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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, obesity, 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 research (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.

References

- Asian Pacific American Legal Center (APALC). The Diverse Face of Asians and Pacific Islanders in California. Los Angeles: Asian Pacific American Legal Center; 2005.
- Austin AA, Chorpita BF. Temperament, anxiety, and depression: comparisons across five ethnic groups of children. Journal of Clinical Child and Adolescent Psychology. 2004; 33(2):216–226. [PubMed: 15136185]
- Braun KL, Mokuau N, Hunt GH, Kaanoi M, Gotay CC. Supports and obstacles to cancer survival for Hawaii's native people. Cancer Practice. 2002; 10(4):192–200. [PubMed: 12100103]
- Burton B. Proposed genetic database on Tongans opposed. BMJ. 2002; 324(7335):443.
- Center for Disease Control and Prevention (CDC). Health disparities among Native Hawaiians and other PIs garner little attention. Atlanta, GA: Centers for Disease Control and Prevention (CDC); 2002.

Chui SY, Lyerly HK. Disparities in breast carcinoma treatment in Asian/Pacific Islander women. A challenge to the provider. Cancer. 2002; 95(11):2257–2259. [PubMed: 12436429]

- Cunningham E, Cameron V, Evans J, Irvine V, Pitama S, Robertson P. The development of guidelines for handling samples and specimens collected for research involving Maori. New Zealand Medical Journal. 2007; 120(1264):U2785. [PubMed: 17972992]
- Feigelson HS, McKean-Cowdin R, Coetzee GA, Stram DO, Kolonel LN, Henderson BE. Building a multigenic model of breast cancer susceptibility: CYP17 and HSD17B1 are two important candidates. Cancer Research. 2001; 61(2):785–789. [PubMed: 11212283]
- Hughes CK, Tsark JU, Kenui CK, Alexander GA. Cancer research studies in Native Hawaiians and Pacific Islanders. Annals of Epidemiology. 2000; 10(8 Suppl):S49–60. [PubMed: 11189093]
- Jackson FE, Chu KC, Garcia R. Special Populations Networks--how this innovative community-based initiative affected minority and underserved research programs. Cancer. 2006; 107(8 Suppl):1939– 1944. [PubMed: 16944469]
- Jemal A, Siegel R, Xu J, Ward E. Cancer statistics, 2010. CA: A Cancer Journal for Clinicians. 2010; 60(5):277–300. [PubMed: 20610543]
- Kolonel LN, Altshuler D, Henderson BE. The multiethnic cohort study: exploring genes, lifestyle and cancer risk. Nature Reviews Cancer. 2004; 4(7):519–527. [PubMed: 15229477]
- Le Marchand L, Haiman CA, van den Berg D, Wilkens LR, Kolonel LN, Henderson BE. T29C polymorphism in the transforming growth factor beta1 gene and postmenopausal breast cancer risk: the Multiethnic Cohort Study. Cancer Epidemiology, Biomarkers and Prevention. 2004; 13(3):412–415.
- Le Marchand L, Haiman CA, Wilkens LR, Kolonel LN, Henderson BE. MTHFR polymorphisms, diet, HRT, and breast cancer risk: the multiethnic cohort study. Cancer Epidemiol ogy, Biomarkers and Prevention. 2004; 13(12):2071–2077.
- Lea R, Benowitz N, Green M, Fowles J, Vishvanath A, Dickson S, et al. Ethnic differences in nicotine metabolic rate among New Zealanders. New Zealand Medical Journal. 2005; 118(1227):U1773. [PubMed: 16372023]
- Lew R, Tanjasiri SP. Slowing the epidemic of tobacco use among Asian Americans and Pacific Islanders. American Journal of Public Health. 2003; 93(5):764–768. [PubMed: 12721139]
- Mead, ATP., Ratuva, S. Pacific Genes and Life Patents: Pacific Indigenous Experiences and Analysis of the Commodification and Ownership of Life. New Zealand: Call of the Earth Llamado de la Tierra and the United Nations University Institute of Advanced Studies; 2007.
- Minkler, MM., Wallerstein, N. Community-Based Participatory Research for Health. San Francisco: John Wiley & Sons, Inc; 2003.
- Mishra SI, Luce-Aoelua PH, Hubbell FA. Predictors of papanicolaou smear use among American Samoan women. Journal of General Internal Medicine. 2001; 16(5):320–324. [PubMed: 11359551]
- Prehn AW, Topol B, Stewart S, Glaser SL, O'Connor L, West DW. Differences in treatment patterns for localized breast carcinoma among Asian/Pacific islander women. Cancer. 2002; 95(11):2268–2275. [PubMed: 12436431]
- Shabbir S, Kwan D, Wang MC, Shih M, Simon PA. Asians and Pacific Islanders and the growing childhood obesity epidemic. Ethnicity & Disease. 2010; 20(2):129–135. [PubMed: 20503892]
- Small, CA. Voyages from Tongan Villages to American Suburbs. Ithaca: Cornell University Press; 1997.
- Sporle A, Koea J. Maori responsiveness in health and medical research: key issues for researchers (part 1). New Zealand Medical Journal. 2004; 117(1199):U997. [PubMed: 15475980]
- Tanjasiri SP, LeHa'uli P, Finau S, Fehoko I, Skeen NA. Tongan-American women's breast cancer knowledge, attitudes, and screening behaviors. Ethnicity & Disease. 2002; 12(2):284–290. [PubMed: 12019939]
- Tanjasiri SP, Sablan-Santos L. Breast cancer screening among Chamorro women in southern California. Journal of Women's Health and Gender Based Medicine. 2001; 10(5):479–485.
- Tanjasiri SP, Tran JH, Palmer PH, Foo MA, Hanneman M, Lee C, et al. Developing a Community-Based Collaboration to Reduce Cancer Health Disparities among Pacific Islanders in California. Pacific Health Dialog. 2007; 14(1):114–122.

Census Bureau US. The American Community: Pacific Islanders 2004. 2004

Weston MK, Moss DP, Stewart J, Hill AG. Differences in breast cancer biological characteristics between ethnic groups in New Zealand. Breast Cancer Research and Treatment. 2008; 111(3):555–558. [PubMed: 18026873]