Physical Activity among Adult Somali Women: The Cultural Adaptation of an Evidence-Based Intervention

Kate Murray, PhD, MPH
Azieb Ermias
Amber Lung
Amina Sheikh Mohamed, MPH

Presenter Disclosures
Kate Murray
The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:
No relationships to disclose

Learning Objectives
- **Objective 1:** To describe recommended steps for cultural adaptation of evidence-based public health interventions for a new cultural group
- **Objective 2:** To identify some of the unique barriers and opportunities for physical activity interventions with Somali women living in the United States
- **Objective 3:** To discuss some of the methodological challenges of piloting and culturally adapting a physical activity intervention for use with a sedentary adult Somali women in the United States
Cultural Adaptation

Changes in Health
- Nutrition Transition
  - Rapid onset of chronic diseases
  - Changes in diet & behavior

When to use Cross-Cultural Adaptation?

Table 1. Possible Scenarios Where Some Form of Cross-Cultural Adaptation is Required

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Results in a Change in</th>
<th>Adaptation Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Culture</td>
<td>Country of site</td>
</tr>
<tr>
<td>A: New language, new culture, same country</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>B: New language, new culture, new country</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C: New language, same culture, same country</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>D: New language, same culture, new country</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>E: New language, new culture, same country</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Cultural Adaptation

1. Information Gathering
2. Preliminary Adaptation Design
3. Preliminary Adaptation Tests
4. Adaptation Refinement


Cultural Adaptation of Interventions

Cultural Adaptation

Types of Adaptation

- **Surface**: observable, superficial characteristics (e.g. language, food, locations, clothing)
- **Revision of tip sheets**
- **Translation**
- **Deep**: cultural, social, historical, environmental and psychological characteristics (e.g. the meaning of health, social norms)
- **Cultural competence of research team**
- **Critical analysis of sociopolitical circumstances that affect differences in health behaviors and health outcomes**

Information Gathering
- Focus Groups 2009: East African Women
  - What are your health concerns?
  - Areas for program development?

Physical Activity
- Photovoice Project
  - Safety
  - Lack of culturally appropriate resources
- Literature Review

Literature Review
- Many existing physical activity programs
- 1 trial with Somali women in New Zealand*
  - Group-based programs
  - Sponsored gym memberships
  - Walking groups at a local high school
  - Growing area of research

Adaptation
- Practical barriers (e.g. time, money)
- Cultural/religious barriers
- Health Literacy as a point for adaptation
  - Lower literacy associated with worse health status
  - Tailoring communication can affect outcomes
- Literacy and Acculturation: larger picture

Ladnaan Program Targets

- Somali Women born in Africa
- 18 to 65 years old
- Sedentary
- BMI less than 40

Piloting Recruitment

- Through partner organization
- Word of mouth
- Advisory Committee
- Community Leaders

Methods

- Community Mapping Pilot (10 Participants)
- Study Pilot (25 participants)

Steps 2/3: Preliminary Adaptation Design & Tests
Mapping Procedure

- Physical Activity Barriers
  Examples: cost, time, safety, unleashed animals, presence of men
- Physical Activity Opportunities
  Examples: free parks, park and recreation centers/programming, YMCAs, venues where children can simultaneously play

Adaptation

- Who
- What
- Where
- When
- How

The Intervention

- Main Components:
  - Increase moderate intensity physical activity
  - PA topics: goal setting, moderate intensity exercise, rewards, overcoming barriers, social support, etc.
  - Wellness topics: stress management, you and your doctor, healthy eating, relaxation, time management, etc.
  - Emphasis on print-based dissemination of information
Adaptation

Reduce - Simplify - Prioritize

- Be Realistic: Make sure your goals are achievable. Unrealistic goals can sometimes lead to frustration and disappointment
- Set goals you can meet

Sample of key problems: unclear message, long or technical words, complex sentences, no illustrations, print too small, inappropriate for target audience

Health Literacy

Original Document Means
- 277 words
- .62 pictures
- 5.5 reading level

Revised Document Means
- 164 words
- 4.2 pictures
- 2.9 reading level
Material Content & Delivery

- Types of exercise
  - Places for exercise
  - PA as part of daily living
  - Focus on family and social networks
- Group-based format

Next Steps

- 6-week Open Trial
- 2013 – 2014 RCT
  - 100 sedentary adult Somali women
  - Wait-list control
- Organizational Intervention
  - Enhanced community access to culturally appropriate resources
  - Increased awareness within broader community

Acknowledgements

- Mentor Team: Bess Marcus, Deb Bowen, Simon Marshall, Heidi Ellis
- Ladsaan Team: Amina Sheik Mohamed, Azieb Ermias, Amber Lung, Zana Shirwan
- East African Women's Health Advisory Committee: Godfriede Nsanbanyenge, Sakra Abdir, Amy Fan, Elizabeth Ahera, Khadiga Mohamed, Nyawech Kailech, Ramla Sahid
- Community Partners: United Women of East Africa Support Team (UWEAST) and Project Concern International (PCI)
- Funders: American Cancer Society (MRSG-13-069-01-CPPB), SDSU/UCSD Cancer Center Comprehensive Partnership, California Wellness Foundation
Questions?

Kate Murray
k2murray@ucsd.edu
http://www.kate-murray.squarespace.com/