

Impact of Comprehensive Nutrition Counseling Among Overweight and Obese Obstetric Patients

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Gestational weight gain is a critical component of maternal and fetal health during pregnancy and there is a lack of knowledge among pregnant women regarding nutrition and exercise during pregnancy.

01 Problem

Lack of knowledge regarding nutrition and appropriate weight gain pregnancy + high rates of inappropriate weight gain.

Current practice is a brief discussion of weight gain during pregnancy.

Problem was identified after looking at the average total weight gain of obstetric patients within one OBGYN practice.

Parameters: a population

02 Objective

Increase nutrition and exercise knowledge by 50% by the end of the Initial OB counseling appointment in obstetric patients with a pre-pregnancy BMI of <24.9.

- 1- Specific plan is to improve patient's knowledge regarding weight gain recommendations through counseling regarding proper nutrition, exercise, and caloric intake.
- 2- Measure using a pre and post test
- 3- Attain goal throughout a 2-4 week collection period
- 4- Realistic and relevant for the patient population.
- 5- Achieve goal by July 2022

03 Methodology

Program Evaluation

Participants: Obstetric patients presenting for their initial OB appointment whose BMI > 24.9.

Data collection: Pre and post test design

Measure of Knowledge: Assessed with the use of an 8-question test consisting of questions related to weight, exercise, and nutrition. Given pre and post counseling

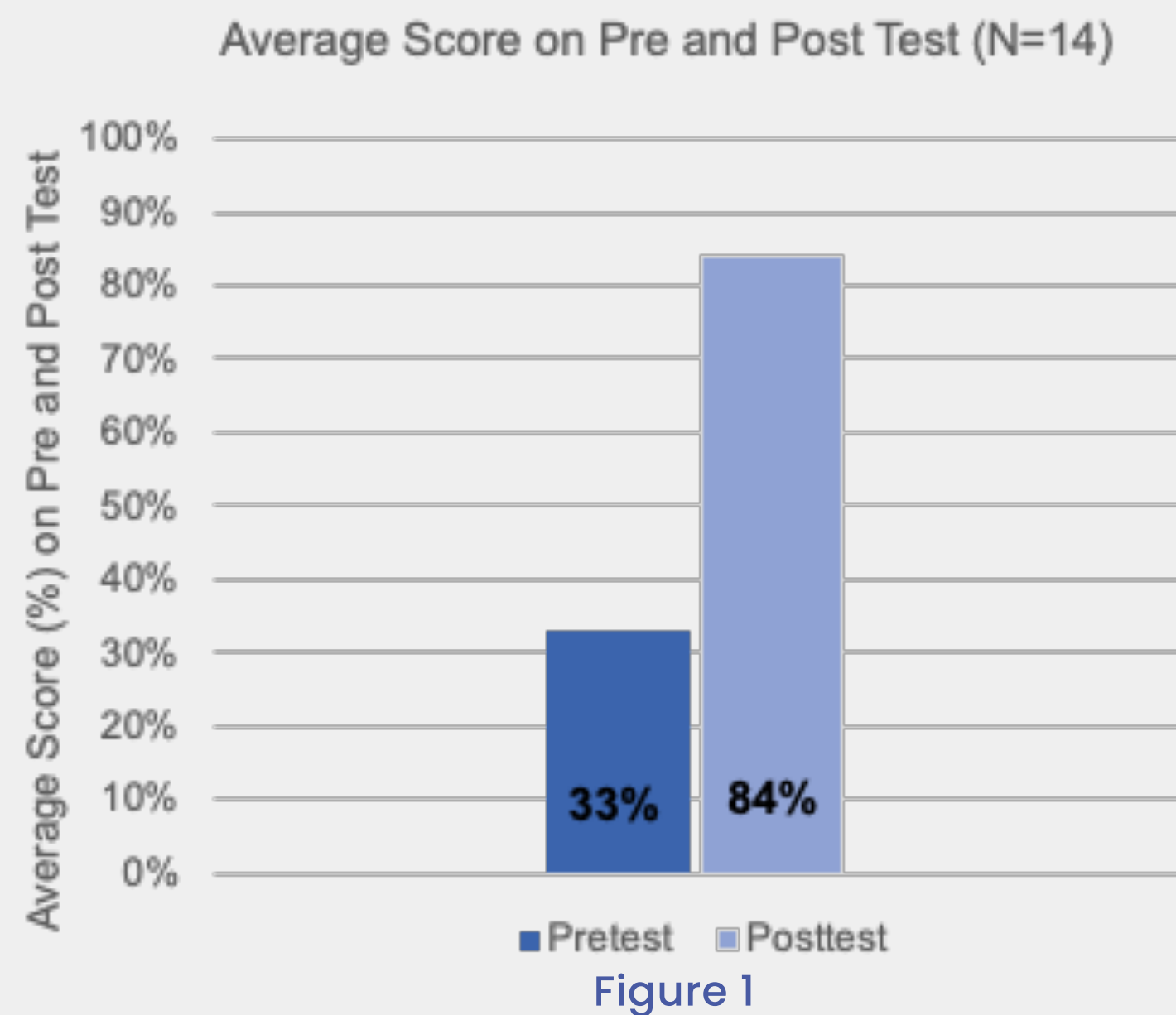
Study: Data was analyzed using descriptive statistics and a pair t-test

Act: Will adopt, adapt, or abandon

04 Analysis

Pre-post differences were assessed using paired sample t-tests.

The mean scores on the pre- and post- test (8 question knowledge assessment) increased from 2.64 (33%) to 6.71 (84%). The mean difference of 4.07 is clinically significant ($p < .0001$).



Average scores (in percentages) on the pre and post comprehensive nutrition counseling test, which was administered to 14 obstetric patients with a BMI > 24.9 in July 2022

05 Results/Findings

In total, 14 patients completed the pre- and post- test. The comprehensive counseling intervention increased participants knowledge regarding nutrition, exercise, and gestational weight gain by 135%.

Providing more comprehensive counseling to patients can improve knowledge.

Strengths: strong study design for assessing knowledge/factual information and repeated measures proved to be statistically significant.

Limitations: small sample size

06 Implications/Next Steps

Because this intervention was successful and the aim was achieved, the OBGYN office will continue providing comprehensive nutrition counseling to patients.

Will also start collecting data to determine its effect on total gestational weight gain.

Other possible next steps include the addition of preconception counseling for patients with a BMI > 24.9 in relation to weight management prior to pregnancy and associated health outcomes.

Participant	Pre	Post
1	0	8
2	4	8
3	2	6
4	1	4
5	4	8
6	3	8
7	0	8
8	6	8
9	4	7
10	2	5
11	1	4
12	2	8
13	3	5
14	5	7
Mean	2.64	6.71
Standard Deviation	1.82	1.59

Table 1
 Participant's pre- and post- comprehensive nutrition counseling test scores (out of 8).
 Note: N=14.

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