

Use of a Formalized Group to Manage Obesity in a Community Mental Health Setting

Beki Asti, DNP
Copper Country Community Mental Health
Houghton, MI

Problem Statement

- Obesity and mental illness often occur simultaneously.
- Five hundred adults with mental illness receive services at Copper Country Community Mental Health (CCCMH) in Houghton, Michigan.
- Thirty three percent have a medical diagnosis of obesity (S. Skytta, personal communication, September 10, 2015).

PICO(T) Question

Population, Intervention, Comparison, anticipated Outcomes, and Time frame

- P: For patients with mental illness treated in a community mental health clinic
- I: Does participation in a formalized group
- C: Compared to non-participation
- O: Decrease BMI scores by two points, increase movement and result in weight loss
- T: Over a 12-week period?

Purpose and Objectives

Purpose:

- Evaluate the effectiveness of a formalized group to manage obesity in adults with mental illness

Objectives:

- Increase movement in patients with mental illness
- Sustain current weight (if normal BMI) or decrease BMI by two points in overweight or obese

Results

Over a 12-week period:

- The walking group walked nearly three times the steps than the control group (Figure 1.1)

- The walking group participants lost 1.75 lbs

- The control group gained 3.92 lbs

- The walking group had a higher BMI in week 1 compared to week 12.

- The control had a lower BMI in week 1 compared to week 12 (Figure 1.2)

- There was a moderate negative correlation between the weight changes and total number of steps (as the number of steps increase, the weight of the participant decreased)

Themes from qualitative analysis:

- Family member and friends have an influence on activity level
- All participants noticed a difference in mood on days that they took more steps

Practice Implications

- Patients with mental illness who were part of a formalized group walked nearly three times more steps than those that did not participate in a group over the course of the 12-week project.

- The walking group participants also lost weight throughout the intervention period compared to gaining weight as seen in the control group participants.

- Self-efficacy might have impacted the activity level of the walking group participants. All walking group participants were aware that increased activity led to a positive mood.

Search for Evidence

- A search of Medline, CINAHL and ProQuest databases produced 20 articles published using adult participants since 2005 for review.
- Keywords *mental illness, obesity, weight management, psychotropic drug, mental disorder, obese, weight loss, weight gain, pedometer, and antipsychotics* were used.
- Eleven studies met criteria for being published in the United States, Australia, United Kingdom or Canada and all but one was published in the last five years.
- Nine were quantitative studies, one systematic review of mixed-method studies, and one qualitative study.
- No guidelines addressing obesity in patients with mental illness were found.

Key Findings

- Four quantitative studies evaluated educational programs providing nutrition and physical activity information.^{3,5,7,9} Pedometers were used to in two of the studies.^{2,6}
- Most studies were conducted in a setting similar to the project population, and more than half were performed in the United States.^{1,2,3,4,5,6,7,11}
- All nine quantitative studies measured either weight or BMI.^{1,2,3,4,5,6,7,9,11}
- Interventions ranged from eight weeks to 12 months and varied from requiring active exercise participation to education-only sessions.^{1,3,5,6,7,9,11}
- Interventions that focused on exercise led to increased physical activity.^{1,5,6,11}
- Changes in weight and BMI were seen in both control and experimental groups.^{1,3,5,6,7,9,11}
- A systematic review identified barriers such as symptoms of mental illness, socioeconomic factors, medication side effects and stigma that might cause interventions to be ineffective.⁸
- Themes identified in a qualitative study identify the complex nature of weight management for patients with mental illness.¹⁰

Implementation

- Twelve week quality improvement project including 10 members of CCCMH's Clubhouse program
- The intervention group=four participants involved in the walking group
- The control group=six members of the Clubhouse who were not participating in the walking group
- Both groups were given pedometers and instructed to record daily steps
- Weekly weights were recorded at the Clubhouse
- Walking group was transported to the mall two times/week to walk
- Met with walking group participants during week nine to engage in qualitative discussion promoting self-efficacy
- Descriptive statistics were used to analyze the average daily steps, weight and BMI changes
- Parametric statistical tests were used to compare the walking group and control group data to show a difference between the two groups
- A qualitative approach focusing on self-efficacy helped determine themes among the walking group participants

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