J Obes Eat Disord, 3:2 allied DOI: 10.21767/2471-8203-C1-003 INTERNATIONAL OBESITY, BARIATRIC AND METABOLIC SURGERY SUMMIT AND EXPO

August 23-24, 2017 | Toronto, Canada

Statistical Analysis of Body - Mass data for Young African Children

Kwabena A. Kyei Department of Statistics, University of Venda, South Africa

nalysis of body- mass data is useful because body-mass-Aindex (BMI) is a good indicator of body fat for both adults and children. It is good as a screening tool to identify weight problems in individuals. High BMI predicts future morbidity and death. Though it is not reliable for children nor is it good to be used as a diagnostic tool, it gives a clue to healthy lifestyles for both adults and children. BMI values correlate statistically with the risk for developing disease and dying such that for every 5kg/m^2 jump in BMI outside 22.5 - 25.0, the associated mortality risk increases with 30% jump. Do children in Nigeria have body-mass problem? If so what are the factors?

Objective: To determine the level of BMI among young children and to model the covariates.

Methods: A survey was conducted between April and July 2014 in Nigeria. The survey covered a thousand young children aged between 10 and 20 years randomly sampled. Generalized Linear Modeling (GLM) was used in the analysis.

Results: The results show that the mean BMI is 18.43 and that factors affecting BMI are age, gender, educational level, mother's occupation and the person with whom the child lives.

Conclusion: The mean BMI is 18.43, and this indicates that, generally, the children do not have weight problem nor is fatness a problem because its BMI lies within the recommended/expected range. Important factors affecting it (BMI) are children living with both parents, level of education and mother's occupation.

Keywords: BMI, children, Generalized Linear Models

e: Kyei61@gmail.com