

Effect of Behavior Counseling on Weight Loss in Primary Care

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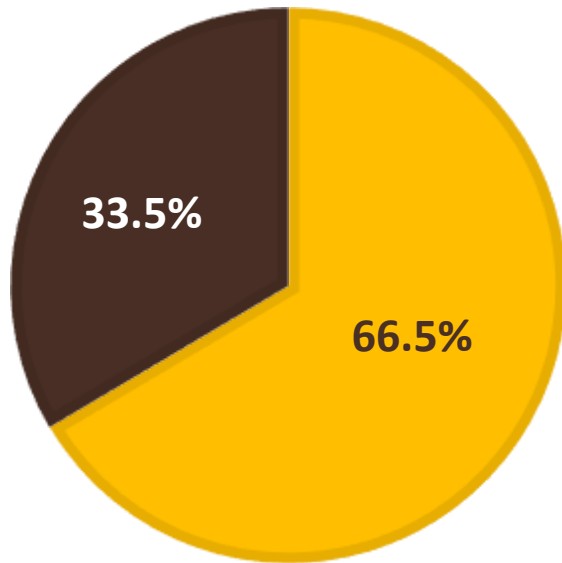
Background

- Obesity affects more than two-thirds of adults living in the US.¹⁰
- Individuals who are overweight or obese are at increased risk for a variety of comorbid conditions:^{5,6}
 - Diabetes
 - Asthma
 - Gallbladder disease
 - Musculoskeletal disorders
 - Cardiovascular disease
 - Obstructive sleep apnea
 - Cancers
 - Hypertension

Prevalence of Obesity in the United States

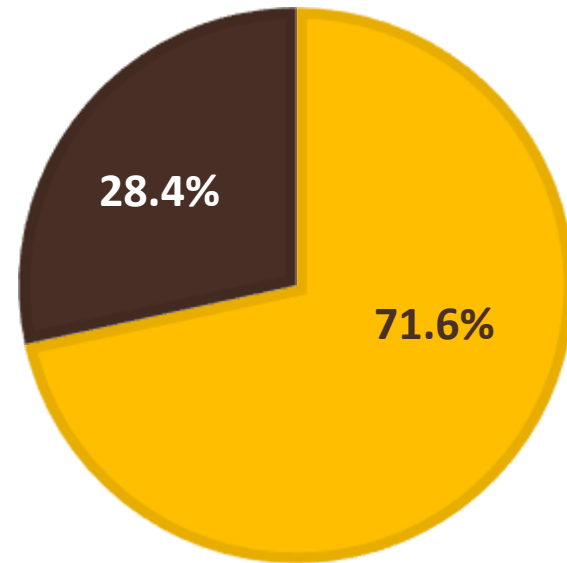
PREVALENCE OF OVERWEIGHT & OBESITY IN WOMEN¹⁰

■ Overweight & Obesity Combined ■ Normal Weight



PREVALENCE OF OVERWEIGHT & OBESITY IN MEN¹⁰

■ Overweight & Obesity Combined ■ Normal Weight



Relevance to Nurse Practitioners

- One of the goals of *Healthy People 2020* is to promote “healthy behaviors across all life stages.”¹³
- Consistent with this goal, encouraging healthy behaviors and lifestyle changes is an essential component of NP practice.
- In order to deliver more comprehensive care, it is necessary that NPs provide weight loss counseling to promote weight reduction.

Current Research Literature

Successful weight loss programs include guided behavior therapy and education about weight reduction and lifestyle changes.

Whittemore et al. (2010)

- This study examined a weight loss program led by NPs in primary care.
- Participants (n = 58) were at risk for type 2 diabetes and were assigned to an enhanced standard care control group or a lifestyle intervention program.
- Results indicated individuals in the lifestyle intervention program were more satisfied with their program than the control group.

Turner et al. (2008)

- Interdisciplinary wellness program to help patients implement behavior changes and promote weight reduction.
- 12-week program included the choice of three diets, ongoing education, behavioral support, fitness activities, and support groups.
- Results revealed minimal weight reduction.
- Only one out of 122 participants attended all 12 sessions.

Purpose

The objective of this study was to identify the effect of behavior change counseling techniques such as motivational interviewing, goal setting, self-monitoring, and perceived self-efficacy on weight loss in adult clients in a primary care setting.

Self-Efficacy Theory

- Social-cognitive learning framework that has been useful in a variety of behavior change treatment contexts.⁴
- Self-efficacy refers to one's perceived ability to cope effectively in a particular situation.²
- Individuals with high-perceived efficacy will be able to confront difficult situations and cope successfully.²

Self-Efficacy Theory Cont'd

- One's sense of self-efficacy can play a major role in how he or she approaches goals, tasks, and barriers to making successful behavior changes.^{2,4}

Behavior Change Techniques

- In primary care, NPs can use evidence-based behavior change techniques to work with clients who are ambivalent to change.^{1,3,11}
 - Motivational interviewing
 - Goal setting
 - Self-monitoring

Methods

- Single-case experimental design
- Designated paid staff at a low-income primary care clinic in Laramie, Wyoming recruited three participants
- Adults were eligible to participate if:
 - (a) they were over the age of 18;
 - (b) had a body mass index (BMI) ≥ 25 ; and
 - (c) were able to speak, read, write, and understand English

Methods Cont'd

- Female participants were excluded if they were pregnant or trying to get pregnant.
- Participation was voluntary and human subject's approval was obtained from the University of Wyoming's Institutional Review Board.

Procedures

- Participants met individually and were enrolled in six 30-minute weight loss counseling sessions led by a DNP-FNP student.
- Initial visit:
 - Baseline BMI
 - Weight Loss Questionnaire
 - Weight Efficacy Life-Style (WEL) Questionnaire⁴

Procedures Cont'd

- All visits:
 - Motivational interviewing utilized¹
 - Goal setting using S.T.A.R.T Criteria¹¹
 - Self-monitoring
- Last visit:
 - WEL Questionnaire re-administered⁴

Data Analyses

- Data were collected using questionnaires, face-to-face interviews, self-efficacy scales, and self-monitoring results.
- Participants' weights were recorded in an Excel spreadsheet during each encounter and evaluated at the end of the study.
- Correlations between participants' perceived self-efficacy and weight control behaviors were also examined.

Results

- Only one participant attended all six weight loss counseling sessions. Another participant attended four out of six sessions and one participant only attended the first session.
- One participant experienced minimal weight loss and another participant experienced weight gain.

Results Cont'd

Participants' Weights During Weekly Weight Loss Counseling Sessions

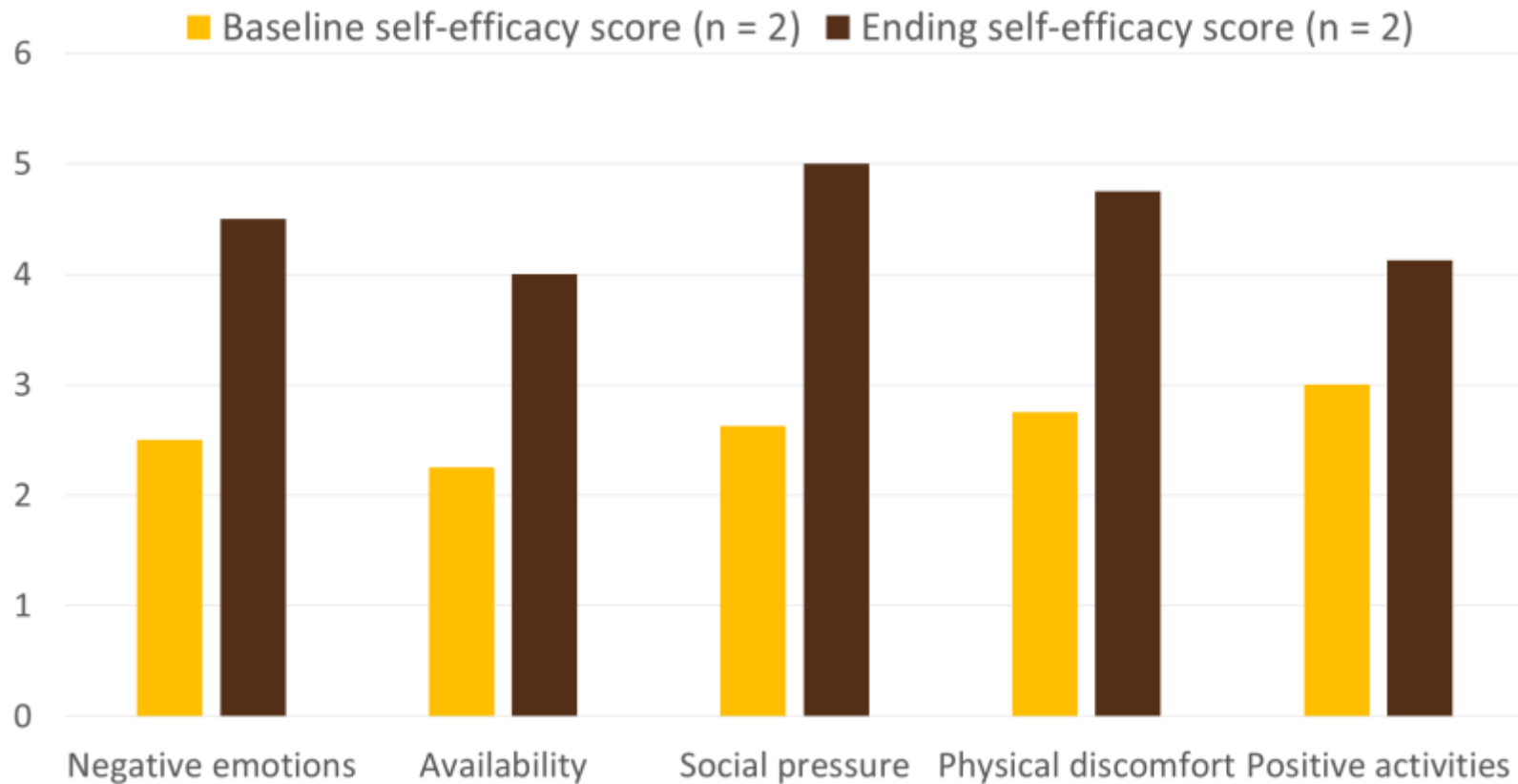
Gender	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Difference
Male	338 lbs.	338 lbs.	336 lbs.	340 lbs.	342 lbs.	342 lbs.	+ 4 lbs.
Female	260 lbs.	258 lbs.	258 lbs.	257 lbs.	--	--	- 3 lbs.

Results Cont'd

- Self-Monitoring
 - There was no correlation between routine self-monitoring and weight reduction.
- Self-Efficacy
 - Mean self-efficacy scores increased over time.

Results Cont'd

Baseline & Ending Self-Efficacy Scores Related to Eating Behaviors



Results Cont'd

- Participants' Perceptions
 - Weight loss barriers included health conditions, lack of family support, financial stress, and stress at home.
 - Goal setting, rewards, routine encouragement, weekly weight monitoring, and mentorship were the most helpful aspects of weight loss counseling.

Conclusion

- Self-efficacy scores increased over time, indicating improved confidence confronting difficult eating behaviors.
- More research is needed to evaluate exercise self-efficacy.
- More long-term evaluation of behavior counseling is needed to identify its effect on weight reduction in adult clients.

Conclusion Cont'd

- Participants appreciated having a mentor and felt routine counseling sessions made them more accountable to change negative behaviors.

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