

ABSTRACT

Objectives: As the prevalence of childhood overweight and obesity increases in the developing countries, identifying morbidities associated with the condition is important. ADHD is a recently recognized morbidity in this group. The current study estimated the prevalence of ADHD among obese and non-obese children and adolescents attending out patient clinic at Lady Ridgeway Hospital, Sri Lanka. Demonstration of the association between ADHD and obesity in Sri Lankan children was the main focus of this study.

Methodology: It was a comparative cross sectional study of 209 children aged 6 to 12 years attending Out Patient Department, and out patient clinic for obese children at Lady Ridgeway Hospital for Children, Colombo 08. Height, weight and the BMI of each child were assessed by the author using the same measuring device to confirm the obese/non-obese status. Demographic data of the subjects were collected using a prepared format. Obesity was defined as BMI of more than 95th centile in reference charts. Assessment of the ADHD was done with the DSM IV criteria using K-SADS PL. The tool was translated to Sinhalese, and retranslated to English by two independent doctors. A pilot study was performed with 10 children prior to the main study. Collected data was analyzed using SPSS.

Results: The prevalence of ADHD among the obese was 17.15% (n=18) compared to 5.7% (n=6) among non-obese. The difference was statistically significant (P=0.010). Combined type ADHD was the commonest sub type, - (10.47% obese (n=11) and 3.8% non-obese (n=4)) followed by Predominantly Hyperactive-impulsive type, - (3.8% obese (n=4) and 1.9% (n=2) non obese). Least number of children were affected by predominantly inattentive type, -(2.85% (n=3) obese and 0% non-obese). There was a male preponderance with the diagnosis of ADHD (62.5% males Vs. 37.5% females). Predominantly inattentive type of ADHD was more prevalent among females (male: female = 1:2). Predominantly Hyperactive-Impulsive type and combined type of ADHD were commoner among males (male: female = 2 to 1).

Conclusions: This study highlights the higher frequency of ADHD among obese children and adolescents compared to non-obese. Reasons behind this co-morbidity are unknown. If replicated in future studies, these findings will have important implications in prevention and management of ADHD by early detection and management of obesity and its risk factors.