM ON HEALTH AND DIETARY HABITS: A PATIENT-REPORTED OUTCOMES STUDY.

Ruben D Salas-Parra, MD[1]; Katerina Jou, MD[2]; Charmaine Gentles, DNP, ANPBC[1]; Matthew Jung, DO[1]; Ann Defnet, MD, FACS, DABOM[1]; Dominick Gadaleta, MD, FACS, FASMBS[1]; Larry Gellman, MD, FACS, FASMBS[1]; Andrea Bedrosian, MD, FACS, FASMBS[1];

[1]Northwell Health/North Shore University Hospital, Manhasset, New York; [2]Northwell Health, New Hyde Park, New York

Introduction

- Our Metabolic and Bariatric Surgery Program (MBSP) includes a multidisciplinary team: a metabolic and bariatric surgeon, nutritionist, nurse practitioners, psychologist, and ongoing administrative support individualized for each patient at an academic, accredited bariatric center of excellence.
- **Objective:** Assess changes in patients' self-reported health, dietary habits, and physical activity following the enrollment in a MBSP.

Methods

- A survey was distributed to patients after completion of the MBSP at least three months after their surgery during 2023-2024.
- Demographic data were collected, and survey's responses were rated and analyzed using chi-square for statistical significance (Figure 1).

Results

Question #1: In general, how would you rate your health?

Response n (%)	Before MBSP	After MBSP	p-value
Very Poor	6 (13.0%)	1 (2.17%)	p<0.0001
Poor	22 (47.8%)	0 (0%)	
Average	13 (28.3%)	4 (8.7%)	
Good	5 (10.9%)	30 (65.2%)	
Excellent	0 (0%)	11 (23.9%)	

Question #2: How would you consider your dietary habits?

Response n (%)	Before MBSP	After MBSP	p-value
Very Unhealthy	13 (13.8%)	0 (0%)	p<0.0001
Unhealthy	21 (44.7%)	0 (0%)	
Neither Healthy or Unhealthy	9 (28.7%)	1 (2.2%)	
Healthy	3 (12.8%)	30 (65.2%)	
Very Healthy	0 (0%)	15 (32.6%)	

Question #3: What do you consider the healthiest diet among these options?

Response n (%)	Before MBSP	After MBSP	p-value
Home cooked/fresh food	30 (65.2%)	16 (34.8%)	p=0.0007
Organic	0 (0%)	0 (0%)	
High in whole grains, dietary fiber	5 (10.9%)	1 (2.2%)	
High in vegetables and fruits	2 (4.4%)	1 (2.2%)	
Includes lean meat, high in fish, low fat, low carbs, vitamins, protein, and minerals	9 (19.6%)	28 (60.9%)	

Question #4: Please select how much you agree or disagree with the following statement: I am knowledgeable of healthy eating habits.

Response n (%)	Before MBSP	After MBSP	p-value
Strongly disagree	2 (4.4%)	0 (0%)	p<0.0001
Disagree	11 (23.9%)	0 (0%)	
Neither agree nor disagree	18 (39.1%)	3 (6.5%)	
Agree	13 (28.3%)	20 (43.5%)	
Strongly agree	2 (4.4%)	23 (50%)	

Question #5: How often do you aim to eat healthy every day?

Response n (%)	Before MBSP	After MBSP	p-value
Do not know	0 (0%)	0 (0%)	p<0.0001
Never	5 (10.9%)	0 (0%)	
Occasionally	32 (69.6%)	0 (0%)	
Often	7 (15.2%)	12 (26.1%)	
Very often	2 (4.4%)	34 (73.9%)	

Question #6: How would you rate your engagement in physical activity?

Response n (%)	Before MBSP	After MBSP	p-value
Sedentary/No physical activity	24 (52.2%)	2 (4.4%)	p<0.0001
Once a week	14 (30.4%)	2 (4.4%)	
2-3 times a week	7 (15.2%)	26 (56.5%)	
5 days a week	1 (2.2%)	16 (34.8%)	

Question #7: Have you ever received dietary counseling from a registered dietician or other healthcare professional BEFORE your first bariatric surgery consultation?

Response	n (%)
No	9 (19.6%)
Yes	37 (80.4%)

Question #8: How useful was the dietary counseling you received in direct preparation for bariatric surgery?

Response	n (%)
Not at all useful	0 (0%)
Slightly useful	2 (4.4%)
Somewhat useful	5 (10.9%)
Very useful	22 (47.8%)
Extremely useful	17 (37%)

Figure 1: results from the completed from surveys.

Results

- **Pre-MBSP,** 60.9% of patients rated their overall health as "poor" or "very poor," and **post-MBSP,** 89.1% rated as "good" or "excellent" (p<0.0001).
- **Pre-MBSP,** 58.5% considered their dietary habits "very unhealthy" or "unhealthy," and **post-MBSP,** 97.8% considered their dietary habits "healthy" or "very healthy" (p<0.0001).
- 80.4% of respondents had received dietary counseling prior to their first consultation, with most patients deeming the **MBSP "very useful" or "extremely useful" (84.8%).**

Conclusions

- **Our MBSP led to improvements** in patient's self-reported health ratings, dietary habits, understanding of healthy eating, and physical activity levels.
- These findings **highlight the intervention's effectiveness in enhancing overall physical well-being.**
- Further research with is warranted to validate the durability of these findings with longer follow ups.