

# Diabetes, Disease Management, and Disability: Perspectives from a Diverse Population of Diabetics

Tammy Tom & Christy M. Nishita

Center on Disability Studies, University of Hawaii at Manoa

November 8, 2009, American Public Health Association, Philadelphia, PA

## Background

Although culture may play a role in how individuals with diabetes participate in their disease management, it is possible that across ethnic backgrounds similar beliefs regarding support needs and disease perceptions provide a foundation for cross-cultural program and policy development. We tapped into a racially diverse group of diabetics participating in an existing research study<sup>/1</sup> to examine this topic.

## Research Questions

- (1) Do beliefs about the need for diabetes management supports differ among diabetics from different ethnic backgrounds?**
- (2) Do beliefs about whether diabetes will affect future functioning or employment differ among diabetics from different ethnic backgrounds?**

## Methods

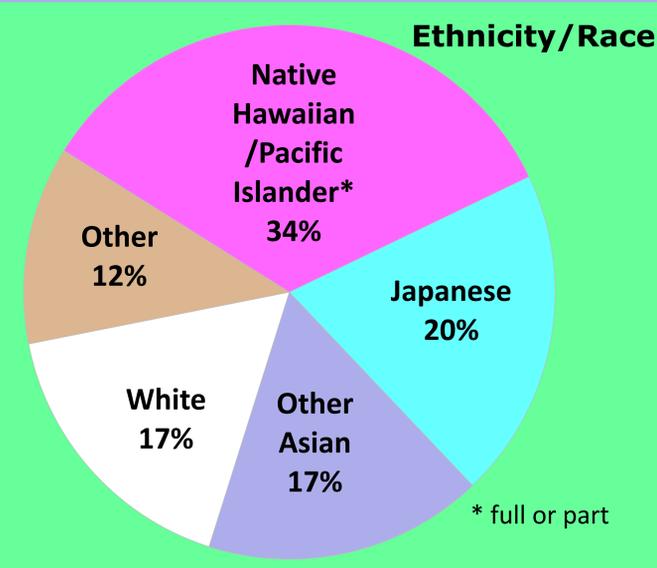
Sample	<ul style="list-style-type: none"> <li>190 adults enrolled in the Hawaii Demonstration to Maintain Independence &amp; Employment<sup>/1</sup></li> <li>Pros: Ethnic diversity; Access to existing study data</li> <li>Cons: Convenience sample → Limits generalizability</li> </ul>
Data Collection	<ul style="list-style-type: none"> <li>Questions added to existing study survey</li> <li>Mail survey with mail/email/phone follow-up</li> <li>156 responses (82%)</li> </ul>
Analyses	<ul style="list-style-type: none"> <li>Chi-square to examine similarities/differences in responses (independence/dependence of ethnicity/race and response)</li> <li>Priority given to NHPI races (part or full). Any other individuals of mixed race categorized as Other.</li> <li>Adequate Chi-square cell counts influenced category development – particularly Asians into Japanese and Other Asian (Chinese, Filipino, those of mixed Asian heritage).</li> </ul>

<sup>/1</sup> This poster is a side study of a federally funded RCT in progress (2007-2010). Study eligibility includes: diabetes diagnosis or 6.5+ A1c; 18 to 62 yrs old; working 10+ hrs/wk; min. wage+; living on Oahu; not receiving SSI or SSDI.

## Respondent Characteristics

<b>Diabetes Type</b> Type 2: 88%	<b>Gender</b> Female: 65%
<b>Years since diagnosis</b> Mean: 8 yrs	<b>Age</b> Mean: 50 yrs
<b>Hemoglobin A1c<sup>/1</sup></b> Mean: 7.6%	<b>Education</b> Bachelor's degree or higher: 54%
<b>Body Mass Index (BMI) <sup>/2</sup></b> Mean: 33	<b>2007 Annual Earnings<sup>/3</sup></b> Mean: \$42K
<b>Healthcare Coverage</b> Insured: 99%	<b>Employment</b> Mean hrs worked/wk in past month: 37 hrs

<sup>/1</sup> Obtained from healthcare provider <sup>/2</sup> Calculated from height and weight obtained from healthcare provider <sup>/3</sup> Obtained from State of Hawaii Department of Labor & Industrial Relations



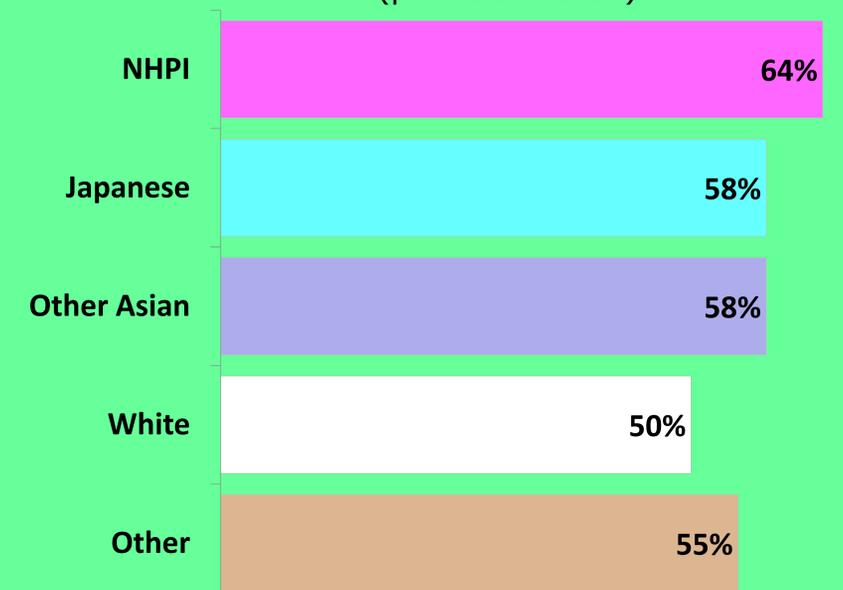
## Results

**1. Believe they need support to achieve specific disease management behaviors<sup>/1</sup>:**  
Responses similar across ethnicity/race

Behavior	All races	p-value
Maintain a healthy weight	74%	0.21
Maintain healthy blood glucose levels	74%	0.97
Exercise regularly	66%	0.49
Maintain healthy cholesterol levels	57%	0.89
Manage stress	55%	0.59
Maintain a healthy blood pressure	48%	0.53
See a healthcare professional regularly	31%	0.66
Take medication as prescribed	22%	0.98
Get a flu shot every year	17%	0.50
Not smoke	6%	0.68

<sup>/1</sup> The list of behaviors on the survey mirrored Centers for Disease Control diabetes self-management recommendations

**2. Believe diabetes will affect their future functioning or employment:**  
Responses similar across ethnicity/race (p-value = 0.81)



## Discussion

Across ethnic backgrounds, beliefs about support needs and the effect diabetes may have on future functioning/employment were similar. Results represent the views of a diverse population of diabetics and could be used for cross-cultural policy and program development. Additional research could include surveying American Indian/Alaska Native, Black, and Hispanics who were not well represented in this sample. Examining what diabetics believe they need and the services they actually use warrants further investigation.

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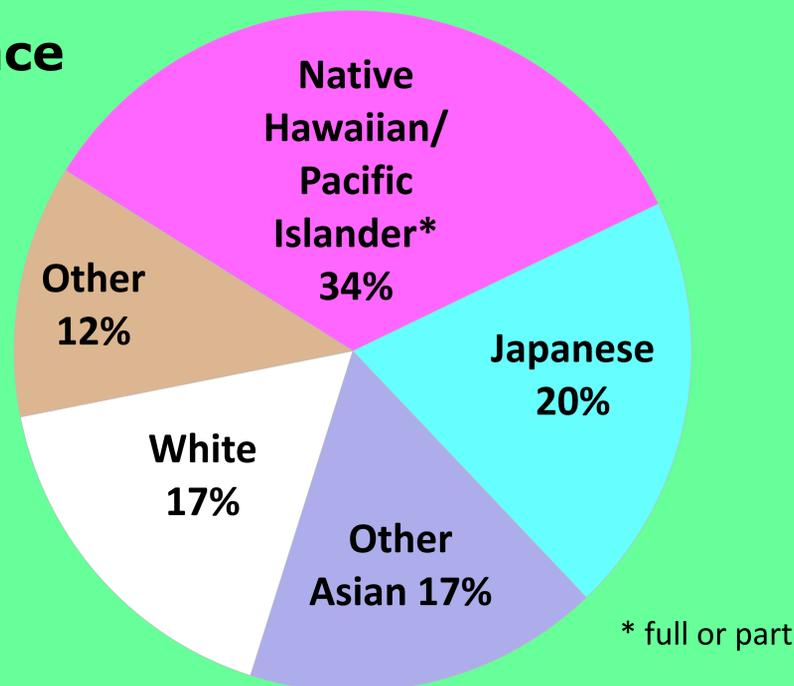
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## Ethnicity/Race



## Results

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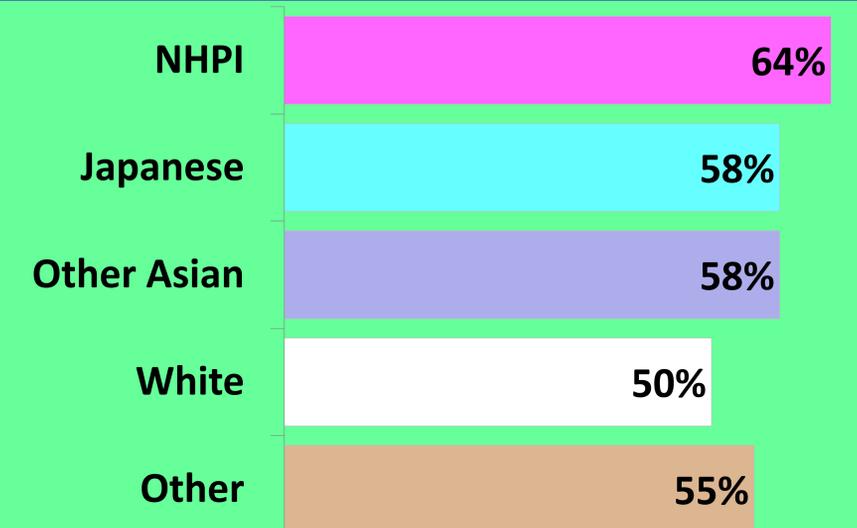
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