The Role of Social Media Support Groups in Improving Postoperative Outcomes in Bariatric Surgery

Neal Ferrin DO[1], Alain Elian MD[2], Saad Shebrain MD[1]

[1]Western Michigan University Homer Stryker MD School of Medicine, Kalamazoo, MI
[2]Ascension Borgess Hospital, Department of Bariatric Surgery, Kalamazoo, MI

Introduction

Sustained weight loss and comorbidity resolution is the ultimate goal after bariatric surgery. Part of the preparation for surgical candidates includes involvement in the bariatric support community through support groups (SG). This study aims to determine the effectiveness of social media support groups on subjective and objective weight loss measures as experienced by each patient.

Methods

- Single institution retrospective cohort study
- Survey created to evaluate patient experience with SGs from 2015-2023
- SG options of Facebook (FB) and In-person/Virtual (IP/V)
- Percent Excess Weight Loss (%EWL) and percent Total Weight Loss (%TWL) calculated using weight at 6-, 12-, 18-, and 24-month postoperative visits
- Correlational analysis was performed to determine the association between support group type and both patients' experience and weight loss.



References

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Results

Subjective

- Positive correlation between the type of SG and reported patient's experience
- Significant difference between SGs in: Active participation, Degree of engagement, Positive experience, Contribute to amount of weight loss, Improvement in comorbidity resolution, Level of motivation, Increase levels of support
- Combined (both FB and IP/V) option with highest scores in each category

Objective

- No correlation between SGs and amount of weight loss (EWL and TWL) at 6, 12, 18, and 24 months (P=0.262, 0.337, 0.310, 0.119) respectively

1. Which support Group do you use to connect with us?
   a. Facebook support group
   b. In-person/virtual support group
   c. Both
   d. None
2. How active are you in this/these support group(s)?
3. How engaged are you in this/these support group(s)?
4. The support group(s) I was involved in positively contributed to the amount of weight loss I experienced after surgery.
5. The support group(s) I was involved in contributed to the amount of weight loss I experienced after surgery.
6. The support group(s) I was involved in contributed to the improvement of my other medical conditions related to obesity after surgery.
7. The support group(s) I was involved in contributed to the amount of motivation I experienced to live the bariatric lifestyle after surgery.
8. The support group(s) I was involved in contributed to a decrease in stress levels after surgery.
9. The support group(s) I was involved in contributed to the increased level of support I experienced after surgery.
10. It would be helpful to have physician involvement in these support groups (i.e; physician led discussion/advice)

Figure 1: Multiple-choice survey to evaluate support group experiences and preferences

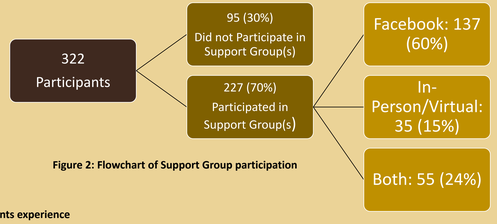


Figure 2: Flowchart of Support Group participation

Table 1: Correlation between type of support groups (SGs) and Patients experience

Subjective Patients Perception	Correlation (r)	P-value
Active Participation	.207**	0.002
Degree of Engagement	.334**	<.001
Positive Impact on Experience After Surgery	0.18	0.01
Amount of Weight Loss	0.18	0.009
Improvement of Obesity-related Medical Comorbidities	0.17	0.016
Motivation in Life-Style After Bariatric Surgery	0.12	0.092
Decrease in Stress Levels After Bariatric Surgery	0.10	0.172
Increase Level of Support After Bariatric Surgery	0.18	0.01
Physician Led Discussion/Advice	0.00	0.986

Results, Cont.

Table 2: Differences between Support Groups

Subjective-Objective Data	Facebook SG Only	In-person/ Virtual SG Only	Combined (FB and IP/VT)	P-value
Subjective				
▪ Active Participation	3.00 (1.25)	2.34 (1.14)	3.80 (1.02)	<.001
▪ Degree of Engagement	2.5 (1.10)	2.50 (1.10)	3.50 (1.03)	<.001
▪ Positive Impact on Experience After BS	3.13 (1.02)	3.00 (1.21)	3.65 (1.10)	0.006
▪ Contribution to Amount of Weight Loss	3.14 (1.00)	2.94 (1.16)	3.67 (1.10)	0.002
▪ Improvement of Obesity-related Medical Comorbidities	2.92 (1.00)	3.06 (1.2)	3.35 (1.13)	0.05
▪ Motivation in Life-Style After BS	3.52 (1.00)	3.29 (1.22)	3.88 (1.11)	0.03
▪ Decrease in Stress Levels After BS	3.37 (1.00)	3.27 (1.15)	3.63 (1.04)	0.206
▪ Increase Level of Support After BS	3.45 (1.00)	3.18 (1.01)	3.96 (1.10)	0.001
▪ Physician Led Discussion/Advice	3.79 (1.00)	3.94 (1.00)	3.76 (1.2)	0.699
Percent Total Weight Loss (%)				
TWL-6 Months	21.63 (5.34)	20.31 (6.22)	23.20 (7.39)	0.262
TWL-12 Months	26.26 (9.38)	27.82 (9.64)	29.51 (11.34)	0.337
TWL-18 Months	28.40 (11.00)	23.42 (10.64)	29.03 (10.94)	0.310
TWL-24 Months	27.46 (10.48)	21.73 (10.97)	29.75 (6.92)	0.119
Percent Excess weight Loss (%)				
EWL-6 Month	42.36 (12.90)	38.58 (13.64)	46.92 (15.80)	0.124
EWL-12 Month	51.16 (19.77)	52.82 (19.42)	55.70 (21.9)	0.616
EWL-18 Month	54.33 (23.90)	44.68 (22.23)	58.96 (20.9)	0.269
EWL-24 Month	53.68 (23.39)	42.39 (22.98)	60.24 (14.56)	0.128

Conclusion

- Facebook dominates as a SG platform after bariatric surgery
- Participation in combined social media (FB) and in-person/virtual SGs provides the patient with most beneficial experience
- No impact on weight loss in the short term.

Limitations

- Single institution study, convenience sample
- Sample size: survey sent to all patients who underwent surgery from 2015-2023 (n=2200) with survey participation of 15% (322/2200)