DEVELOPMENT OF A NEW BODY IMAGE ASSESSMENT SCALE IN URBAN CAMEROON: AN ANTHROPOLOGICAL APPROACH

Objective: Develop and validate body image scales (BIS) presenting real human bodies adapted to the macroscopic phenotype of urban Cameroonian populations.

Design: Quantitative and qualitative analysis.

Setting: Yaoundé, capital city of Cameroon.

Participants: Four samples with balanced sex-ratio: the first (n=16) aged 18 to 65 years (qualitative study), the second (n=30) aged 25 to 40 years (photo database), the third (n=47) and fourth (n=181), ≥18 years (validation study).

Main Outcome Measure: Construct validity, test retest reliability, concurrent and convergent validity of BIS.

Results: Body image scales present six Cameroonian of each sex arranged according to main body mass index (BMI) categories: underweight (<18.5 kg/m²), normal (18.5–24.9 kg/m²), overweight (25–29.9 kg/m²), obesity class I (30–34.9 kg/m²), obesity class II (35–39.9 kg/m²), and obesity class III (≥40 kg/m²). Test-retest reliability correlations for current body size (CBS), desired body size and current desirable discrepancy (body self-satisfaction index) on BIS were never below .90. Plus, for the concurrent validity, we observed a significant correlation (r=0.67, P<.01) between measured BMI and CBS. Finally, the convergent validity between BIS and a female African American silhouette scale, for different dimensions of body size perceptions, is acceptable.

Conclusions: Body image scales are adapted to the phenotypic characteristics of urban Cameroonian populations. They are reliable and valid to assess body size perceptions and culturally adapted to the Cameroonian context. (Ethn Dis. 2011;21(3):288–293)

Key Words: Central Africa, Obesity, Body Image, Body Image Scales

INTRODUCTION

Many studies have aimed to assess body image in different groups and populations. In developed countries, most of researchers study body image to evaluate psychological disturbances like body dysmorphia and eating disorders in different ethnic groups or according to sex, age class and nutritional status. In developing countries, most of researchers study body image to evaluate the impact of sociocultural valorization of stoutness on the prevalence of obesity in the context of a nutrition transition. In both cases, methodologies employed to measure body image are qualitative or quantitative: interview, focus group, questionnaire and figural stimuli presenting different sizes of a body.

As far as figural stimuli are concerned, most studies do not use figural drawings or silhouettes scales based on real human shapes. Most studies among Africans or African Americans used figural stimuli not adapted to phenotypic characteristics (especially including morphology and color of skin) of target populations. Silhouettes scales usually do not include anthropometrical data to accurately assess body size perceptions and to compare them, for example, to health criteria. Therefore, it seems important to construct scales able to solve these methodological problems for future studies aimed at the evaluation of body size perceptions in Africa.

In Cameroon, where high levels of obesity are common in urban areas, and the valorization of stoutness is pregnancy, the analysis of the impact of local cultural representations and practices relative to the body, stoutness and development of obesity appears inescapable. It seems pertinent to create a tool able to measure precisely these local representations to match it with various health indicators (body mass index [BMI], glycemia, blood pressure) in the context of the nutrition transition that Cameroon is currently experiencing. In order to explore body weight perceptions in Cameroon, we developed and validated a human photographic stimuli and a body image assessment guide (BIAG) taking into account the biocultural characteristics of the population.

METHODS

Qualitative Study - Survey

Our objective was to create figural stimuli adapted to anthropological characteristics of a sub-Saharan African population. The body image scale (BIS) is aimed at the assessment of...