CCHRC Diabetes Education Programs

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Executive Director
Chinese Community Health Resource Center (CCHRC)
CCHRC - Part of the Chinese Hospital Health System

- Mission
  To build a healthy community through culturally and linguistically competent programs on preventive health, disease education and management, research and advocacy.

- Bilingual, Bicultural Staff/Health Educators, Volunteers and Interns
Bilingual Services and Programs

- General Health Education
  (Perinatal, Pediatric, Geriatric/ End of-Life Care)
- Patient Navigation
- Cancer Information and Services
- Disease Education & Management
Bilingual Services and Programs (cont’d)

- Individual Counseling
- Community Events
- Bilingual Library
- Research & Publication
- Advocacy
Bilingual (English & Chinese) Diabetes Programs

In-Person Programs & Services
- Seminars
- Screenings
- Individual Nutrition Counseling
- Instruction on Glucometer Use
- Education Materials/ Wellness Library
- Support Groups
Effectiveness of a Culturally Tailored Diabetes Self-Management Support Group for Chinese Americans

To test the feasibility and efficacy of a diabetes self-management and education program for Chinese Americans in a support group format.

23 Chinese Americans w/diabetes
Twelve 90-minute education sessions
Single-group, pre- post- test design
At 6 months, 42.1% had ≥1.0% A1C decrease

(Sun et al., 2012) www.cchrchealth.org/research/publications
Bilingual Diabetes Programs (cont’d)

Web-based Resources:

- **BMI**
  [http://www.cchrchealth.org/health-calculators/body-mass-index-bmi-adults](http://www.cchrchealth.org/health-calculators/body-mass-index-bmi-adults)

- **Calorie Calculator**
  [http://www.cchrchealth.org/health-calculators/calorie-calculator](http://www.cchrchealth.org/health-calculators/calorie-calculator)

- **Nutrition Analysis**

- **Grocery Shopping Tips**

- **Resource Links**

- **Education Materials**
  [http://www.cchrchealth.org/health/health-education-materials](http://www.cchrchealth.org/health/health-education-materials)
Education Materials

- Online information on Diabetes and co-morbidities (over 35 pdf files available for download at www.cchrchealth.org/health/health-education-materials in Traditional Chinese, Simplified Chinese and English)

- Bilingual Diabetes Management Booklet (revised 2016) http://www.cchrchealth.org/health/health-education-material/diabetes

- Animated videos/ DVDs (in Cantonese, Mandarin and English, produced http://www.cchrchealth.org/chronic-disease-education/Coronary%20Artery%20Disease
  - Diabetes Education and Management
  - Congestive Heart Failure
  - Coronary Artery Disease
Chapters include:

- What is Diabetes?
- Types of Diabetes
- Diagnosis, Symptoms of & Risk factors for Diabetes
- Complications of Uncontrolled Diabetes
- Management of Diabetes
- Low Blood Sugar and High Blood Sugar
- Diabetes Management During Illness
- Diabetic Eye, Foot & Dental Care
- Recommended Tests, Exams and Immunizations
Bilingual (English & Chinese) Diabetes Programs

Media Education, Publications & Presentations

- **Community Media Education**
  http://www.cchrchealth.org/media-tools/ktsf_great_family

- **Research & Publication**
  http://www.cchrchealth.org/research/research

Other Publications:
www.cchrchealth.org/research/publications

Presentations at Professional Conferences:
www.cchrchealth.org/research/Presentations
Home-Based & Technology-Centered Childhood Obesity Prevention for Mothers with Pre-school Age Children

Aims

1. Adapt existing web-based program for Chinese American mothers and their preschool-aged children

2. Beta-test the adapted online program among Chinese American mothers

3. Assess feasibility of intervention
A Randomized Control Study

**Intervention Via Tablet Computer (N=16)**
- Viewed a 30-minute video for 8 consecutive weeks on 8 different topics
- Highlighted: The 5-4-3-2-1-0 message

**Control Via Mailing (N=16)**
- Received printed health materials weekly for 8 consecutive weeks on 8 different topics (eg: immunization, injury prevention and school readiness)
Lesson Topics:
http://www.cchrchealth.org/researchcourse/lesson1

- Energize Your Family - *Getting Started*
- Energy Balance - *Maintain A Healthy Weight*
- What to Feed My Family - *Energy IN*
- Grocery Shopping
- Find Fun In Physical Activity - *Energy OUT*
- Less Sit, More Fit - *Decrease Screen Time*
- Smart Parenting
- Maintain A Healthy Weight for Life
5-4-3-2-1-0 Theme Song

Memorize these numbers for a healthy you and me
（要健康數字代號 緊記呢幾句）

Click Here to Play Video
Outcome Measures

- Mothers: maternal self-efficacy, changes in eating behaviors, physical activity, child-feeding practices, BMI and waist circumference

- Children: changes in vegetable and fruit intake, physical activity, sedentary activity, and sugary drink consumption

- Outcomes assessed at baseline, immediate & 3-month post intervention

- Survey incorporated:
  - CFQ= Child Feeding Questionnaire
  - FEAHQ= Family Eating and Activity Habits Questionnaire
### Sample Characteristics

<table>
<thead>
<tr>
<th><strong>Mean Age of Children</strong></th>
<th>4.31 Years (SD = 0.69)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean Maternal Age</strong></td>
<td>36 Years (SD = 4.9)</td>
</tr>
<tr>
<td><strong>Gender of Children</strong></td>
<td>46.9% Female</td>
</tr>
<tr>
<td><strong>Overweight or Obese with BMI &gt;85(^{th}) Percentile based on CDC Children Growth Chart</strong></td>
<td>37.5%</td>
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<tr>
<td><strong>Mean Maternal BMI</strong></td>
<td>25.0 (SD = 2.71)</td>
</tr>
<tr>
<td><strong>Average Maternal Waist Circumference (in.)</strong></td>
<td>33.7 Inches (SD = 2.45)</td>
</tr>
<tr>
<td>Variables</td>
<td>Control T0 (SD)</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Maternal Weight (lbs.)</td>
<td>132.29 (14.02)</td>
</tr>
<tr>
<td>Maternal BMI</td>
<td>24.79 (2.83)</td>
</tr>
<tr>
<td>Maternal Waist Circumference (in.)</td>
<td>33.99 (2.42)</td>
</tr>
<tr>
<td>Maternal Age</td>
<td>36.30 (4.96)</td>
</tr>
<tr>
<td>Paternal Age</td>
<td>43.31 (6.79)</td>
</tr>
<tr>
<td>Acculturation</td>
<td>1.94 (0.32)</td>
</tr>
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Results

Mixed-model analysis indicated that significantly more of the mothers in the intervention group

- Decreased waist circumference ($F=6.6$, $p=.005$)
- Increased confidence for promoting healthy eating at home ($F=4.9$, $p=.023$)
Results (cont’d):
Effect Sizes (Intervention compared to Control Group)

<table>
<thead>
<tr>
<th>Large Effect Sizes (d= 0.8)</th>
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<tbody>
<tr>
<td>Maternal BMI</td>
<td>(d = 1.53)</td>
</tr>
<tr>
<td>Maternal Self-Efficacy for Promoting Healthy Eating</td>
<td>(d = 0.99)</td>
</tr>
<tr>
<td>Maternal Waist Circumference (inches)</td>
<td>(d = 0.88)</td>
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<table>
<thead>
<tr>
<th>Moderate Effect Sizes (d= 0.5)</th>
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<tbody>
<tr>
<td>FEAHQ Eating Style- Maternal</td>
<td>(d = 0.79)</td>
</tr>
<tr>
<td>Girl Body Image</td>
<td>(d = 0.72)</td>
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Limitations

- Small sample size
- Short-term follow up
- Self-reported measures

Acknowledgments

- The Safeway Foundation
- University of California, San Francisco - Department of Family Health Care Nursing
- Kai Ming Head Start
- Quynh Bui, MD
- Jyu-Lin Chen, PhD, RN, CNS, FAAN
Conclusion: Achieving Patient Centered Diabetes Care

- Cultural sensitivity
- Partnership
- Patient centered delivery method for messages
- Effective communication
- Patient empowerment
- Team approach
- Family involvement and social support

Conclusion: Achieving Patient Centered Diabetes Care
Acknowledgements

- CCHRC Board of Directors
- CCHRC Staff, Interns and Volunteers
- Academic Partners
- Community Partners
THANK YOU!