2017 Internship Project & Abstract - Vishakha Mavani

Determinants of Weight Loss Success in Clinical Intensive Behavioral Therapy for Obese Adults

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Background: The Centers for Medicare & Medicaid Services began reimbursing for Intensive Behavioral Therapy (IBT) for obese adult Medicare beneficiaries in late 2011. Studies on IBT are scant, and no studies have investigated factors that determine weight loss in IBT patients. We assessed baseline sociodemographic, clinical, and program factors that predict greater weight loss success over one year among patients who received IBT.

Methods: Using data from the Marshfield Clinic Health System, a retrospective cohort of 301 obese adults who received IBT between 01/01/2012-06/30/2016 was assembled. Mixed models were used to assess monthly body weight over one year and logistic regression was used to assess ≥5% weight loss at 12-months after IBT initiation. Sociodemographic, clinical and IBT program factors were tested as exposures in these models to determine predictors of weight loss.

Results: Weight loss over one year was higher in patients who had high baseline BMI, started IBT in summer or fall, lost ≥3kg within the first 6 months, and attended more IBT counseling visits (p<0.001 for all exposure-by-time interactions). Notably, patients with early weight loss (vs. those without) and those who completed all 22 IBT visits (vs. those who completed 1 IBT visit) lost 5.9 and 4.8 kg more weight respectively. Additionally, patients with ≥5% weight loss 12-months after initiation were more likely to have lost ≥3kg within the first 6 months (p<0.001), completed more IBT visits (p=0.007), and have both Medicare and Medicaid coverage (p=0.036).

Conclusions: We identified baseline BMI, season of IBT start, early weight loss, number of IBT counseling visits attended and type of healthcare coverage as the sociodemographic and IBT program factors predictive of significant weight loss among IBT recipients. Future research should explore IBT effectiveness in other populations, as well as how early weight loss phenotypes influence long-term weight loss maintenance.