

Translating Diabetes Prevention Into Native Hawaiian and Pacific Islander Communities: The PILI ‘Ohana Pilot Project

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What Is the Purpose of the Study?

We sought to utilize a fully engaged community-based participatory research (CBPR) approach to culturally adapt the Diabetes Prevention Program (DPP) Lifestyle Intervention for Native Hawaiian and other Pacific Islander (NHOPI) communities and to examine the effectiveness of the culturally adapted program to promote weight loss in five NHOPI communities.

What Is the Problem?

NHOPIs, of which Native Hawaiians (NHs) comprise more than 45%, have a greater burden of diabetes, prediabetes, and the metabolic syndrome than Whites. NHs have a diabetes mortality that is three times higher than Whites. The prevalence of overweight and obesity is 82% for NHs compared with the national prevalence of 53%. Thus, NHOPI populations have an excess burden of diabetes health disparities and would benefit from efforts to reduce these disparities.

Few studies have evaluated the use of fully engaged CBPR approaches to facilitate the translation of empirically tested and efficacious research interventions, such as the DPP Lifestyle Program, into real-life practice that will directly benefit the health and well-being of individuals and families that experience a greater burden of diabetes health disparities such as NHOPI.

What Are the Findings?

- A fully engaged CBPR approach that included five community and one academic partners from the inception of the research project was successful in enrolling NHOPIs to create a culturally relevant DPP Lifestyle Program, now entitled the PILI “Ohana Lifestyle Intervention” (POLI).
- Using community–peer educators in five NHOPI communities, the POLI was implemented in eight sessions delivered over 12 weeks to 239 adult NHOPIs enrolled in the PILI ‘Ohana Pilot Project.
- The mean weight loss was 1.5 kg (95% confidence interval [CI], –2.0 to –1.0) with 26% of participants losing 3% or more of their baseline weight.
- Mean weight loss among participants who completed all eight sessions was significantly greater (–1.8 kg; 95% CI, –2.3 to –1.3) than those who completed fewer than eight sessions (–0.7 kg; 95% CI, –1.1 to –0.29).
- A fully engaged CBPR approach was successful in translating an evidenced-based diabetes prevention lifestyle program into a culturally relevant intervention in NHOPI communities.
- This pilot study demonstrates that similar weight loss in high-risk minority populations can be achieved using a fully engaged CBPR approach model.

Who Should Care Most?

- NHOPI people who are interested in reversing the high prevalence of diabetes and prediabetes in their communities.
- Health care providers who care for NHOPI patients and their families who may have diabetes or prediabetes.
- Public health leaders, policy makers, and community leaders who may be able to provide resources to disseminate effective programs into high-risk communities.
- Other minority communities who want to be engaged in the process of preventing diabetes in their communities through active participation.

Recommendations for Action

- Fully engaged CBPR approaches warrants further examination as a potential tool for translating evidence-based studies into public health practice, especially among high-risk minority communities.
- Cultural adaptation of empirically tested and complex interventions needs to be evaluated to ensure retention of efficacy of the intervention when applied to real-life settings.
- High-risk minority communities, such as NHOPIs, need more resources to disseminate and train community members to implement effective diabetes prevention programs that are culturally relevant.