Improving behavioral and clinical indicators in older adults with diabetes: Findings from a community clinic-based program

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**Project Team**

- **Kokua Kalili Valley Comprehensive Family Services**
- **University of Hawaii Office of Public Health Studies**
- **Hawaii State Department of Health Diabetes Prevention and Control Program**

**Recruit for and Implement DSMP Classes**
- Collect Data: Clinical and Self-Reported
- Implement Evaluation Plan
- Data Analysis and Reporting
- Provide Funding
- Provide Oversight

**Stanford’s Diabetes Self-Management Program (DSMP)**

**Purpose**
- To empower people with type 2 diabetes to take control of their diabetes
- To gain knowledge of self-management
- To improve skills needed in the day-to-day management of diabetes

**Session format**
- Feedback/Problem solving
- Short lecture
- Action planning
- Closing

**TOPICS COVERED**
- Understanding diabetes
- Keeping track of blood sugar
- Eating a healthy diet
- Being more physically active
- Coping with stress
- Dealing with sick days
- Taking care of your skin and feet
- Communicating with health professionals
- Setting and reaching goals

**Project Process**

1. **Recruit participants**
   - Flyer posted at the health center
   - Word-of-mouth
   - Attended a variety of community events

2. **Offer informational session**
   - Meet with leaders
   - Get familiar with materials
   - Have an MD explain the importance of diabetes self-management

3. **Conduct baseline data collection**
   - Self-reported: Health behavior survey
   - BMI, BP, Glucose, A1C, Fasting glucose, BP

4. **Offer DSMP workshops**
   - 2.5 hours/week for 6 weeks (Offered 8 workshops)

5. **Conduct 6-month reunion**
   - Reminder calls
   - Reminder cards

6. **Celebrate**

7. **Conduct 1-year assessment**

**Results**

**Participant demographics (n=101)**

- Mean age: 73 years old
- Gender: 87% Female
- Ethnicity:
  - Native Hawaiian 1%
  - Micronesian 2%
  - Japanese 4%
  - Chinese 2%
  - Filipino 91%

**Prevalence of Chronic Conditions**

- Native Hawaiian
  - NPC (BMI ≥ 25)
  - BP ≥ 140/90
  - Fasting glucose ≥ 126
  - HDL < 40

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**Data collected at baseline, 6 months, and 12 months**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Time spent for exercises</th>
<th>Health care utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Exercise</td>
<td>Aerobic</td>
<td>Strength exercise</td>
</tr>
<tr>
<td>MD visit</td>
<td>ER visit</td>
<td>Hospitalization</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
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<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Clinical Measures**

- Total cholesterol (mg/dL)
- SBP (mmHg)
- Fasting glucose (mg/dL)
- HDL (mg/dL)
- LDL (mg/dL)
- BMI (kg/m2)
- A1C (%)

**Lessons Learned**

- DSMP works with an Asian and Pacific Islander population.
- Leaders from the community increased participation in the program.
- This project demonstrated long-term positive impacts in a variety of health behaviors and clinical measures.
- The benefits of DSMP may be enhanced when opportunities for physical activities are offered at the same site as DSMP.

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**Data Analysis and Reporting**

- Reminder cards
- Reminder calls
- 100% Completion rate

**Participant demographics (n=101)**

<table>
<thead>
<tr>
<th>N (Completion rates)</th>
<th>Baseline</th>
<th>6 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 (100%)</td>
<td>87 (85%)</td>
<td>74 (64%)</td>
<td>54 (53%)</td>
</tr>
</tbody>
</table>

**Prevalence rates**

- Baseline: 1%
- 6 months: 9%
- 12 months: 10%