Abstract

Introduction: Previous studies have found a significant correlation between parents and offspring regarding overweight and obesity in general population at early life stages. However this issue has received no attention in people with intellectual disability (ID). Therefore, the present study was designed to find out potential correlations in overweight/obesity between young adult women with ID living in the family and their parents. Material and methods: In the present observational cross-sectional study, a total of thirty-four women with Down syndrome (n = 34; 22.6 ± 2.1 years; 29.6 ± 3.3 km/m²) were recruited through different community support groups for people with intellectual disabilities. Furthermore, biological mothers (n = 34; 59.6 ± 4.9 years; 28.5 ± 3.2 km/m²) and fathers (n = 34; 61.5 ± 5.3 years; 26.2 ± 2.7 km/m²) volunteered for this study. They all underwent an anthropometric assessment to determine body mass index (BMI). This protocol was approved by an Institutional Ethics Committee. Results: In the studied population, a total of 26 (76.5%) women with ID were overweight/obese. Furthermore, there were 22 (66.6%) overweight/obese mothers and 16 (53.3%) fathers. Results also showed significant correlations between participants BMI and their father (r = 0.327; p = 0.0116) and mother BMI (r = 0.412; p < 0.001). Lastly, overweight/obese women presented a stronger correlation with overweight/obese mothers (odds ratio 4.3; 95%CI 2.9-7.3) than fathers (odds ratio 3.1; 95%CI 1.6-4.4). Conclusion: Parental overweight/obesity, especially maternal one, was strongly associated to overweight/obesity in young adult women with DS. Accordingly, there is an urgent necessity of incorporating parents in the intervention programs designed to the prevention and treatment of overweight and obesity in people with ID.

Keywords

Intellectual disability, Obesity, Overweight, Parents, Offspring.