

## **Evaluation of Stroke Disparities in Native Hawaiians and other Pacific Islanders**

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Native Hawaiians and other Pacific Islanders (NHOPI) have been reported to die at a younger age from major cardiovascular diseases compared to other racial-ethnic groups in Hawaii. One of the major causes of cardiovascular-related mortality is intracerebral hemorrhage (ICH), a type of hemorrhagic stroke with high morbidity and mortality. Although longstanding hypertension is the most common cause of ICH, use of sympathomimetic drugs such as methamphetamine can also cause ICH. Since NHOPI in the community may have a higher prevalence of methamphetamine abuse and other ICH risk factors compared to other racial-ethnic groups, the cause of this disparity is unclear. Furthermore, long-term functional outcome after ICH among NHOPI has not been studied.

We are conducting a prospective cohort study of ICH patients who are hospitalized at The Queen's Medical Center. We plan to assess the differences in age of presentation and the causes of ICH between the NHOPI and other major racial-ethnic groups are hospitalized with acute ICH. Furthermore, we plan to assess the differences in 3-month health-related quality of life and disability between NHOPI and other major racial-ethnic groups (Japanese, Filipino, and whites) who suffered ICH.

In this study, data such as demographic information, vascular risk factors, substance abuse history, pre-hospital functional status, etiology of the hemorrhage and disease severity are collected. At hospital discharge, in-person interview with the patient or the surrogate will be performed to measure the modified Rankin Scale (mRS), Glasgow Outcome Scale (GOS) and Barthel Index (BI). These outcome measures and Stroke-Specific Quality of Life (SS-QOL) survey will be assessed by in-person or telephone interview at 3-, 6-, and 12- months from admission.

To our knowledge, this study would be the first to examine ICH risk factors and outcomes among NHOPI. Findings from this study will lead to an improved understanding about ICH-related risk factors and long-term outcomes among NHOPI. Identifying these key factors may lead to future community-based intervention study that can improve ICH-related outcomes and reduce health disparities among NHOPI.