# Title

Evaluation of tertiary care model Obesity management services in patients with Serious Mental Illness

### Hospital

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#### Topic

Obesity is a complex, chronic, progressive and relapsing disease. Prevalence of obesity is higher in individuals with severe mental illness compared with general population, and is associated with adverse physical and psychological outcomes. Complex interactions between genetic, environmental, social factors, mental health and obesogenic medications lead to significant challenges in providing weight management strategies in this vulnerable population.

# Methodology

Electronic medical records of 151 patients with severe mental illness attending an obesity clinic in a tertiary care hospital during the covid-19 pandemic were reviewed. Data on baseline patient characteristics, lifestyle factors, obesity associated co-morbidities and interventions recommended to the patient was collected and analyzed.

#### Discussion

Mean age at presentation was 43.6years, 84% were females with an average weight of 102kgs. Class I, II, and III obesity was present in 30%, 25%, and 38% patients respectively,13% were overweight. Unhealthy lifestyle, stress eating, disturbed sleep, mental illness, and medications were the most common self-reported reasons for weight gain. 46% of patients gained weight in their teens and young adulthood. Data on lifestyle factors showed that only half of the patients had regular meals, with >25% eating out frequently. 50% of patients exercised regularly. Nearly one-third were unemployed/on welfare, 38% had sedentary jobs. Family history of obesity was present in 80% of patients. Weight gain associated joint pain was the most common self reported co-morbidity and was present in more than half of the patients followed by gastro-esophageal reflux disease (45%). Nearly one in five patients had a diagnosis of

obstructive sleep apnea, and of recurrent renal disease. Enquiry into cardiovascular risk factors showed one third of the patients had diagnosed dyslipidemia; hypertension was present in 20% and type 2 diabetes mellitus in about 19%. Moderate to heavy alcohol use was noted in 20% of patients, 20% were current smokers. Recent laboratory results for metabolic workup were available for only half of the patients, with hypertriglyceridemia being the most notable abnormality. Lifestyle modifications were recommended to all, pharmacotherapy to 88%, behaviour therapy to 45%, and bariatric surgery to 33%.

#### Outcome

This study highlighted that people with serious mental illness not only have a high prevalence of obesity, but also of risk factors predisposing to obesity including unhealthy lifestyle, and of obesity associated comorbidities including cardiovascular risk factors. We have put in measures to increase support to these patients, including better access to behaviour therapy, pharmacotherapeutic options, as well as increasing awareness in hospital and community based mental health teams about obesity as a complex chronic disease and to promote shared responsibility.