## Reducing Cancer Health Disparities among Pacific Islanders in the U.S.

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## Why a Special Issue on Cancer Disparities among Pacific Islanders?

Cancer mortality is on the decline in the U.S. (Jemal, Siegel, Xu, & Ward, 2010), but like so many other health conditions this is not enjoyed by all Americans. Among the most underserved are Pacific Islanders (PIs), who in 2000 numbered 874,414 (alone or in combination with one or more other races). California is second only to Hawai'i in the number of PIs, with half of the state's 221,458 PIs living in Southern California (APALC, 2005). Pacific Islanders (PIs) represent a wide diversity of ethnic populations, with over 19 census defined groups that each have their own culture, language, traditions, world and health perspectives, and political and migration history. Some of these PI populations have close ties to the U.S. territories and jurisdictions in the Pacific, including American Samoa, Guam, the Federated States of Micronesia, the Republic of the Marshall Islands, and the Commonwealth Nations of the Mariana Islands. Other groups such as Tongans, have migrated from their small island nations in search of higher earnings to support families back home (Small, 1997). Despite their differences in nationalities, PIs generally face high socioeconomic barriers to health and other care (US Census Bureau, 2004). For instance, educational attainment is low: 14-40% of PIs have less than a high school degree compared to the California average of only 10% (APALC, 2005). While only 8% of Californians were at or below the poverty line, this was true for 10-20% of PIs. Compared to nearly all other ethnic groups, PIs suffer from higher prevalence of the leading health disparity indicators, including cigarette smoking, hypertension, diabetes, infant mortality, tuberculosis, hepatitis B, and asthma (CDC, 2002).

PIs face critical cancer health disparity needs and barriers to care. With regards to cancer prevention. Native Hawaiians, American Samoans, Chuukese and Palauans have been found to have rates of tobacco use between 42-58% among men, and between 11-67% among women (Lew & Tanjasiri, 2003). A 2004 study for the California Departments of Justice and Education found that among 12th graders, heaviest daily smoking was observed for Hawaiians (35%) and Samoans (30%), compared with 19% Koreans, 16% Filipinos, 12% Japanese, and 5% Chinese youth (Austin & Chorpita, 2004). Similarly, a 2003 study found PI 9th graders in California have the highest smoking rate (19.7%) compared to whites (16.3%). Obesity has also been implicated as a causal factor in the onset of cancer (including breast, colon, endometrium, esophagus, and kidney cancers), and rates of obesity are high in PI populations (Shabbir, Kwan, Wang, Shih, & Simon, 2010). A 2008 needs assessment of PI young adults in Southern California found that 76% of Samoans and 84% of Tongans were overweight (defined as greater than 85th percentile), and levels of nutritional intake and physical activity identified many areas of need.

PIs also have exceedingly low levels of cancer early detection. Breast and cervical cancer screening in Chamorros, Tongans, Samoans and Native Hawaiians have all been documented to be low, pointing to factors at the individual (e.g., knowledge, cultural beliefs), family (e.g., gender roles), community (e.g., stigma), and policy levels (e.g., lack of medical interpreters) (Mishra, Luce-Aoelua, & Hubbell, 2001; Tanjasiri, LeHa'uli, Finau, Fehoko, & Skeen, 2002; Tanjasiri & Sablan-Santos, 2001). Furthermore, few studies exist regarding cancer survivorship needs of PIs (Hughes, Tsark,

Kenui, & Alexander, 2000) although past research points to differential clinical treatment preferences that may impact long-term quality of life (Chui & Lyerly, 2002; Prehn et al., 2002). A 2009 community assessment highlighted some of the needs of PI breast cancer survivors, including the lack of communication with medical providers, severe stigma and shame of cancer diagnoses, social support needs of survivors from family and church, and the potentially positive role of spirituality in promoting long-term quality of life. The development of culturally appropriate community interventions is urgently needed for PI breast and other cancer survivors (Braun, Mokuau, Hunt, Kaanoi, & Gotay, 2002). Lastly, to enable the speedier delivery of cancer advances to PI populations in the future, biorespository and biobanking studies need to be performed. Genetic risk factors for cancer among PIs have already been identified in polymorphism studies on a range of genes demonstrating ethnic differences in folate metabolism, nicotine metabolism, and estrogen biosynthesis (Feigelson et al., 2001; Kolonel, Altshuler, & Henderson, 2004; Le Marchand et al., 2004; Le Marchand, Haiman, Wilkens, Kolonel, & Henderson, 2004; Lea et al., 2005). PIs have also been found to have more aggressive tumorous cell growth in comparison to other racial/ethnic groups (Weston, Moss, Stewart, & Hill, 2008). Studies are needed to further understand phenotypic expressions resulting from gene and environment interplay; however, before such studies can be undertaken. we must first understand the cultural, psychological and sociological implications of such sample collection. Available studies have explored these issues with indigenous communities (e.g., Maori), finding that cultural nuances (including confidentiality, consent, tissue handling, and use of genetic information) must guide biospecimen collection or risk significant PI community opposition (Burton, 2002; Cunningham et al., 2007; Mead & Ratuva, 2007; Sporle & Koea, 2004).

## What's New In this Issue?

Unlike "traditional" public health research that is performed solely by university-based researchers to understand and address population needs, the articles contained in this special supplement reflect a partnership between leaders in Pacific Islander communities and long-time research collaborators at selected universities throughout Southern California. Referred to as community-based participatory (CBPR), these collaborations aimed to not only understand cancer needs, but create sustainable solutions based upon the cultural strengths of populations (Minkler & Wallerstein, 2003). All of the partnerships reflected in these papers applied CBPR processes in the problem definition, study methods, data analyses and community-wide dissemination of findings. We are grateful to the National Cancer Institute's Center to Reduce Cancer Health Disparities, who supported all of these CBPR studies through their Special Populations Networks and Community Network Programs (Jackson, Chu, & Garcia, 2006; S.P. Tanjasiri et al., 2007). These programs catalyzed cancer disparity research studies, community-based outreach education, and the training of ethnic minority researchers.

WINCART: Weaving an Islander Network for Cancer Awareness, Research and Training was founded in 2005 as one of 25 Community Network Programs to reduce disparities across the continuum of cancer care, from genetic risk, prevention, early detection, timely diagnosis and treatment through health navigation, and survivorship. The papers in this supplement were authored by both community and university researchers, and exemplify the CBPR perspective across this cancer care continuum, including:

- Genetic risks among Pacific Islanders (by Dr. Beale)
- Cancer prevention among Native Hawaiians (by Dr. McMullin and her

colleagues) and among men (by Dr. Sripipatana and his colleagues)

- Cancer early detection among Samoans (by Ms. Vaivao and colleagues), Marshallese (by Ms. Briand and Ms. Peters)
- Health navigations (by Dr. Tisnado and colleagues)
- Cancer survivorship among Chamorros (by Ms. Manglona and colleagues, and by Dr. Perez and colleagues) and Samoans (by Ms. Sabado and colleagues)
- Community capacity building among Tongan health professionals (by Ms. Tuione and colleagues), and young adults to build a pipeline

of future health professionals (by Ms. Tran and colleagues)

Among the recommendations that nearly every paper makes is the need for not only further research to evaluate the effectiveness of community-based cancer interventions, but also the importance of CBPR approaches that build research capacities in community and university settings. We cannot agree more, and hope this supplement supports future students, community leaders, and cancer researchers to broaden and deepen the effort to secure cancer health benefits for all in this country.

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