Literature Review
American Samoan: Culture and Care Needs

1. Living with Ma'i Suka: individual, familial, cultural, and environmental stress among patients with type II diabetes mellitus and their caregivers in American Samoa:
(ABSTRACT) The U.S. territory of American Samoa has a disproportionate number of people with type II diabetes mellitus compared with neighboring Samoa and the U.S. mainland. The purpose of this research was to study perceptions of diabetes among people with type II diabetes in American Samoa in order to design culturally appropriate interventions to prevent and manage diabetes effectively. Seven focus groups were held with 64 participants at a primary health care facility and a nearby workplace in American Samoa. These focus groups were conducted in the Samoan language and explored perceptions of diabetes, including its meaning, etiology, and the illness experience. Participants were people with diabetes at the health care facility and their family caregivers. Our systematic analysis of the translated transcripts showed that American Samoans with type II diabetes experienced individual, familial, cultural, and environmental stress. They also associated environmental and familial stressors with the worsening of symptoms and increases in blood glucose levels. Although participants believed that stress within the family worsened diabetes symptoms, family members figured prominently as primary caregivers. Interventions aimed at improving diabetes management in American Samoa should emphasize family involvement coupled with education and methods to reduce caregiver burden, given the chronic, lifelong nature of diabetes.

Elstad, E., Tusiofo, C., Rosen, R. K., McGarvery, S.T. Living with Ma'i Suka: individual, familial, cultural, and environmental stress among patients with type II diabetes mellitus and their caregivers in American Samoa. 2008.
http://www.ncbi.nlm.nih.gov/pubmed/18558029?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.PMC_FreeArticle_ad&linkpos=2&log$=pmcad6_article

2. Predictors of indigenous healer use among Samoans:
(ABSTRACT) To determine the utilization of alternative modalities of care (i.e., indigenous healers or fofo) by Samoans, the indigenous peoples of the US Territory of American Samoa and examine predictors (i.e., socio-demographic, access to care, health status, culture-specific beliefs about disease etiology and treatment, and intentions to use healers) of utilization of fofo. DESIGN: A cross-sectional design, with systematic, random sampling procedures. SUBJECTS: 1,834 adult Samoan men and women residing in American Samoa, Hawaii, and Los Angeles. OUTCOME MEASURE: Prevalence and predictors of utilization of fofo. Multivariate logistic regression was performed to determine independent predictors of utilization of fofo. RESULTS: The prevalence of use of fofo across the three study sites was 41.0%. The following variables emerged as significant predictors of use of fofo: older age (odds ratio [OR] = 1.60; 95% confidence interval [CI] = 1.25-2.06), resident of American Samoa (OR = 1.69, CI = 1.29-2.21), belief that indigenous healers can treat cancer (OR = 1.79, CI = 1.40-2.30), belief that some illnesses afflict only Samoans (OR = 2.15, CI = 1.72-2.70), and greater intentions to use a fofo (OR = 2.27, CI = 1.81-2.85). Some of the more common medical conditions for which Samoans used fofo were biomedically defined musculoskeletal and neurologic problems, and Samoan sicknesses (ma'i Samoa). CONCLUSIONS: Population-based estimates of use of alternative modalities of care by Samoans are comparable to that reported for the general US population. However, the predictors of utilization of indigenous healers are more likely to be culture-specific health beliefs about disease etiology and treatment. There is a need to better understand Samoan traditional medicine and help-seeking behavior and explore whether indigenous Samoan healers can assist in the delivery of clinically proven and culturally sensitive health interventions to positively impact both disease management and preventative behavior in this minority Polynesian population.

Mishra, S.I., Hess, J., Luce, P.H. Predictors of indigenous healer use among Samoans. 2003.
http://www.ncbi.nlm.nih.gov/pubmed/14618860?ordinalpos=1&itool=EntrezSystem2.Pent

rez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&linkpos=1&log$=relatedarticles&logdbfrom=pubmed

3. Improving health outcomes in diverse populations: competency in cross-cultural research with indigenous Pacific Islander populations:
(ABSTRACT) There is a large disparity in health status between the indigenous peoples of the US Associated Pacific compared to any population in the USA. The research process that has been supported by US academic institutions and federal agencies has been limited in its ability to address the disparate health issues and may be part of the problem. We define culturally competent research and review approaches to developing competency in cross-cultural research with indigenous Pacific Islander populations. DESIGN: This is a descriptive review of the investigators' experience in the Hawaii MEDTEP Center experience and of the experience of others conducting research with the indigenous people of the Pacific Islands. RESULTS: Culturally competent cross-cultural research with the indigenous peoples of the Pacific requires an understanding and application of indigenous peoples' paradigms of health, knowledge, science, and research. It is not sufficient to train more indigenous Pacific Islanders to do more Western-style research. Unraveling the complex health situation and determining the changes that need to be made is dependent on the dominant culture engaging the indigenous Pacific populations in a way that bridges cultural paradigms. CONCLUSION: Positively affecting the disparity of health in the indigenous populations of the Pacific is, in part, dependent on employing an indigenous-peoples-centered model of research. The model can have application to the study of indigenous peoples in other parts of the world.

Palafox, N.A., Buenconseio-Lunn, L., Riklon, S., Waitzfelder, B. Improving health outcomes in diverse populations: competency in cross-cultural research with indigenous Pacific Islander populations. 2002.
http://www.ncbi.nlm.nih.gov/pubmed/12772547?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&linkpos=4&log$=relatedreviews&logdbfrom=pubmed

4. Adiponectin and type II diabetes in Samoan adults:
(ABSTRACT) Previous studies have established an association between adiponectin and type II diabetes. It is unclear whether adiponectin will be useful among Samoan Islanders, characterized by markedly elevated levels of obesity, in differentiating those at risk of developing type II diabetes. METHODS: Cross-sectional, genetic epidemiology study of obesity in American Samoa and Samoa 2002-2003 (n = 1,599). Logistic regression provided adjusted odds ratios and 95% confidence intervals for the association between adiponectin, diabetes, and pre-diabetes (impaired fasting glucose). RESULTS: There is a significant decreasing trend in the odds of diabetes and pre-diabetes across increasing quintiles of adiponectin with an OR of 2.8 (95% CI: 1.6, 5.0) and 2.9 (95% CI: 1.5, 5.7), respectively, in the lowest relative to the highest quintile of adiponectin (P-for-trend = 0.004 and 0.001). CONCLUSIONS: Adiponectin is an important correlate, independent of other risk factors, of the pathogenesis of type II diabetes among Samoan islanders and may help distinguish those at higher risk of developing this disease

Dibello, J.R., Bavlin, A., Viali, S. Tuitele, J., Bausserman, L., McGarvey, S.T. Adiponectin and type II diabetes in Samoan adults. 2009.
http://www.ncbi.nlm.nih.gov/pubmed/19107905?ordinalpos=14&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

5. Diabetes management: utilizing community health workers in a Hawaiian/Samoan population:
(ABSTRACT) Although not widely utilized, community health workers have been shown to enhance diabetes education and management efforts among racial/ethnic minority populations. OBJECTIVE: To examine the effectiveness of community health workers on diabetes management among a population with primarily Native Hawaiian and Samoan ethnic minority participants with HbA1c greater than 10%. DESIGN: Descriptive study comparing HbA1c readings of participants with diabetes with and without

CHW intervention. PARTICIPANTS: Of 116 eligible participants, 74% were either Native Hawaiian or Samoan. RESULTS: The mean baseline HbA1c for all eligible participants was 10.9+/-0.8%. The 80 participants who completed CHW intervention had a 2.2+/-1.8% (p.<.01, compared with baseline) mean reduction in HbA1c, compared with a 0.2+/-1.5% reduction for those without CHW intervention. CONCLUSION: Community health workers had a positive impact on diabetes management defined in terms of improved HbA1c amongst this predominantly Native Hawaiian and Samoan population.

Beckham, S., Bradley, S., Washburn, A., Taumua, T. Diabetes management: utilizing community health workers in a Hawaiian/Samoan population. 2008. http://www.ncbi.nlm.nih.gov/pubmed/18469413?ordinalpos=24&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

6. BMI and waist circumference as indicators of health among Samoan women:
(ABSTRACT) High rates of obesity and chronic disease make establishment of effective indicators of risk for chronic disease important. The objective was to examine adequacy of anthropometric cut-off points as indicators of risk for chronic disease among Samoan women in Hawaii. RESEARCH METHODS AND PROCEDURES: A cross-sectional survey of 55 Samoan women 18 to 28 years of age that included blood lipids, cholesterol, and glucose (including after a 2-hour oral glucose test); anthropometry (weight, height, waist circumference); and DXA of body composition. RESULTS: Using the Centers for Disease Control and Prevention (CDC)/World Health Organization (WHO) cut-off points for BMI, 22% of women were overweight and 58% were obese. Cholesterol, lipid, and glucose values were all linearly related to DXA body fat, BMI, and waist circumference. BMI and waist circumference at WHO/NIH cut-off points predicted levels of blood lipids and glucose that indicate elevated risk for disease. DISCUSSION: WHO/NIH cut-off points for BMI and waist circumference reflect risk indicators of chronic disease among young Samoan women in Hawaii.

Novotny, R., Nabokov, V., Derauf, C., Grove, J., Vijayadeva, V. BMI and waist circumference as indicators of health among Samoan women. 2007. http://www.ncbi.nlm.nih.gov/pubmed/17712106?ordinalpos=34&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

7. Diabetes management: utilizing community health workers in a Hawaiian/Samoan population:
(ABSTRACT) Although not widely utilized, community health workers (CHWs) have been shown to enhance diabetes education and management efforts among racial/ethnic minority populations. OBJECTIVE: To examine the effectiveness of CHWs on diabetes management among a population with primarily Native Hawaiian and Samoan ethnic minority participants with HbA1c greater than 10%. DESIGN: Descriptive study comparing HbA1c readings of participants with diabetes with and without CHW intervention. PARTICIPANTS: Of 116 eligible participants, 74% were either Native Hawaiian or Samoan. RESULTS: The mean baseline HbA1c for all eligible participants was 10.9+/-0.8%. The 80 participants who completed CHW intervention had a 2.2+/-1.8% (p.<.01, compared with baseline) mean reduction in HbA1c, compared with a 0.2+/-1.5% reduction for those without CHW intervention. CONCLUSION: Community health workers had a positive impact on diabetes management defined in terms of improved HbA1c amongst this predominantly Native Hawaiian and Samoan population.

Beckham, S., Bradley, S., Washburn, A., Taumua, T. Diabetes management: utilizing community health workers in a Hawaiian/Samoan population. 2008. http://www.ncbi.nlm.nih.gov/pubmed/18469413?ordinalpos=24&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum