Summer Meeting, 28 June-1 July 2010, Nutrition and health: cell to community

High prevalence of overweight and obesity in migrant Ghanaians in London; using Black Churches as a setting for an obesity intervention programme

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The majority of Ghanaian migrants in the UK reside in London and there is evidence that they are disproportionately disadvantaged in terms of suffering from ill health and have significantly greater standardised mortality ratios for all ages⁽¹⁾. In Ghana, obesity increasing with age is more common in women than in men and is higher among urban dwellers than rural dwellers⁽²⁾. Dietary and anthropometric data for UK Ghanaian migrants are limited primarily because of the difficulty of access⁽³⁾. The majority of first-generation Ghanaian migrants in UK are Christian and attend Church regularly and so pastors of the UK Black majority churches were approached and asked to allow access to this population to collect dietary and anthropometric data with the intention to conduct an obesity intervention programme designed specifically for this population.

Four Black majority churches in London agreed to participate in the study and 212 volunteers aged between 18 and 65 years were interviewed face to face to complete the general questionnaire and a semi-quantitative validated food frequency questionnaire⁽⁴⁾. Anthropometric measurements were also collected for height, weight, waist circumference and waist: hip ratio and percentage body fat were measured using portable bioelectric impedance analysis. Dietary data were analysed using $UK^{(5)}$ and $Ghana^{(6)}$ food composition tables.

More than half (56%) of those surveyed were employed as manual workers and 41% resided in rented accommodation. Energy intake was higher in Ghanaian women compared to British women assessed using the NDNS survey (7748 kJ (1852 kcal) v. 6828 kJ (1632 kcal), respectively) but was similar for Ghanaian men and British men (9581 kJ (2290 kcal) v. 9677 kJ (2313 kcal), respectively). The percentage energy distribution from fat intake was higher in Ghanaian women than the British female population (37% v. 35%). On an average, Ghanaian migrant women had a higher BMI than men (27.3 kg/m² v. 24.3 kg/m²) and a significantly higher percentage body fat (31% v. 20%; P < 0.05). The prevalence of overweight and obesity was high in the migrant Ghanaian population when using BMI classification (women 67%, men 57%), but was lower when percentage body fat was used (women 40%, men 32%) and when waist circumference was used (34% women, 27% men).

Nevertheless, despite these variations within our study the data do indicate that the female migrant population exhibit a high prevalence of overweight and obesity compared to the general population when using the conventional body composition assessment tools. A Dutch study⁽⁷⁾ also showed a similarly high prevalence of overweight and obesity using BMI classification in migrant Ghanaians (80% women, 69% men) compared to native urban Ghanaians (22% men, 50% women). We intend to conduct focus groups to identify cultural perceptions of body size and to identify perceived barriers to a healthier lifestyle. This information will then be used to design an obesity intervention specific to this population and delivered through the Black majority Churches.

- 1. London Health Observatory (2007) Population Groups Ethnic Minorities. London: London Health Observatory.
- 2. Amoah A (2003) Ethnic Dis 13, S97–S101.
- Elam G, McMunn A & Nazroo J (2001) Feasibility Study for Health Surveys among Black African People Living in England. Final Report Implications for the Health Survey for England 2003. Joint Health Survey of University College, London and the National Centre for Social Research. London: Department of Health.
- 4. Adinkrah J & Bhakta D (2009) Proc Nutr Soc (In the Press).
- 5. Food Standards Agency (2002) McCance and Widdowson's The Composition of Foods, 6th summary edition. Cambridge: Royal Society of Chemistry.
- 6. Ghana Food Composition Table (2000). Department of Nutrition and Food Science, University of Ghana, Legon.
- 7. Agyemang C, Owusu-Dabo E, de Jonge et al. (2008) Public Health Nutr 12, 909-916.