A pilot study on body image, attractiveness and body size in Gambians living in an urban community

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ABSTRACT. OBJECTIVE: We investigated the attitudinal and perceptual components of body image and its link with body mass index (BMI) in a sample of urban Gambians. We also looked at cross-cultural differences in body image and views on attractiveness between Gambians and Americans. METHODS: Four groups of 50 subjects were assessed: men 14-25y (YM); women 14-25y (YW); men 35-50y (OM); women 35-50y (OW). Socio-economic status, education, healthy lifestyle and western influences were investigated. Height and weight were measured. Body dissatisfaction was assessed with the body dissatisfaction scale of the Eating Disorder Inventory. Perceptions of body image and attractiveness were assessed using the Body Image Assessment for Obesity (BIA-O) and Figure Rating Scale (FRS). RESULTS: Different generations of Gambians had very different perceptions and attitudes towards obesity. Current body size was realistically perceived and largely well tolerated. Older women had a higher body discrepancy (current minus ideal body size) than other groups (p<0.001). Regression analysis showed they were not worried about their body size until they were overweight (BMI=27.8 kg/m$^2$), whilst OM, YM and YW started to be concerned at a BMI respectively of 22.9, 19.8 and 21.5 kg/m$^2$. A cross-cultural comparison using published data on FRS showed that Gambians were more obesity tolerant than black and white Americans. DISCUSSION: The Gambia is a country in the early stage of demographic transitions but in urban areas there is an increase in obesity prevalence. Inherent tensions between the preservation of cultural values and traditional habits, and raising awareness of the risks of obesity, may limit health interventions to prevent weight gain.

INTRODUCTION

A close relationship exists between ethnicity, social values and body image, which can be considered as a mirror of ‘personal evaluations and affective experiences’ (1), moulded by cultural and social expectations (2). In this context, phenomena of acculturation, assimilation and internalisation of dominant cultural standards by minority groups may generate bodily distress, depending on the concordance among actual, ideal and socio-cultural beliefs (3, 4). For this reason, there are definite differences in the perception of body image, especially across ethnic groups. Research shows that African-American women consistently report greater acceptability for higher body weight, as well as higher ideal body weights, while still maintaining positive perceptions of body image. They are also thought to be more likely to be satisfied if they are at a higher body weight, and still regard themselves as attractive, which may be related to a high self-esteem and a strong sense of racial identity. This is exemplified in the lack of social pressure to be thin and reduced social negativity toward obesity (5-8).

However, the role of body image and attractiveness as determinants of weight gain among ethnic groups is not yet clearly established (9-11). In African populations, obesity has been associated with abundance and fertility and being fat has been seen as a statement of well-being. However, there is a paucity of information on body image and obesity from developing coun-
tries (12, 13) and, to our knowledge, few studies of body image and eating behaviour have been carried out in sub-Saharan countries (14-19).

The main causes sustaining this rise in obesity in developing countries have been linked to urbanization and nutrition transition, which have led to an increase in inactivity and consumption of high-energy dense food (20). In The Gambia an increase in urbanization has already created a difference in obesity prevalence between rural and urban areas and this was demonstrated in a large survey which showed a higher prevalence of obesity in urban than rural areas and a rate of obesity in middle-aged women living in urban areas close to 40% (21).

The Gambia is a little country located in West Africa and surrounded by Senegal. Its current population is around 1.4 millions inhabitants and since 1973 there has been a three-fold increase in the population living in urban areas (22). Its life expectancy is on average 55y and a recent study analysed the cause of deaths in the Gambia between 1942-1997 and documented the coexistence of non-communicable diseases (NCDs) with malnutrition and communicable diseases, which placed The Gambia in an early stage of demographic transition (23).

This pilot study explored the link between body image, attractiveness and body size in a sample of young and middle-aged men and women living in an urban community in The Gambia. Further, we explored the association between socio-demographic factors with body image perceptions and we carried out an inter-ethnic comparison with black and white Americans.

METHODS

The study used a cross sectional design in an urban area of The Gambia (Bakau-Kanifing Municipal area) and was completed during July and August 2003. Ethical approval was given by the Gambian Government/MRC Gambia and London School of Hygiene and Tropical Medicine Ethics Committees. Participants voluntarily agreed to participate in the study and signed an informed consent after the project was fully explained by the fieldworkers. Subjects were not reimbursed for their participation. Experienced and skilled local fieldworkers administered the questionnaires in the local language (Mandinka and/or Wollof) and two trained operators (MS and PG) supervised the accuracy of the data collection and performed the anthropometric and body composition assessment.

Subjects

House-to-house recruitment was initiated in a central compound and spread outwards until the initial target of 50 subjects had been recruited within each age and sex bracket, as follows: male 14-25y (young men=YM); female 14-25y (young women=YW); male 35-50y (older men=OM); female 35-50y (older women=OW). Recruitment was conducted within a typical urban population and the identification of the place to start our survey (Compound 1) was determined by the availability of a sheltered space where we could measure anthropometry and body composition. Afterwards the recruitment spread outwards in each compound until the initial target of 50 subjects had been recruited within each age and sex bracket. All the subjects meeting the inclusion criteria were approached and asked to take part in our study. We did not perform a formal assessment of the participation rate but we were confident to have reached almost all the eligible people in each compound (participation rate >90%) because of the extremely good relationships of the community with the MRC, the absence of any invasive procedures and the involvement of charismatic personalities in the community.

The above age groups were considered appropriate to explore inter-generational similarities and differences of behavioural and attitudinal factors which could have influenced body image perceptions and eating behaviour. We did not observe any statistical significant difference between adolescent (n=32; age<18y) and adult subjects (n=68; 18y<age<25y) in terms of weight (p>0.05), height (p>0.05), BMI (p>0.05) and fat mass (p>0.05) and consequently we decided to combine them in one group.

Procedure

Training sessions with local fieldworkers preceded the survey to understand the main language and cultural barriers of the questionnaires. The correct inverse translation of the questions from the local language to English and vice versa was performed to check for and adjust possible distortions in meaning. Furthermore, a preliminary questionnaire administration was carried out at the MRC outpatient clinic in Fajara. In the light of these results, we amended some questions, which could have generated misinterpretations or could be culturally inappropriate. For example, questions on body parts (buttocks, hips), which may have created embarrassment, were explained to each participant rather than directly asked during the interview.

Recruitment started early in the morning (8-9 am) and ended in the evening around 5-6 pm.