Obesity and its comorbidities are now at epidemic levels and present an extremely complex, multifaceted set of issues nationally and globally.

The effects of obesity and its comorbidities in serious mental illness (SMI) are made all the more devastating by the associated conditions of cognitive/behavioral dysfunction, poverty, discrimination, side effects of psychotropic medications, and poor access to care. In this issue, nuanced, insightful articles present the epidemiology, neurobiology, prevention, and treatment of obesity from expert perspectives.

In his article on the prevention of obesity and its comorbidities, Rohan Ganguli, MD, FRCP, outlines primary, secondary, and tertiary prevention measures for obesity in SMI (page 469). Dr. Ganguli cites treatment studies that provide evidence for successful weight gain prevention in the SMI population.

Jeanie Tse, MD, FRCPC, and colleagues describe an integrated sustainable solution for achieving behavioral change and improved physical and mental health in the underserved SMI population (page 473).

Nicole M. Avena, PhD, and colleagues (page 478) discuss cross-sensitization between food addiction and drugs of abuse. They describe the activation of the mesolimbic dopamine pathway that occurs in the overconsumption of sucrose, as well as in the use of drugs of abuse.

Emma Elizabeth McGinty, MS, and colleagues, describe the epidemiology of obesity in the SMI population (page 484). The SMI have a life expectancy that is 25 years less than average; this is thought to be caused by the complex interactions of SMI, socioeconomic factors, and a higher prevalence of obesity and its comorbidities.

In a comprehensive review of the pharmacological treatments of obesity, Cenk Tek, MD, and colleagues (page 489) emphasize that medication should always be used as an adjunct or last resort after a structured lifestyle program is in place. The authors discuss the three medications currently approved for the treatment of obesity: phentermine, diethylpropion, and orlistat. They also give detailed overviews of medications approved for other indications that may also produce weight loss, and refer to medications in development.

Michael Michaelides, PhD, and colleagues in their article on functional neuroimaging in obesity (page 496) present their neuroimaging studies, which reveal that obesity is characterized by functional impairment within discrete brain regions and neurotransmitter circuits.

One of their many striking and unexpected findings is that there is activation of the higher cognitive functions involving the orbitofrontal cortex and striatum during food presentation and during feeding.

Shaheed Merani, MD, PhD, and colleagues (page 501) present an in-depth description of bariatric surgical procedures and a review of the data regarding these procedures in the psychiatric population. They report that 62% of patients referred for bariatric surgery have at least one psychiatric diagnosis, with major depressive disorder being most common. The morbidly obese have a higher prevalence of psychiatric illness than controls.

The authors review uniform psychiatric screening and exclusion guidelines. Post-bariatric surgical outcomes are described for patients with depression, anxiety, binge eating, and sexual dysfunction disorders.

Bariatric surgery is one of the fastest-growing surgical interventions in the US. This is an area in which we must continue to collect data and evaluate outcomes for these procedures in the SMI population.
In beginning to define and establish effective treatments, one of the keys to treating obesity is to facilitate behavioral change — this is what we try to do as psychiatrists. The SMI population does not have widespread access to private sector programs, and has often been abandoned nationally. Psychiatrists can take the lead in creating and implementing comprehensive obesity programs for the public sector.

Using principles from the fields of cognitive therapy, motivational interviewing, and adherence techniques, we can bring behavioral change concepts to both the public and private sectors.

By working with the NIH, the NIMH, and other resources, we can develop an American Obesity Network: a cohesive, comprehensive, accessible system for treating obesity that incorporates insights and templates from the contributing authors, as well as ideas from other experts in the field.

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about the guest editor

Joanne Caring, MD, is Unit Chief of the Community Support Services (CSS) Program at Metropolitan Hospital Center in East Harlem, NY, and Assistant Professor at New York Medical College. She is a Fellow of the American Psychiatric Association, and a recipient of the New York City Health and Hospitals Corporation Behavioral Health Best Practices Award and Behavioral Health Recognition Award.

After graduating from Cornell University with a BFA and pursuing a career in art, Dr. Caring received her degree from St. George’s University School of Medicine. She did her residency at Metropolitan Hospital Center/New York Medical College.

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