Nutritional Counseling for Adults with Severe Mental Illness: Key Lessons Learned

ONE OF THE UNFORTUNATE side effects of taking certain antipsychotic medications is weight gain, which is often substantial.[1-3] Individuals with severe mental illness (SMI), including schizophrenia, schizoaffective disorder, bipolar disorder, and post-traumatic stress disorder, can be at considerable risk for developing obesity-related chronic diseases (Figure 1).[2-4] Individuals with SMI face unique barriers to living healthy lifestyles.[5,6] In addition to often having poor eating habits and being physically inactive, they may also have problems with drug addiction, which can compromise their ability to make healthy food choices.[6] Cognitive deficits related to psychiatric disease often lead to reduced attention span, inadequate retention of class material, and poor adherence to schedules.[7,8] Many patients with SMI have limited financial resources as a result of not being able to work,[3] and some live in assisted-living facilities where they may have limited control over the food served.[5] Overcoming one or more of these barriers can be extremely challenging.

The elements of a weight loss program designed for the general population, including portion control, increasing intake of fruits, vegetables, and whole grains, reducing fat intake, and increasing exercise, are the same elements that can help those with SMI control their weight. Unfortunately, this type of guidance has been less available to this population for various reasons. This population has often been stigmatized and not offered the full range of health and wellness opportunities available to other people. Health professionals themselves may believe individuals with SMI are less capable of following a weight loss program due to the various cognitive and other challenges described. However, these types of behavioral interventions are preferable to risky alternatives, such as surgery and weight loss medications, some of which can exacerbate psychotic symptoms.[9] Behavioral interventions can potentially result in successful weight loss in those with SMI, particularly if educational materials are presented in a multimodal and repetitive manner.[1,5]

During the past 20 years, there has been a movement away from an illness-focused, medical model of mental health, toward a person-centered, recovery model.[10] Individuals with mental illness are empowered to determine their own path of recovery, assume control over their lives, and make decisions for themselves. Given the evidence that supports the link between enhanced nutrition and improved physical, mental, social, and emotional well being,[11] the need for nutritional interventions is apparent in the mental health setting. Registered dietitian nutritionists (RDNs) have the training and specialized skills that play an important role in enabling mental health recovery by helping these individuals modify food behaviors and make healthy choices.

The purpose of this article is to provide insight into the challenges RDNs face when providing nutritional counseling to individuals living with a mental illness. Case studies highlight

*This article was written by **Crystal L. Kwan**, MPH, RD, clinical dietitian, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Hollie A. L. Gelberg,** PhD, RD, clinical dietitian, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Jennifer A. Rosen**, PharmD, BCPP, co-investigator, Long Beach VA, and clinical pharmacist, PGY-2 pharmacy residency program director in psychiatry, Department of Pharmacy, Department of Veterans Affairs Medical Center, Long Beach, CA; **Valery Chamberlin**, MD, co-investigator, Sepulveda VA, psychiatrist, Mental Health, associate clinical professor, UCLA, and associate residency director, UCLA-SFV Psychiatry, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Chandresh Shah**, MD, co-investigator, Los Angeles Ambulatory Care Center VA, and psychiatrist, Mental Health, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Charles Nguyen**, MD, co-investigator, Long Beach VA, and psychiatrist, Mental Health, Department of Veterans Affairs Medical Center, Long Beach, CA; **Joseph M. Pierre**, MD, co-investigator, West Los Angeles VA, associate director of residency education, UCLA Semel Institute for Neuroscience & West Los Angeles VA Medical Center, co-chief, Schizophrenia Treatment Unit, West Los Angeles VA Medical Center, and associate clinical professor, Department of Psychiatry & Biobehavioral Sciences, David Geffen School of Medicine at UCLA, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Zachary D. Erickson**, program manager, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Shirley J. Mena**, MSN, RN, research assistant, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Michael King, Jr**, research assistant, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Irina Arnold**, MS, MD (MD obtained in Russia), research assistant, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Matthew R. Baker**, research assistant, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; **Hilary B. Meyer**, research assistant, Medical Research, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA; and **Donna Ames**, MD, principal investigator, Program Leader, VA Psychosocial Rehabilitation and Recovery Center, and professor in residence, David Geffen School of Medicine at UCLA, Department of Veterans Affairs Medical Center, Greater Los Angeles, CA.*

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Medication	Metabolic syndrome	Weight gain	Glucose metabolism dysregulation	Dyslipidemia
Aripiprazole	Low	Low	Low	Low
Clozapine	High	High	High	High
Olanzapine	High	High	High	High
Risperidone	Mild	Mild to moderate	Mild	Mild
Quetiapine	Moderate	Moderate	Moderate	High
Ziprasidone	Low	Low	Low	Low

Figure 1. Approximate relative likelihood of metabolic disturbances with antipsychotic medications. Modified from Hasnain and colleagues,[4] with kind permission from Springer Science and Business Media.

the complexities involved in providing nutritional care and education. Although nutritional counseling was provided within the context of a research study, the lessons learned can apply to any RDN looking for practical strategies to overcome some of the challenges associated with behavior change in the SMI population.

DESCRIPTION OF RESEARCH

A randomized controlled Department of Veterans Affairs research study assessed the efficacy of a behavioral weight loss program for 120 US veterans with SMI (men and women, aged 18 to 70 years) who have gained weight as a result of their medications. This program has proven to be effective in preliminary findings.[7] A multisite extension of this study is currently underway. Subjects assigned to the intervention group receive educational group lessons on nutrition and exercise, along with individual nutrition counseling weekly for the first 8 weeks and monthly thereafter, up to 1 year. RDNs teach the classes and perform the counseling. Lessons include an introduction to carbohydrates and fats, healthy eating out, the "Healthy Plate" method,[12] and mindful eating. Subjects are assessed using anthropometric, metabolic, and dietary assessments to evaluate the program's overall effect on health outcomes. Some specific measurements include weight, body mass index (BMI), waist circumference, body fat percentage, blood pressure, lipid levels, and blood glucose. Although the remaining data have yet to be collected, preliminary analysis indicates overall improvement in weight and waist circumference for the intervention group compared with the control group through the first 6 months of the program.

CASE STUDIES

Case 1

A 52-year-old male veteran with paranoid schizophrenia, dyslipidemia, and obesity was prescribed aripiprazole, a second generation antipsychotic medication. With a starting weight of 230 lb, his weight increased by 70 lb to 300 lb during the next year. With a BMI of 41, a waist circumference of 54 inches, and triglyceride levels of 240 mg/dL (2.71 mmol/L), the patient sought help through the behavioral weight management research study. Having already lost 30 lb on his own before starting the program, the participant identified himself as "ready for change." He met with an RDN and case manager on a monthly basis. Cognitive barriers were not apparent; however, high levels of anxiety and reported paranoia would often interrupt meetings with the RDN. Although he demonstrated a basic understanding of nutrition-related knowledge, a diet high in desserts and fast foods remained his primary challenge in weight loss. The RDN used motivational interviewing techniques to work with the patient in identifying regular goals for an improved diet. Problem-solving skills were taught as the participant discussed barriers to healthy eating at each session. The patient also learned how to use self-monitoring strategies to keep track of his daily food intake using a food and exercise diary. His fruit and vegetable consumption increased with time. A pedometer was also used to track the number of steps walked, which eventually increased to 18,000 to 20,000 steps daily. He received rewards throughout the program, including gift cards and portion control plates, for meeting his health goals. Despite weight fluctuations, episodes of anxiety and depression, and missed appointments, the patient lost 20 lb, reduced his waist circumference by 4 inches, and achieved a normal triglyceride level of 118 mg/dL (1.33 mmol/L) during a 1-year period. He reported feeling more confident, happy, and equipped to practice these new healthy habits on his own.

Case 2

A 51-year-old male veteran with schizoaffective disorder, dyslipidemia, hypertension, and obesity was prescribed the antipsychotic medication quetiapine and experienced a 50-lb weight gain during the next 4 years. He was referred by his case manager to participate in the research study with the hope of managing his weight. Even with a baseline weight of 211 lb, a BMI of 33, a waist circumference of 48 inches, and an elevated lipid panel, the patient demonstrated little motivation for change. The RDN learned of his usual habits, which included three meals and snacks per day provided by his live-in residence, and one meal per day from a fast-food restaurant nearby. Exercise was not part of his daily routine. Significant cognitive barriers were observed by the participant's inability to identify basic nutrition concepts and the relationship between food and weight. Other behaviors, such as conceptual disorganization