Developing obesity prevention interventions among ethnic minority children in schools and places of worship: The DiET and Active Living (DEAL) study

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Background
- Studies from the US and the UK show that ethnicity is consistently associated with childhood obesity. 1, 2
- In the UK, children from some ethnic minorities tend to engage more than their White British peers in obesity related behaviours. 2
- Little is known about what promotes or hinders engagement with prevention programmes among ethnic minority children.
- In contrast to the US, faith-based health promotion interventions have rarely been used to engage ethnic minority groups in the UK.

Purpose
This poster describes the design of the DiET and Active Living (DEAL) study 3 set in London, UK. The aim of DEAL is to conduct exploratory research, using a socio-ecological conceptual framework, to identify culturally acceptable child- and family-based interventions to reduce dietary and physical activity (PA) risk factors for childhood and adolescent obesity among ethnic minorities.

Methods
Setting
We utilised both a population approach (Schools) and a targeted approach (Places of Worship) and examined:
- Willingness to take part
- Access to families
- Mode of delivery & ability to sustain support

Sample
77 children (8-13 years) from 3 primary and 2 secondary schools, 2 Pentecostal churches, 1 Church of England, 1 mosque, 1 Jain prayer group, 1 Tamil temple, 1 Shree Swaminarayan temple and 1 Sikh Gurdwara (see Table 1 for sample by ethnicity).

Focus Groups
- Explored barriers and facilitators to healthy food choices and sufficient physical activity
  - 13 child groups (n = 70)
  - 8 parent groups (n = 38)
  - 3 grandparent groups (n = 11)

Intervention Taster Sessions
- Piloted potential intervention components (see Table 2 for example sessions)
- Content informed via literature review, focus groups and consultation interviews

Table 2: Examples of DEAL intervention sessions

<table>
<thead>
<tr>
<th>Diet only session</th>
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<td>Primary School: 5-a-day fruit and vegetables</td>
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<tr>
<td>Delivered through interactive knowledge sessions</td>
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<tr>
<td>Alternatives to energy dense snacks</td>
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<td>Tasting sessions of simple fruit and vegetable dishes</td>
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| Physical Activity only session |
| Secondary School: Street Dance |
| Delivered through professional led dance session |
| Using popular activity to reinforce PA messages |
| Learning and executing a dance routine |

| Combined Diet and PA session |
| Gurdwara: Physical activity and energy balance |
| Delivered through interactive knowledge sessions |
| Principles of PA, energy intake and expenditure |
| Small group activities, worksheets |

Measures
- Examined feasibility and cultural appropriateness of tools to measure:
  - PA (Actiheart, Youth Physical Activity Questionnaire)
  - Diet (Food diary, 24hr Recall, Interactive Portion Size Assessment System: IPSAS)
  - Self-efficacy (for both PA and diet)

Preliminary Findings

Barriers and Facilitators
- General themes regardless of ethnicity
  - Dislike of school meals
  - Lack of interest in PA in girls
- Ethnic specific themes
  - Familial roles and responsibilities
  - Retention of cultural food practices
  - Influence of religion on well-being

Intervention Taster Sessions
- Most popular sessions were those with an interactive science component.

Future Research
- These findings have informed the development of a pilot randomised control trial: a multi-component intervention delivered via schools and supported by places of worship and community partnerships.

References

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