ORIGINAL RESEARCH

Predictors of Overweight and Obesity Among Children 24-59 Months Old in Informal Settlements in Nairobi- Kenya: A Cross-Sectional Study

Otin Janet [1], Ochola Sophie [1], Onywera Vincent [1]

[1]Department of Food and Nutrition, Kenyatta University, NAIROBI

[1]Corresponding Author Email: otinjanet02@gmail.com

Background: Childhood obesity is a public health concern worldwide. Information on this condition among children living in poor populations is scarce in Kenya. The objectives of the study were to determine the prevalence and predictors of overweight and obesity among young children living in informal settlements.

Methods: Cross sectional study conducted among 398 mothers / children 24-59 months old dyads. WHO age and sex specific Weight for Height (WFH) Z - score cut off points were used to determine overweight and obesity. Feeding practices were determined based on a 24-hour dietary intake and a 7-day food frequency. Information on physical activity was collected using the Children's Physical Activity Questionnaire (CPAQ). Predictors of overweight and obesity were determined using Linear Stepwise Regression Analysis (*P*<0.05).

Results: The prevalence of overweight and obesity among the children was 7.1%. The mean daily energy intake was (1602 kilocalories), carbohydrate (378.5g) and fat (27.4 g), higher than the RDI. Frequently consumed foods were cereals, mean 5.8; vegetables mean 5.8 and milk mean 6.3 days per week respectively. Fruit consumption was low; mean 2.9 days per week. Children were frequently involved in sedentary activities and screen time; mean 10.6 hours and 21.2 hours per week respectively. The main predictors of overweight and obesity were screen time (1.30; *P<0.001*); followed by sedentary activities (0.96; *P<0.001)* and carbohydrate consumption (0.01; *P=0.033)*.

Conclusion: Prevalence of overweight and obesity is high among the children due to the high amount of time spent on sedentary activities, screen time, and poor dietary practices.

Key words: Overweight. Obesity, dietary practices, sedentary activities, screen times, physical activities; under-fives, informal settlements