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 percent have a medical diagnosis of obesity (S. Skyyta, 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.
- Most studies were conducted in a setting similar to the project population, and more than half were performed in the United States.
- All nine quantitative studies measured either weight or BMI. 2,3,4,5,7,8,9,11
- Interventions ranged from eight weeks to 12 months and varied from requiring active exercise participation to education-only sessions.
- Interventions that focused on exercise led to increased physical activity. 1,5,6,7,8
- Changes in weight and BMI were seen in both control and experimental groups. 2,3,4,5,7,9,11
- 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 twice/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

References

Acknowledgements
Special thanks to CCCMH for supporting this project and to Dr. Jean Rosiak for ongoing guidance.