



Native Hawaiian and Pacific Islander Participation in Alzheimer's Disease Clinical Trials: Exploration of Zip Code Based Heat Map Patterns

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Objectives: Alzheimer's Disease (AD) is the most common neurodegenerative disorder in the United States, and it disproportionately burdens minority populations. Previous research demonstrated that Asian and Native Hawaiian patients were less likely than White patients to participate in AD clinical trials. Native Hawaiians and Pacific Islanders (NHPI) make up 27% of the population in Hawaii and 0.5% of the United States population. The goal of this study was to determine what percentage of AD clinical trial participants were NHPI, as well as patterns in their demographics.

Methods: A retrospective chart review of AD patients (ICD G31.84) who participated in AD clinical trials at two outpatient neurological clinics between the year 2020 and 2024 was conducted. One-way ANOVA or Kruskal-Wallis rank sum test for continuous variables and Fisher's Exact Test or Pearson's Chi-squared test for categorical variables were used to examine differences across racial groups. ZIP code heat maps were used to depict participation of various ethnocultural racial groups.

Results: Total of 244 patients participated in AD clinical trials. Overall, White patients had the highest percentage of participation (31%), followed by Asians (24%), and NHPI (10%) patients. Based on ZIP code heat maps the three ethnocultural racial groups had different patterns of referral to AD clinical trials. NHPI patients represented, on average, the youngest group diagnosed with AD at 71 years old ($p=0.01$).

Conclusion: In a majority minority state like Hawaii, NHPI population makes up 20% of the population in this memory clinic, however, they are under-represented in participation in AD clinical trials (10%). ZIP code-based heat maps can provide insights into the pattern of referrals and clinical trial participation for NHPI as well as to their counterparts.