Review of Dietary Intervention Models for Black and Minority Ethnic Groups

Lynn Stockley
Summary

• Demographics
• Health
• Background and other reviews
• Overview of studies included in review
• Details of each study by type e.g. cooking classes
• Characteristics of those interventions which appeared more successful
• Recommendations

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Demographics of BME groups in Wales
...ethnic groups

Source: 2001 Census of Population, Office for National Statistics

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...geographical distribution

Source: 2001 Census of Population, Office for National Statistics

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... percentage of Welsh residents born in Wales,
• The Indian group had the most diverse religious backgrounds with 54% Hindu, 19% Sikh and 9% Christian. The vast majority of Pakistani and Bangladeshi groups were Muslim, while 54% of Black, and 51% of mixed groups were Christian.

• Ability to speak English declines with increasing age, is less for women than men, and much less for those born outside the UK. 1% of the BME population claimed to speak some Welsh. The majority of these were Mixed, with levels around 18%.
“non-whites are over-represented in the low income population of the UK, comprising 3% compared with 8% in the general population“ (LIDNS 2007)
Health of BME groups

- Among Black Caribbean and South Asian men and women diabetes is relatively high
- Anaemia is common among women - up to 29.0% in Indian women
- Prevalence of heart attacks high in Pakistani men
- Black Caribbean men and Bangladeshi and Pakistani women have high stroke rates
Health of BME groups

• Black Caribbean (28.0 kg/m2) and Black African women (28.8 kg/m2) had a higher BMI

• Foresight indicated that increases in obesity will be less in BME groups than for the white population, except that black African women and Pakistani men and women appear to share the trend of increasing obesity of the white population
Nutrient Intakes

• % sat fat energy 1.9 % lower than equivalent White households

• 42% of Black women and 36% of Asian women had calcium intakes below the LRNI cf 8% of White women

• Use of salt in cooking was higher in most minority ethnic groups than among the general population

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Overall aim: to review dietary interventions in BME groups and to recommend which interventions and models may be most applicable for piloting with ethnic communities in Wales

Searches covered info 1998-2008. Limited to studies carried out in any of the four countries of the UK
Other reviews

- first comprehensive systematic review on effectiveness of dietary interventions in BME groups- 1998. [www.nice.org.uk](http://www.nice.org.uk)
- recent review health promotion & prevention interventions related to CVD and cancer in Pakistani, Chinese and Indian communities (Netto *et al.* 2008)

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Overview of studies

• 17 evaluated interventions were identified. 14 of these were from England, 2 from Scotland and 1 from Wales.
• Most (4) cooking classes.
• Peer educators working with groups (3)
• Small groups - healthy eating/slimming (5)
• Tailored professional input (2)
• Media/schools/catering training (3)
Overview of studies

• Most studies rated as being of weak scientific quality. 2 were weak-moderate. Reasons:-
  – numbers in the study low,
  – self reported measures
  – no control groups, usually pre-post measures and in several cases no baseline data.

• i.e. the findings of the studies, whilst they may be interesting or show potential, do not provide a strong evidence base
Cooking class 1

- Eight CookWell programmes in eight urban low income areas, with each class containing 6-10 women, including from S.Asian background.
- Subsequent project with women from Bangladeshi, Pakistani, Somali and Zimbabwean backgrounds
- Results promising - food consumption and self reported skills acquisition
- Cookwell resources produced and revised
Cooking classes 2 & 3

• Cookery clubs in Bedfordshire. Women from Bengali, Gujarati, Punjabi and Urdu backgrounds. 3 x 2hr sessions. Self reported measures - improvements in cooking practices.

• 4-week “Cook and Eat” community-based programmes + 90-minute Grocery Shopping Tours – Haringey - focus on ↓salt intake. Mostly women - African, Asian, Caribbean. +ve results.
• Cooking projects may be beneficial, but the scientific quality of the evaluations is low. Also there is no data on cost effectiveness, and at face value these type of interventions appear to be resource intensive, and not necessarily easy to sustain.
Peer educators working with groups 1 & 2

• Cardiff - women from Arabic, Bangladeshi, Gujarati, Pakistani and Somali backgrounds. Purpose - train workshop facilitators to pass knowledge to peers in their own language. 7 women trained. Self reported improvements.

• Bristol. Salt focus. Training programme for peer educators from African Caribbean, Somali, South Asian and East Asian groups. Used 2 behavioural change models - social learning theory & stages of change. +ve results.
Peer educators working with groups

3

• Leicestershire. Project Dil. CHD training and awareness programme for health care professionals; and a public awareness campaign including a peer education programme for the South Asian community. Within 6 months of completion, a total of 54 peer education sessions accessed by over 2,000 people. Adopted by Leicestershire Health Services
Peer educators working with groups

Conclusion

• Results promising but scientific quality is low. 2 of the 3 studies said work spread to wider community. Another benefit - cultural relevance increased, language barriers are overcome.

• There may be practical reasons to consider the application of a peer education approach in Wales, despite the limitations of the evidence base.
Other small group interventions

• Asian women's healthy eating and exercise group. Supported by the multilingual link worker. Small ↓ BMI.
• Salt. South Asian and Caribbean communities in Manchester. dedicated community food worker. 3 group sessions. Some +ve changes.
• Slough. S.Asian women. Eligible participants were provided with access to 12 weeks of free slimming sessions. 87% failed to complete the course of sessions.
Other small group interventions:
CHD risk factor screening + group lifestyle sessions

• Khush Dil. Health visitor-led screening; dietetic clinics to provide one-to-one nutritional support; practical activities including cookery workshops, exercise classes and CHD/diabetes awareness sessions. Community development approach + Stages of Change. Significant ↓ clinical measures.
Interventions with tailored professional input - 1

- Huddersfield. South Asian Infant Nutrition Worker (SAINW) advice and support during weaning - families with a South Asian origin. ↓ in use of interpreters+ some tel support are potential cost savings to offset the cost of the SAINW.
- Employing a trained and bilingual infant worker from specified BME communities appears to increase reported positive outcomes,

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Interventions with tailored professional input - 2


- Results appeared to be positive, and the qualitative research was important in highlighting issues e.g. the positive results that were achieved depended on dietitians spending more time than they were paid for in undertaking this project.
Other interventions

- Salt. 8 wk Media campaign in ethnic media. Self reported +ve changes.
- Leics. 5 schools over 2 years. Limited changes.
Characteristics of more successful interventions

- Tailored to the various BME groups
- Understanding lifestyles, and relationships
- Re-inforce changes
- Use trusted community worker
- Health profs from same community/language
- Community development and peer ed – promising
- Interventions which combine health structures and professionals with community based activities appear promising – and may be adopted by local structures

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Recommendations 1-3

- Evaluations of dietary interventions in BME should use rigorous and appropriate research methodologies. If the available funding is not sufficient to include a good evaluation, then every effort should be made to collaborate with other agencies or groups to increase the funding.

- Evaluated dietary interventions for the general population should consider boosting the numbers of BME participants so that conclusions can be drawn out relating to BME groups. Realistically this may probably be best achieved by focusing on one of the BME ethnic groups.

- Evaluation tools need to be appropriate and validated for the specific BME groups e.g. food intake measurement techniques.
Recommendations 4-6

• Any future evaluated dietary interventions in BME groups should explicitly include the theoretical bases used to structure the intervention, and to develop the behaviour change elements

• Assess cost –effectiveness, generalisability within BME groups, and sustainability (in addition to effectiveness in changing behaviour, nutritional status, or aspects of attitudes) in future evaluated dietary interventions in BME groups

• Incorporate the relevant characteristics of successful projects in future dietary interventions for BME groups

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