

The Prevalence of Obesity among a Huge Sample of 5-20 Years Old Jordanian Children and Adolescents Based on CDC Criteria

Authors : Walid Al-Qerem, Ruba Zumot

Abstract : Background: The rise of obesity among children and adolescents remains a primary challenge for healthcare providers globally and in the Middle East. The aim of the present study is to determine the prevalence of obesity among 5-20 years old Jordanians based on CDC criteria. Method: A total of 5722 Jordanians (37% males; 63% females) aged 5-20 years data were retrieved from the Jordanian Ministry of Health electronic database (Hakeem). As per the CDC selection criteria, the chosen data pertains exclusively to healthy Jordanian children and adolescents who are medically sound, not suffering from health conditions, and not undergoing any treatments that could hinder normal growth patterns, such as severe infection, chronic kidney disease (CKD), Down's syndrome, attention deficit hyperactivity disorder, cancer, heart disease, lung disease, cystic fibrosis, Crohn's disease, type 1 diabetes, hormonal disturbances, any stress-related conditions, hormonal therapy such as corticosteroids, Growth hormones (GHS) or gonadotropin-releasing hormone agonists, insulin, and amphetamines or any other stimulants. In addition, participants with missing or invalid data values for anthropometric measurements were excluded from the study. Weight for age and body mass index for age were analyzed comparatively for Jordanian children and adolescents against the international growth standards. The Z-score for each record was computed based on CDC equations. As per CDC classifications, BMI for age percentiles, values ≥ 85 th and < 95 th are classified as overweight, and value at ≥ 95 th is classified as obesity. Results: The average age of the evaluated sample was 12.33 ± 4.39 years (10.79 ± 3.39 for males and 13.23 ± 4.66 for females). The mean weight for males and females were 33.16 ± 14.17 Kg and 43.86 ± 18.82 Kg, and 133.54 ± 17.17 cm for males, 142.19 ± 18.35 for females, while for BMI the mean was for boys and girls 17.81 ± 3.88 and 20.52 ± 5.03 respectively. The results indicated that based on CDC criteria, 8.9% of males were classified as children/adolescents with overweight, and 9.7% were classified as children/adolescents with obesity, while in females, 17.8% were classified as children/adolescents with overweight and 10.2% were classified as children/adolescents with obesity. Discussion: The high prevalence of obesity reported in the present study emphasizes the importance of applying different strategies to prevent childhood obesity, including encouraging physical activity, promoting healthier food options, and behavioral changes. Conclusion: The results presented in this study indicated the high prevalence of overweight/obesity among Jordanian adolescents and children, which must be tagged by healthcare planners and providers.

Keywords : CDC, obesity, childhood, Jordan

Conference Title : ICO 2024 : International Conference on Obesity

Conference Location : Singapore, Singapore

Conference Dates : May 02-03, 2024