**WEIGHT ISSUES IN ADULTS WITH AUTISM SPECTRUM DISORDERS IN A CANADIAN AGENCY PROVIDING RESIDENTIAL SERVICES**

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**Objectives:** There is growing awareness around the healthcare challenges in adults with intellectual disabilities (ID). Higher prevalence of both physical and psychiatric comorbidities is present in this segment than the general population. ASD also is an independent vulnerability factor for health problems, especially in midlife and late adulthood. Medications are an important part of the multimodal treatment plan for both medical and psychiatric conditions (including aggressive behaviours) but often carry weight burdens. Obesity, particularly, is increasing at an alarming rate. Robust findings clearly documenting the association of body mass index (BMI at or above 95th percentile) in the obesity range and ASD for children and young adults. Scant research is available for adults with ASD and ID. This study characterizes the BMI of adults with ASD residing in group homes primarily in central Ontario in relations to physical and psychiatric comorbidities as well as medication usage to inform healthcare administrators and providers in this largely unexplored area.

**Methods:** Cross-sectional review of medical records was conducted on 76 group home residents with ASD. Their demographics, psychiatric and medical diagnoses, together with their medication profile were collected. Descriptive methods were used for analysis of all categorical and continuous variables. Participants were categorized according to BMI class. 76 ASD adults (58 males), aged 20 to 67yr (mean 38.1yr), have been in residential care on average for 15.6yr.

**Results:** Of the 76 participants, 2 were underweight, 21 normal, 35 overweight, 17 obese I, 1 obese II, thus demonstrating a higher proportion of overweight or obese individuals (69.7%) than the general population. Number of psychiatric comorbidities was positively correlated with heavier BMI class among those with at least one psychiatric comorbidity (R2 = 0.8614, p < 0.05). Moderate positive correlation between number of physical comorbidities and heavier BMI class (R2 = 0.3136, r = 0.56, p < 0.05), but only 3/18 participants in the Obese BMI class were formally diagnosed by a physician as obese. There was a strong positive correlation between number of GI conditions and heavier BMI class among those with at least one GI condition (R2 = 0.9941), but relatively no difference in number of musculoskeletal conditions between BMI classes.

**Discussion/Conclusion:** High proportion of overweight or obese participants portends consideration of weight as part of health maintenance. Since obesity is not typically the presenting complaint, it is seldom included in treatment plans. Weight burden is not an inevitable outcome of polypharmacy which is often necessary in the complex management of the sequalae arising from ASD and ID. Judicious use of medications can be combined with multimodal management strategies prioritizing healthy BMI in this mostly sedentary population. Dietary interventions with accommodations around food sensitivity and narrow meal preferences may be beneficial in ameliorating certain gastrointestinal conditions (especially constipation). Low incidence of musculoskeletal disorders, irrespective of BMI classes, supports physical exercises as a viable management option. Integrating these measures into the social planner may not only mitigate obesity risks but provide residents a greater sense of physical and emotional wellbeing from more social inclusion.

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