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Body size preference is a predictor of cardio-metabolic health among urban women in Uganda: The health-beauty paradox

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Abstract

Non-communicable diseases cause a growing burden of death and disability in the Sub-Saharan Africa region, including Uganda. Beyond the individual and environmental factors, there is the deeply rooted cultural positive perceptions of large body sizes, which exacerbate the surge of overweight and obesity due to little or no awareness; hence, the health-beauty paradox. We analysed the perceptions of body weight within the health-beauty paradox among women of reproductive age (WRA) in urban Uganda.

A cross-sectional study was conducted in Kakoba within Mbarara City with a randomly selected population of WRA (15 to 49 years), who can provide consent and assent, not pregnant or lactating, and not on any cardio-metabolic imbalance medication. Data on dietary intake, physical activity, and physical and biochemical measurements were collected according to the WHO STEPwise instrument. Williamson's body silhouettes were used to obtain data on perceptions of body size. We modelled the cardio-metabolic outcomes by logistic regression.

Out of the 299 participants, 34 % of the women were overweight, 33 % with obesity, and 66 % with a waist circumference larger than 80 cm. Whereas 17 % of the respondents had elevated blood pressure and 13 % were classified with metabolic syndrome. Overall, 28 % of the respondents preferred an overweight or obese body silhouette. Additionally, 37 % of the women with a large waist circumference and 47 % with metabolic syndrome preferred an overweight or obese body size. A unit increase in age increased the odds of having metabolic syndrome (OR=1.08, $p = 0.02$) and having a larger waist circumference (OR=1.12, $P < 0.001$). A point increase in preferred body size increased the likelihood of having metabolic syndrome (OR=1.97, $p = 0.002$) and having a larger waist circumference (OR=1.53, $P < 0.001$). The number of vegetable servings in a day decreases the odds of having a larger waist circumference by (OR=0.66, $p = 0.009$). The health-beauty paradox exists, and its implications on the cardio-metabolic health of women are alarming.

Keywords: Body size, health-beauty paradox, metabolic syndrome, obesity