The NIH AANHPI-HSIG Newsletter was initiated by Dr. Dan Xi and led by Karen Qi, Editor-in-Chief, with a team of editors, Dan Xi and Catherine Yu. The bi-monthly newsletter, first issued on November 9, 2021, featuring news and events related to the NIH and AANHPI-HSIG, as well as publications about AANHPI health research in PubMed, is produced by the AANHPI-HSIG science communication group and distributed through NIH AANHPI-HSIG mailing listservs to AAPI-HEALTH-SIGsLIST.NIH.GOV and other email lists to extramural communities.

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Inaugural NIH Annual AA and NHPI Health Research Conference
Wednesday to Thursday, May 4th-5th, 2022, via WebEx (open to the public)

The NIH AANHPI-HSIG hosted the Inaugural "Annual NIH AA and NHPI Health Research Conference" to celebrate AANHPI heritage month, highlight AANHPI research achievements, and assess research needs. The main theme of the conference was "Mechanisms and Translational Research to Improve Health and Therapeutic Outcomes for AA and NHPI Population". Dr. Lawrence Tabak (Acting Director, NIH), Ms. Krystal Ka’ai (Executive Director, WHIAANHPI, HHS), Dr. Eliseo Pérez-Stable (Director, NIMHD, NIH), Dr. Marie Bernard (Co-Chair, NIH UNITE, NIH), and Dr. Katrina Goddard (Director, DCCPS of NCI, NIH) started the conference off with opening remarks. Dr. Victor Dzau, President of the National Academy of Medicine, and Dr. Howard Koh, professor at the Harvard T. H Chan School of Public Health were the two keynote speakers. Dr. Michael Chiang (Director, NEI, NIH) and Dr. Shannon Zenk (Director, NINR, NIH) will joined the final summary and panel discussion session on May 5. Finally, information about career development was also shared for NIH staff.

NIH AANHPI-HSIG AANHPI Mental Health and Well-Being Webinar: Drs. Keawe`aimoku Kaholokula and Andrew Subica, “Native Hawaiian Mental Health”
Wednesday, March 30th, 2022, from 2:00 PM – 3:00 PM ET, via WebEx (open to the public)

Drs. Kaholokula and Subica presented on the unique mental health risk factors for Native Hawaiians and Pacific Islanders (NHPI). Dr. Kaholokula’s presentation focused on historical and sociocultural determinants of NHPI mental health. He began with a historical background on demographic trends and occupation and depopulation by infectious disease and oppressive socioeconomic and political systems, ultimately resulting in a loss of culture and systemic marginalization. These repeated traumas, Dr. Kaholokula explained, contributed to higher rates of suicide, substance use, mental disorders, and other adverse health outcomes among Native Hawaiian children and adults. Dr. Kaholokula also presented on potential explanations (social ecological, psychological perspectives) on why Native Hawaiians have higher rates of mental health conditions, and how racism affects health. He concluded his presentation highlighting the tremendous resilience of the Native Hawaiian community, highlighting the revitalization of traditional practices, strong social support, and culture-based educational strategies.

Dr. Subica focused on mental health and substance use among NHPI. He explained how our knowledge on NHPI health is limited by data aggregation, small sample sizes, and difficulty recruiting NHPI participants due to historical discrimination and a lack of culturally competent research protocols. He also highlighted the disproportionate risk for mental health symptoms during COVID-19 among NHPI adults and high unmet need for mental health services. Dr. Subica theorized there are three significant barriers to mental healthcare access for NHPI: (1) lack of awareness, (2) unfamiliarity with treatment process, and (3) stigma. He then described recent studies and interventions he’s conducted to further our understanding on mental health and substance use among NHPIs. Dr. Subica concluded his presentation highlighting next steps, such as community-based participatory research, to better collaborate with NHPI populations to improve their health.
Acculturation and subsequent oral health problems among foreign-born older Chinese Americans: Does Neighborhood disorder matter?
Weiyu Mao, Bei Wu, Ireis Chi, Wei Yang, XinQi Dong
DOI: 10.1177/01640275211018785
Abstract: Objectives: To investigate the relationship between acculturation and subsequent oral health problems in older Chinese Americans and to further test the moderating role of neighborhood disorder in such a relationship. Methods: The working sample included 2,706 foreign-born community-dwelling older Chinese Americans aged 60 years or older who participated in the Population Study of Chinese Elderly in Chicago at baseline between 2011 and 2013 and the 2-year follow-up between 2013 and 2015. Stepwise Poisson regressions with lagged dependent variable were conducted. Results: Behavioral acculturation was protective against subsequent oral health problems, and the protective role was stronger among individuals reporting lower levels of neighborhood disorder. Residence in Chinatown was associated with an increase in the risk of subsequent oral health problems. Discussion: To reduce oral health symptoms and related burdens, it is important to consider, in practice and policy, the role of acculturation and the neighborhood on subsequent oral health outcomes.

Social support as a moderator of physical disability and mental health in older Vietnamese immigrants in the U.S.: Results from the Vietnamese aging and care survey (VACS)
Christina E Miyawaki, Minhui Liu, Van Ta Park, Mindy Thy Tran, Kyriakos S Markides
DOI: 10.1016/j.gerinurse.2022.01.012
Abstract: After the Vietnam War, 1.3 million Vietnamese migrated to the U.S. where they are the fourth largest Asian American subgroup. However, little is known about their health compared to other Asian subgroups. As such, we developed the Vietnamese Aging and Care Survey to understand older Vietnamese immigrants’ health in Houston, Texas (N=132). We examined how social support moderated the relationship between their physical disability and mental health (depressive symptoms and loneliness). Most respondents rated their health as fair/poor and more than half lived in extended family households or senior housing in ethnic enclaves. Having more physical disabilities was associated with higher depressive symptoms and loneliness, but higher social support moderated the effect of physical disability on loneliness. Local policymakers and stakeholders might strategize using the existing culturally and linguistically appropriate daycare centers and home and community-based services to mitigate depression and loneliness among older Vietnamese immigrants with physical disabilities.

Chronic health conditions, acute health events, and healthcare utilization among adults over age 50 in Hawai’i who use cannabis: A matched cohort study
Kristina T Phillips, Kathryn L Pedula, Namkee G Choi, Kylee-Ann K Tawara, Vanessa Simiola, Derek D Satre, Ashli Owen-Smith, Frances F Lynch, John Dickerson
DOI: 10.1016/j.drugalcdep.2022.109387
Abstract: Background: Research on cannabis-related health outcomes in diverse older adults is limited. The current study utilized a matched cohort study design to compare older adults in Hawai’i with identified cannabis diagnoses and matched controls on chronic health conditions, acute health events, and healthcare utilization from 2016 to 2020. Method: Patients age 50+ were identified using ICD-10 diagnostic codes for cannabis use, abuse, and dependence using electronic health record data from an integrated health system (Kaiser Permanente Hawai’i). Those with cannabis diagnoses (n = 275) were compared to matched non-using controls (n = 275; based on age, sex) on chronic health conditions (coronary heart disease, hypertension, COPD, chronic non-cancer pain), acute health events (myocardial infarction, respiratory symptoms, stroke, persistent or cyclic vomiting, injuries), and healthcare utilization (outpatient, inpatient, and emergency department visits) following case identification for two years. Results: Participants were 19.5% Native Hawaiian/Pacific Islander, 24.4% Asian, 47.8% White, and 8.5% Other/Unknown, with an average age of 62.8 years (SD=7.3). Adjusting for covariates as possible, participants with a cannabis diagnosis had significantly greater risk of coronary heart disease, chronic non-cancer pain, stroke, myocardial infarction, cyclic vomiting, and injuries, over time, compared to controls. Cannabis use was associated with any and greater frequency of outpatient, inpatient, and emergency department visits. Conclusions: In a diverse sample, older adults who used cannabis had worse health conditions and events and used more health services over a two-year period. Future studies should evaluate cannabis-related health outcomes, effects of cannabis problem severity, as well as implications for healthcare in aging populations.
**Disaggregating Asian race reveals COVID-19 disparities among Asian American patients at New York City’s public hospital system**

Roopa Kalyanaraman Marcello, Johanna Dolle, Areeba Tariq, Sharanjit Kaur, Linda Wong, Joan Curcio, Rosy Thachil, Stella S Yi, Nadia Islam  
DOI: 10.1177/00333549211061313

**Abstract:** Objectives: Data on the health burden of COVID-19 among Asian American people of various ethnic subgroups remain limited. We examined COVID-19 outcomes of people of various Asian ethnic subgroups and other racial and ethnic groups in an urban safety net hospital system. Methods: We conducted a retrospective analysis of 85,328 adults aged ≥18 tested for COVID-19 at New York City's public hospital system from March 1 through May 31, 2020. We examined COVID-19 positivity, hospitalization, and mortality, as well as demographic characteristics and comorbidities known to worsen COVID-19 outcomes. We conducted adjusted multivariable regression analyses examining racial and ethnic disparities in mortality. Results: Of 9971 Asian patients (11.7% of patients overall), 48.2% were South Asian, 22.2% were Chinese, and 29.6% were in other Asian ethnic groups. South Asian patients had the highest rates of COVID-19 positivity (30.8%) and hospitalization (51.6%) among Asian patients, second overall only to Hispanic (32.1% and 45.8%, respectively) and non-Hispanic Black (27.5% and 57.5%, respectively) patients. Chinese patients had a mortality rate of 35.7%, highest of all racial and ethnic groups. After adjusting for demographic characteristics and comorbidities, only Chinese patients had significantly higher odds of mortality than non-Hispanic White patients (odds ratio = 1.44; 95% CI, 1.04-2.01). Conclusions: Asian American people, particularly those of South Asian and Chinese descent, bear a substantial and disproportionate health burden of COVID-19. These findings underscore the need for improved data collection and reporting and public health efforts to mitigate disparities in COVID-19 morbidity and mortality among these groups.

**Identifying the Physical and Emotional Needs of Health Care Workers in Hawai`i During the COVID-19 Pandemic**

Anna D Davide, Amelia R Arechy, Opal V Buchthal, Joseph Keawe Aimoku Kaholokula, Andrea H Hermosura  
PMCID: PMC8995858

**Abstract:** A mixed-methods study was performed to identify the physical and emotional needs of Hawai`i health care workers during the COVID-19 pandemic, and the degree to which these needs are being met by their clinic or hospital. Qualitative interviews and demographic surveys were conducted with two cohorts of health care workers. Cohort 1 (N=15) was interviewed between July 20 – August 7, 2020, and Cohort 2 (N=16) between September 28 – October 9, 2020. A thematic analysis of the interview data was then performed. Participants’ primary concern was contracting the illness at work and transmitting it to their families. Solo practitioners working in outpatient clinics reported more financial challenges and greater difficulty obtaining PPE than those employed by hospitals or group practices. While telehealth visits increased for both inpatient and outpatient settings, the new visit type introduced new barriers to entry for patients. The study findings may serve to better understand the effect of COVID-19 on health care workers and support the development of hospital and clinic procedures. Further research into the impacts of COVID-19 on nurses in Hawai`i is recommended.

**The #StopAsianHate Movement on Twitter: A Qualitative Descriptive Study**

Jiepin Cao, Chiyoung Lee, Wenyang Sun, Jennie C De Gagne  
DOI: 10.3390/ijerph19073757

**Abstract:** Evidence-based intervention and policy strategies to address the recent surge of race-motivated hate crimes and other forms of racism against Asian Americans are essential; however, such efforts have been impeded by a lack of empirical knowledge, e.g., about racism, specifically aimed at the Asian American population. Our qualitative descriptive study sought to fill this gap by using a data-mining approach to examine the contents of tweets having the hashtag #StopAsianHate. We collected tweets during a two-week time frame starting on 20 May 2021, when President Joe Biden signed the COVID-19 Hate Crimes Act. Screening of the 51,665 tweets collected revealed that a total of 904 tweets were eligible for thematic analysis. Our analysis revealed five themes: "Asian hate is not new", "Address the harm of racism", "Get involved in #StopAsianHate", "Appreciate the Asian American and Pacific Islander (AAPI) community’s culture, history, and contributions" and "Increase the visibility of the AAPI community." Lessons learned from our findings can serve as a foundation for evidence-based strategies to address racism against Asian Americans both locally and globally.
"Is It good or bad for the air?" Latino and Asian Pacific Islander youth-led messaging and action for environmental justice through photovoice

Robin A Evans-Agnew, Julie Postma, Joyce Dinglasan-Panlilio, Weichao Yuwen, David Reyes, Sheena Denney, Judy Olsen

DOI: 10.1177/15248399211045729

Abstract: Photovoice is a powerful way to generate youth reflection and social action for health promotion. While the literature offers numerous examples of photovoice studies involving youth, they are most often engaged in taking, dialoguing, and developing phototexts, but not always in the critical next stages of planning what to do with this data, in terms of analyzing and then planning change-related strategic actions. This article describes the ways in which an intergenerational environmental justice project, as part of a larger community-based participatory research program, engaged youth through all stages of a photovoice project. Latino and Asia Pacific Islander adults recruited their own and other youth to conduct a photovoice and air sample data collection, analysis, exhibition, and evaluation activity focused on addressing indoor environmental justice threats from volatile organic chemicals. We offer lessons learned and reflect on the role of intergenerational collaboration to support youth in applying a critical lens for analyzing photovoice data and advocacy for health in their communities. We conclude with implications for photovoice practice and research.

Symptom management in Chinese adults with end stage renal disease (ESRD)

Nicole Levy, Wing Cheung, Haley McDonald, Mara Chris Banez, Jingjing Shang, Patricia W Stone, Carolyn Sun

 DOI: 10.1016/j.apnr.2021.151549

Abstract: Background: With over $50 billion spent annually in the United States (U.S.) on patients with chronic kidney diseases, and an incidence of end-stage renal disease (ESRD) in Asian Americans that is 1.5 times higher than in Caucasians, there is a compelling need to improve symptom management strategies for this population. Aims: 1) To identify common, bothersome symptoms and both Eastern and Western symptom-management strategies in older Chinese-American ESRD patients. 2) To validate the effectiveness of these symptom-management strategies through literature review and an expert panel. Methods: 1) Older Chinese-Americans were surveyed to assess common ESRD symptoms and management strategies. 2) An umbrella review of patients' symptom-management strategies was conducted, and findings were confirmed by experts. Results: 1) Thirty Chinese-American ESRD patients with an average age of 80 (SD = 13.08) reported strategies to manage fatigue, pain, sleep disturbance, dyspnea, anxiety, nausea and vomiting, constipation, and pruritus. 2) A total of 55 studies were included in the umbrella review. Evidence of varying quality and confirmation by experts supported the effectiveness of 33 symptom-management strategies used by Chinese-American ESRD patients. Conclusion: Further study is needed to understand why Chinese-American patients, on average, reported fewer symptoms compared with the general population but scored lower on quality of life measures; to validate reported amelioration strategies; to explore strategy effectiveness; and to uncover additional symptoms and strategies among older Chinese-Americans living with ESRD.

Health Disparities Across Lung Cancer Continuum Among Asian Americans: A Systematic Review

Fang Lei, Ying Zheng, Chine-Ching Li

DOI: 10.1007/s10903-021-01212-9

Abstract: The purpose of this systematic review is to synthesize lung cancer associated health disparities across the cancer continuum among Asian Americans. A systematic review design with the narrative method was used for conducting this study. Electronic literature databases, including PubMed, Google Scholar, and CINAHL, were searched. After applying filter information, inclusion and exclusion criteria, a total of 20 articles were included in the review. Findings related to lung cancer prevention, screening, incidence rates, diagnosis, treatment, survival rates, and mortality rates among Asian Americans were synthesized. Results showed the prevalence of smoking quit attempts in the past year was high among Asian Americans, although the prevalence of receiving advice to quit and using counseling and/or medication services was low among this population. Also, the smoking cessation rate among Asian Americans was the second lowest among all racial groups, although the abstinence rate was highest among this population. Compared with other races, Asian Americans are more likely to be diagnosed with lung cancer at a distant stage of disease, and they tend to be less likely to undergo surgery than other races in the United States. The incidence and mortality rates of lung cancer were low among Asian Americans compared with other races in the United States, while the survival rate of lung cancer was high among this population. Further research focusing on lung cancer associated health disparities in specific Asian American ethnic groups should be conducted. Culturally relevant programs that tackle cultural and genetic factors related to lung cancer risk as well as early screening, diagnosis and treatment in this vulnerable population are also necessary.
No Equity without Data Equity: Data Reporting Gaps for Native Hawaiians and Pacific Islanders as Structural Racism
Brittany N Morey, Richard Calvin Chang, Karla Blessing Thomas, 'Alisi Tulua, Corina Penaia, Vananh D Tran, Nicholas Pierson, John C Greer, Malani Bydalek, Ninez Ponce
DOI: 10.1215/03616878-9517177
Abstract: Data on the health and social determinants for Native Hawaiians and Pacific Islanders (NHPIs) in the United States are hidden, because data are often not collected or are reported in aggregate with other racial/ethnic groups despite decades of calls to disaggregate NHPI data. As a form of structural racism, data omissions contribute to systemic problems such as inability to advocate, lack of resources, and limitations on political power. The authors conducted a data audit to determine how US federal agencies are collecting and reporting disaggregated NHPI data. Using the COVID-19 pandemic as a case study, they reviewed how states are reporting NHPI cases and deaths. They then used California’s neighborhood equity metric—the California Healthy Places Index (HPI)—to calculate the extent of NHPI underrepresentation in communities targeted for COVID-19 resources in that state. Their analysis shows that while collection and reporting of NHPI data nationally has improved, federal data gaps remain. States are vastly underreporting: more than half of states are not reporting NHPI COVID-19 case and death data. The HPI, used to inform political decisions about allocation of resources to combat COVID-19 in at-risk neighborhoods, underrepresents NHPIs. The authors make recommendations for improving NHPI data equity to achieve health equity and social justice.

Second-generation Asian American women’s gendered racial socialization
Lydia HaRim Ahn, Brian TaeHyuk Keum, Gintare M Meizys, Adil Choudry, Michelle A Gomes, Lei Wang
DOI: 10.1037/cou0000575
Abstract: Utilizing an intersectional framework (Crenshaw, 1989) and socioecological theory (Bronfenbrenner, 1979), we investigated the gendered racialized messages Asian American women receive growing up, otherwise known as gendered racial socialization, from their family, peers, and mass media. Consensual Qualitative Research was used to analyze interview data from 12 second-generation Asian American women. The results demonstrated that (a) family socialization messages included gendered racial discrimination, body image and physical appearance, marital/dating attitudes, role responsibilities and expectations, and academic/work expectations, (b) peer socialization included oppressive messages (e.g., physical objectification, denial of identity, lack of presence) and affirming messages (e.g., positive self-concept messages), and (c) mass media socialization included oppressive messages (e.g., lack of representation, stereotypical depictions), and affirming messages (e.g., messages about empowerment). These messages impacted Asian American women’s views on their body image and physical appearance, self-esteem, career/work, mental health, and critical consciousness. Implications and findings of the need to dismantle interlocking oppressive forces are discussed.

Relation of Menopause With Cardiovascular Risk Factors in South Asian American Women (from the MASALA Study)
Aishwarya Vijay, Namratha Kandula, Alka M Kanaya, Sadiya S Khan, Nilay S Shah
DOI: 10.1016/j.amjcard.2022.01.063
Abstract: The menopausal transition is a time of accelerating risk of cardiovascular disease (CVD), and promoting cardiovascular health during midlife is an important period of time to prevent CVD in women. The association of menopause with cardiovascular risk factors or subclinical atherosclerosis has not previously been evaluated in South Asian American women, a population with a disproportionately higher CVD burden compared with other race/ethnic groups. The objective of this study was to evaluate the association of menopause with CVD risk factors and subclinical cardiometabolic disease markers. We studied women aged 40 to 84 years from the Mediators of Atherosclerosis in South Asians Living in America study. The association of self-reported menopausal status with multiple demographic and clinical variables was assessed with linear and logistic regression adjusted for age and cardiovascular health behaviors. In a secondary ("age-restricted") analysis, postmenopausal participants outside the age range of premenopausal participants were excluded. In the age-restricted sample, menopause was associated with a higher adjusted odds of hypertension (odds ratio = 1.19, 95% confidence interval [CI] 1.02 to 1.41), and higher systolic blood pressure (β = 6.54, 95% CI 0.82 to 11.87), and significantly higher subcutaneous fat area (β = 42.8, 95% CI 5.8 to 91.4). No significant associations between menopause and ectopic fat deposition, coronary artery calcium, or carotid intima-media thickness were observed. In South Asian American women in the Mediators of Atherosclerosis in South Asians Living in America study, menopause was associated with cardiovascular risk factors and higher subcutaneous fat deposition. Menopausal status is an important factor to examine and address CVD risk factors.
Preliminary efficacy of AWARE in college health service centers: A group psychotherapy intervention for Asian American women

Hyeouk Chris Hahm, Jenny H Hsi, Julie M Petersen, Jiaman Xu, Eunmyoung A Lee, Stephen H Chen, Cindy H Liu

DOI: 10.1080/07448481.2020.1777135

Abstract: Objective: Asian Women’s Action for Resilience and Empowerment (AWARE) is a psychotherapy intervention designed to improve the mental health of Asian American women. This study documented the feasibility and preliminary efficacy of AWARE at three university health service centers in Massachusetts. Participants: 174 female Asian American college/graduate students were screened, and 48 (64%) met the eligibility criteria and enrolled in the study. Methods: This study was a non-randomized, pre-post design at three university/college health service centers in Massachusetts. Retention rates and changes in depression, anxiety, and PTSD symptoms were measured. Results: Results demonstrated high feasibility and significant preliminary efficacy of AWARE across the sites. After the completion of AWARE, participants showed statistically and clinically significant reduction of depression, anxiety, and PTSD symptoms (p-values <.001). Conclusions: This study provides strong evidence that AWARE can be successfully implemented in university settings and provides a promising model of mental health treatment for Asian American women.

The impact of China-to-US immigration on structural and cultural determinants of HIV-related stigma: implications for HIV care of Chinese immigrants

Timothy D Becker, Oheemaa B Poku, Xinlin Chen, Jeffrey Wong, Amar Mandavia, Minda Huang, Yuqi Chen, Debbie Huang, Hong Ngo, Lawrence H Yang

DOI: 10.1080/13557858.2020.1791316

Abstract: Objectives: Asian Americans have poor HIV-related outcomes, yet culturally salient barriers to care remain unclear, limiting development of targeted interventions for this group. We applied the 'what matters most' theory of stigma to identify structural and cultural factors that shape the nature of stigma before and after immigration from China to the US. Design: Semi-structured interviews were conducted with 16 immigrants to New York from China, recruited from an HIV clinic and community centers. Deductive followed by focal inductive qualitative analyses examined how Chinese cultural values (lian, guanxi, renqing) and structural factors influenced stigma before and after immigration. Results: In China, HIV stigma was felt through the loss of lian (moral status) and limited guanxi (social network) opportunities. A social structure characterized by limited HIV knowledge, discriminatory treatment from healthcare systems, and human rights violations impinged on the ability of people living with HIV to fulfill culturally valued goals. Upon moving to the US, positions of structural vulnerability shifted to enable maintenance of lian and formation of new guanxi, thus ameliorating aspects of stigma. Conclusions: HIV prevention and stigma reduction interventions among Chinese immigrants may be most effective by both addressing structural constraints and facilitating achievement of cultural values through clinical, peer, and group interventions.

Illness perceptions as a mediator between emotional distress and management self-efficacy among Chinese Americans with type 2 diabetes

Ya-Ching Huang, Julie Zuñiga, Alexandra García

DOI: 10.1080/13557858.2020.1817339

Abstract: Objectives: Emotional distress and illness perceptions have been linked to patients' self-efficacy for diabetes management. This study, guided by Leventhal's Self-Regulatory Model, explores the direct effects of emotional distress (diabetes distress and depressive symptoms) on diabetes management self-efficacy, and the indirect effects through illness perceptions among Chinese Americans with type 2 diabetes (T2DM). Design: Data were obtained from a cross-sectional study of Chinese Americans with T2DM recruited from health fairs and other community settings (N = 155, 47.1% male, mean age 69.07 years). Data analyses including descriptive statistics, correlation, and PROCESS mediation models were used to examine the mediation effects of illness perceptions. Results: Diabetes distress and depressive symptoms had direct negative effects on self-efficacy. Perceived treatment control mediated the association between diabetes distress and self-efficacy, while none of the illness perceptions dimensions impacted the relationship between depressive symptoms and self-efficacy. Conclusion: Improved perceptions of treatment control can ameliorate diabetes distress and improve diabetes management self-efficacy among Chinese Americans. Health providers should elicit patients' illness perceptions as a first step in evaluating their diabetes management self-efficacy and provide appropriate culturally-tailored interventions.
**Vitamin D deficiency and insufficiency in Hawaii: Levels and sources of serum vitamin D in older adults**

Caryn E Oshiro, Teresa A Hillier, Grant Edmonds, Missy Peterson, Patrick L Hill, Sarah Hampson

DOI: 10.1002/ajhb.23636

**Abstract:** Objective: To examine the major sources of vitamin D [25-hydroxyvitamin D (25(OH)D)] and evaluate their collective role on rates of vitamin D deficiency/insufficiency among older adults. Methods: Cross-sectional analysis of the relationship between serum 25(OH)D levels and sources of vitamin D (self-reported and objectively validated sun exposure, supplementation, food including fortified sources). Study subjects were part of the Hawaii Longitudinal Study of Personality and Health who completed a clinic visit between 55 and 65 years (M = 59.6) and food frequency questionnaire, and provided serum to assay 25(OH)D (n = 223). Results: Although mean serum 25(OH)D levels were overall sufficient (54.3 ng/ml, [SD = 10.9]), over one-third of participants (38%) had vitamin D deficiency/insufficiency (<30 ng/ml). Asians were the most likely to be insufficient and Filipinos were the least likely (43% vs. 11%, respectively). Overall, supplement use and sun exposure were both associated with higher 25(OH)D levels and lower risk of vitamin D deficiency/insufficiency. Moreover, Vitamin D sources varied by race/ethnic groups. In multivariate models, higher body mass index, being Asian or Native Hawaiian/Pacific Islander, low supplement use, and low sun exposure were associated with higher risk for vitamin D deficiency/insufficiency (<30 ng/ml). Conclusions: Over 1/3 of the older adult sample was vitamin D deficient/insufficient, despite most of the participants living in a tropical climate with year-round access to sun as a vitamin D source. Sun exposure and supplement use, but not food intake, explained differences in vitamin D deficiency/insufficiency in this population.

**Barriers and Facilitators to the Implementation of a Community Doula Program for Black and Pacific Islander Pregnant People in San Francisco: Findings from a Partnered Process Evaluation**

Cassondra Marshall, Stephanie Arteaga, Jennet Arcara, Alli Cuentos, Marna Armstead, Andrea Jackson, Anu Manchikanti Gómez

DOI: 10.1007/s10995-022-03373-x

**Abstract:** Introduction: Increasingly, community-based models of doula care are receiving attention as possible interventions to address racial inequities in maternal health care experiences and outcomes. In 2018, community-based organization SisterWeb launched to provide free culturally congruent community doula care to advance birth equity for Black and Pacific Islander pregnant people, with funding from the San Francisco Department of Public Health. We conducted a process evaluation of SisterWeb’s first 1.5 years of existence to identify multilevel barriers and facilitators to implementation of their programs. Methods: Guided by the Equitable Evaluation Framework™, we conducted 46 in-depth interviews with individuals from 5 groups: SisterWeb leadership, doulas, doula mentors, and clients, and external stakeholders. Results: Barriers included having diverse clientele groups with unique needs, an ineffective payment model, and simultaneously building an organization and developing and implementing programs. Facilitators included the presence of established strategic partnerships, positive reception of services due to an unmet need for culturally and linguistically congruent pregnancy and birth support among SisterWeb’s clients, a clear organizational vision and mission, and a unique doula cohort model. Discussion: Our findings suggest developing community doula programs pay close attention to the difference between launching a program versus an organization, including the required resources of each, the sustainability of payment models for community doulas, and the provision of culturally relevant, needed services within priority communities. Furthermore, strategic partnerships with maternal health stakeholders in birthing sites, particularly hospitals, are vital to the success of a community doula program.

**Spatial Distribution of Hateful Tweets Against Asians and Asian Americans During the COVID-19 Pandemic, November 2019 to May 2020**

Alexander Hohl, Moongi Choi, Aggie J Yellow Horse, Richard M Medina, Neng Wan, Ming Wen

DOI: 10.2105/AJPH.2021.306653

**Abstract:** Objectives: To illustrate the spatiotemporal distribution of geolocated tweets that contain anti-Asian hate language in the contiguous United States during the early phase of the COVID-19 pandemic. Methods: We used a data set of geolocated tweets that match with keywords reflecting COVID-19 and anti-Asian hate and identified geographical clusters using the space-time scan statistic with Bernoulli model. Results: Anti-Asian hate language surged between January and March 2020. We found clusters of hate across the contiguous United States. The strongest cluster consisted of a single county (Ross County, Ohio), where the proportion of hateful tweets was 312.13 times higher than for the rest of the country. Conclusions: Anti-Asian hate on Twitter exhibits a significantly clustered spatiotemporal distribution. Clusters vary in size, duration, strength, and location and are scattered across the entire contiguous United States. Public Health Implications: Our results can inform decision-makers in public health and safety for allocating resources for place-based preparedness and response for pandemic-induced racism as a public health threat.
Unique Considerations for the Management of Gout in the Hmong Population: Examining Tertiary Encounters at a Large Regional Health Care System

Alison Lerman, Elie Gertner, Terese A DeFor, Morgan Brown, Jay Desai

DOI: 10.1002/acr.24490

Abstract: Objective: To evaluate demographic characteristics, care encounters, comorbidities, and clinical differences in Hmong and non-Hmong patients with gout. Methods: Using retrospective chart review, all inpatient encounters (Hmong versus non-Hmong) were reviewed from 2014 to 2017. Acute or chronic gout was the primary or secondary diagnosis for the encounter. Results: Hmong gout patients were on average 11 years younger than non-Hmong patients, but after adjustment for age, sex, and type of encounter, they had similar rates of hypertension, diabetes mellitus, and heart disease. Hmong patients had significantly decreased renal function at the time of presentation; the odds ratio of chronic kidney disease for Hmong patients was 2.33 versus 1.48 for non-Hmong patients (P < 0.05), the mean creatinine level was 3.3 mg/dl versus 2.0 mg/dl (β = 1.35, P < 0.001), and the glomerular filtration rate was 44.8 ml/minute versus 49.3 ml/minute (β = -6.95, P < 0.001). Hmong gout patients were more likely to use emergency care versus elective or urgent care, they were less likely to be using medications for the treatment of gout prior to admission (32.3% versus 58.2%), and the length of hospital stay was increased (8.8 versus 5.2 days; P < 0.05). Conclusion: Hmong gout patients who had a tertiary care encounter were 11 years younger than non-Hmong patients with similar rates of comorbidities but had worse renal function despite the age differences. They were more likely to use emergency services, to be insured through Medicaid, and not to use preventive medications for gout prior to their encounter. Intensive efforts are needed in the Hmong population for culturally appropriate preventive care management of gout along with diabetes mellitus, hypertension, heart disease, and kidney disease.

Discrimination and Stress Among Asian Refugee Populations During the COVID-19 Pandemic: Evidence from Bhutanese and Burmese Refugees in the USA

Mengxi Zhang, Ashok Gurung, Philip Anglewicz, Kalpana Baniya, Katherine Yun

DOI: 10.1007/s40615-021-00992-y

Abstract: Objectives: To measure COVID-19 pandemic-related discrimination and stress among Bhutanese and Burmese refugees in the USA and to identify characteristics associated with these two measures. Methods: From 5/15 - 6/1/2020, Bhutanese and Burmese refugee community leaders were invited to complete an anonymous, online survey and shared the link with other community members who were English-proficient, ≥18 years old, and currently living in the USA. We identified characteristics associated with pandemic-related discrimination and stress applying ordinal logistic regression models. Results: Among 218 refugees from 23 states, nearly one third of participants reported experiencing at least one type of discrimination, and more than two-thirds experienced at least one type of pandemic-related stress. Having had COVID-19, having a family member with COVID-19, and being an essential worker were associated with discrimination. Discrimination, financial crisis, and female gender were associated with stress. Conclusions: Reducing pandemic-related discrimination should remain a priority, as should the promotion of social support and coping strategies. Noting that this is a nonrepresentative sample, we recommend that larger national studies tracking experiences with pandemic-related discrimination and stress include Asian American subgroups with limited English proficiency.

Factors that Influence Organ Donor Registration Among Asian American Physicians in Queens, New York

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Abstract: Organ donation rates in the United States are lowest among Asians. Physicians are highly respected in Asian communities and may be influential in promoting donor registration, but little is known about their organ donor registration attitudes. We assessed associations between knowledge, attitudes, personal/professional experience, cultural/religious beliefs concerning organ donation and donor registration status using multivariable logistic regression. We surveyed 121 Asian physicians in Queens, New York; 22% were registered donors. Registered donors were more likely to discuss donation wishes with their family (OR 9.47, 95% CI 2.60-34.51), know that donor human leukocyte antigen does not need to match organ recipients (OR 6.47, 95% CI 1.66-25.28), and have experience advising patients about organ donation (OR 5.35, 95% CI 1.50-19.02). Culturally tailored educational materials providing updated information to promote family discussion about organ donation could potentially increase Asian physicians’ level of comfort and expertise in discussing organ donor registration with patients.
Perinatal Experiences of Asian American Women During COVID-19
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DOI: 10.1097/NMC.0000000000000796

Abstract: Purpose: To explore the wellbeing, pregnancy, childbirth, and postpartum experiences of Asian American women who gave birth during the COVID-19 pandemic. Study design: Qualitative exploratory design. Methods: Using convenience and snowball sampling, we recruited Asian American women who gave birth during the COVID-19 pandemic via social media. Participants completed sociodemographic and depressive symptom questionnaires and took part in a virtual semistructured interview where they were asked to describe their pregnancy, birth, and postpartum experiences in the midst of the COVID-19 pandemic. Qualitative content analysis methods were used to identify themes from participant narratives. Results: Thirty-eight Asian American women representing several racial ethnic subgroups (Asian Indian, Chinese, Filipino, Hmong, Laotian, Vietnamese) participated in our study. Participants were on average 34 (SD = 3.5) years of age; the majority were married and lived in California. At the time of data collection, participants were 3.7 (SD = 2.07) months postpartum and 5.3 to 10.5 months into the COVID-19 pandemic. Qualitative content analysis revealed two main themes: 1) unexpected perinatal journey, and 2) the emotional and psychological consequences of COVID-19. Clinical implications: Our findings are not unique to Asian American women, but they offer insight for nurses taking care of all childbearing women. Nurses can provide individually tailored anticipatory guidance to help women navigate perinatal changes and manage expectations during future public health crises. Nurses can also encourage and help perinatal women identify ways to increase their own social support networks during the pregnancy and postpartum period.

A comparison of the influencing factors of chronic pain and quality of life between older Koreans and Korean-Americans with chronic pain: a correlational study
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DOI: 10.1007/s11136-021-02983-2

Abstract: Background: Chronic pain is one of the most common health problems for older adults worldwide and is likely to result in lower quality of life. Living in a different culture may also influence chronic pain and quality of life in older adults. The purpose of this study was to explore how multifaceted elements affect chronic pain and quality of life in older Koreans living in Korea and in older Korean-Americans (KAs) living in the USA. Methods: We conducted a secondary data analysis of data from 270 adults aged 65 years or over (138 Koreans and 132 KAs). We compared the effects of multifaceted elements on pain and quality of life by testing structural equation models (SEMs) for each group, using a maximum likelihood estimation and bootstrapping. Results: SEMs for both Korean and KAs showed that age and depressive symptoms directly affected quality of life. The number of comorbidities and depressive symptoms had mediating effects on quality of life through chronic pain in both groups. In older Koreans only, perceived financial status directly affected quality of life. In older KAs only, sleep quality indirectly affected quality of life through chronic pain. Conclusion: The data showed that multimorbidity and depressive symptoms play critical roles for explaining chronic pain in older Koreans and KAs and ultimately negatively influence quality of life. Future intervention program to improve quality of life in older adults with chronic pain should consider the different cultural aspects affecting quality of life for Koreans and KAs.

Associations of Self-Reported Sleep Quality with Demographic and Other Characteristics in Older Korean Immigrants
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DOI: 10.1007/s10903-021-01174-y

Abstract: Poor sleep is common among older adults, affecting a wide range of health outcomes. However, little is known about sleep issues among older Korean immigrants, the fastest growing Asian American subgroup in the United States. We aimed to explore multiple factors associated with sleep among this group. We analyzed cross-sectional survey data from 43 older immigrants living in two large Korean communities in Southern California. Perceived sleep quality was significantly associated with gender, living arrangement, employment status, mental health, and sleep-related beliefs (all p-values < 0.05). Living with someone and being employed for wages were significantly uniquely associated with better sleep quality, accounting for demographic and health-related factors (R2 = 51.8%, adjusted R2 = 38.7%, p = 0.002). These findings suggest a potential role of sociocultural factors on sleep. Further studies are needed to confirm these findings and to inform a sleep intervention program tailored to the characteristics of older Korean immigrants.
The association of acculturative stress with self-reported sleep disturbance and sleep duration among Asian Americans
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DOI: 10.1093/sleep/zsab298

Abstract: This study aims to examine associations between acculturative stress—defined as the psychological impact, or stress reaction, of adapting to a new cultural context—and self-reported sleep outcomes among Chinese and Korean immigrants in the United States. In this cross-sectional study, acculturative stress was assessed using a 9-item scale, and sleep disturbance was measured using the 8-item scale. Sleep duration was self-reported. Poisson and linear regression analyses were conducted to examine the associations between acculturative stress, sleep disturbance, and sleep duration. Our sample consists of 400 participants (females: 52%, Chinese: 50%, Koreans: 50%, the mean of age = 58.4). 81.8% of them were classified as having no sleep disturbance, whereas 18.2% were classified as having sleep disturbance. Poisson models revealed that greater acculturative stress was associated with a higher prevalence of sleep disturbance (Prevalence Ratio (PR): 1.18, 95% confidence interval (CI): 1.06% to 1.31%). In linear models, a one-unit increase in acculturative stress was associated with 0.08 hr less sleep (p < .05). Interaction tests indicated effect modification for sleep disturbance by sex and ethnic identity: only women had a significant association between acculturative stress and sleep disturbance (PR: 1.30; 95% CI: 1.13 to 1.49), while the association was significant for individuals identifying as “very Asian” (PR: 1.21; 95% CI: 1.08 to 1.35), but not for those identifying as “mostly Asian” or “bicultural/western”. If findings are replicated, we suggest developing intervention programs for Asian immigrants to minimize acculturative stress and bolster protective factors that decrease the risk for poor sleep outcomes.

Asian American Medicare Beneficiaries Disproportionately Receive Invasive Mechanical Ventilation When Hospitalized at the End-of-Life
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DOI: 10.1007/s11606-021-06794-6

Abstract: Background: Asian Americans are the fastest-growing ethnic minority in the USA, but we know little about the end-of-life care for this population. Objective: Compare invasive mechanical ventilation (IMV) use between older Asian and White decedents with hospitalization in the last 30 days of life. Design: Population-based retrospective cohort study. Participants: A 20% random sample of 2000-2017 Medicare fee-for-service decedents who were 66 years or older and had a hospitalization in the last 30 days of life. Exposure: White and Asian ethnicity as collected by the Social Security Administration. Main measures: We identified IMV using validated procedural codes. We compared IMV use between Asian and White fee-for-service decedents using random-effects logistic regression analysis, adjusting for sociodemographics, admitting diagnosis, comorbidities, and secular trends. Key results: From 2000 to 2017, we identified 2.1 million White (54.5% female, 82.4±8.1 mean age) and 28,328 Asian (50.8% female, 82.6±8.1 mean age) Medicare fee-for-service decedents hospitalized in the last 30 days. Compared to White decedents, Asian fee-for-service decedents have an increased adjusted odds ratio (AOR) of 1.42 (95%CI: 1.38-1.47) for IMV. In sub-analyses, Asians’ AOR for IMV differed by admitting diagnoses (cancer AOR=1.32, 95%CI: 1.15-1.51; congestive heart failure AOR=1.75, 95%CI: 1.47-2.08; dementia AOR=1.93, 95%CI: 1.70-2.20; and chronic obstructive pulmonary disease AOR=2.25, 95%CI: 1.76-2.89). Conclusions: Compared to White decedents, Asian Medicare decedents are more likely to receive IMV when hospitalized at the end-of-life, especially among patients with non-cancer admitting diagnoses. Future research to better understand the reasons for these differences and perceived quality of end-of-life care among Asian Americans is urgently needed.

Expanding Understanding of Racial-Ethnic Differences in ADHD Prevalence Rates among Children to Include Asians and Alaskan Natives/American Indians
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DOI: 10.1177/10870547211027932

Abstract: Background: Prior studies show that ADHD prevalence rates vary by race-ethnicity, but these studies do not include a full range of racial-ethnic minority groups. Objective: This study aimed to understand differences in ADHD prevalence among children across a wider range of racial-ethnic groups, overall and stratified by biological sex. Method: Data on children aged 5 to 17 from the 2004 to 2018 National Health Interview Survey Sample Child Files were used in analyses (N = 120,129). Results: Compared to Non-Hispanic White children, ADHD prevalence was lower among Hispanic and Non-Hispanic Asian children. This difference was present for both males and females. Across all racial-ethnic groups, males had higher ADHD prevalence than females. Conclusion: Results from this study provide further evidence that racial-ethnic disparities in ADHD prevalence rates persist across sex and provide initial evidence of substantially lower ADHD prevalence among Non-Hispanic Asians. Implications, limitations, and future research directions derived from the results are discussed.
Associations of clustered health risk behaviors with diabetes and hypertension in White, Black, Hispanic, and Asian American adults

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DOI: 10.1186/s12889-022-12938-y

Abstract: Background: The clustering of Big Four contributors to morbidity and mortality—alcohol misuse, smoking, poor diet, and physical inactivity—may further elevate chronic health risk, but there is limited information about their specific combinations and associated health risks for racial/ethnic minority groups. We aimed to examine patterns of clustering in risk behaviors for White, Black, Hispanic, and Asian American adults and their associations with diabetes and hypertension. As these behaviors may be socioeconomically-patterned, we also examined associations between clustering and socioeconomic status (SES). Methods: Latent class analyses and multinomial and logistic regressions were conducted using a nationally-representative sample of United States (US) adults ages 40-70 (N = 35,322) from Waves 2 (2004-2005) and 3 (2012-2013) of the National Epidemiologic Survey on Alcohol and Related Conditions. Obesity was used as a proxy for unhealthy diet. The outcomes were diabetes and hypertension. Results: A relatively-healthy lifestyle class was found only among White adults. Common patterns of unhealthy clustering were found across groups with some variations: the obese-inactive class among White, Black, and Hispanic adults (and the inactive class among Asian adults); the obese-inactive-smoking class among White, Black, and Hispanic adults; the smoking-risky-drinking class among White and Hispanic adults; and the smoking-risky-drinking-inactive class among Black and Asian adults. Positive associations of unhealthier clustering (having a greater number of risk behaviors) with lower SES (i.e., family income and education) and with health conditions were more consistent for Whites than for other groups. For racial minority groups, lower education than income was more consistently associated with unhealthy clusters. The associations between unhealthier clustering and diabetes and hypertension were less clear for Blacks and Asians than for Whites, with no significant association observed for Hispanics. Conclusion: Concerted efforts to address clustered risk behaviors in most US adults, particularly in racial/ethnic minority groups given the high prevalence of unhealthy clustering, are warranted.

Vaccination patterns, disparities, and policy among Asian-Americans and Asians living in the USA

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Abstract: Background: Although Asian-American individuals have higher rates of some vaccine-preventable diseases such as hepatitis B, vaccination rates among them are low compared with those of non-Hispanic White individuals. Most vaccine research looks at Asian-American people as a single category despite large within-group heterogeneity in health-seeking behaviours. Little is known about vaccination coverage among disaggregated Asian-American ethnic subgroups, although such information could inform policies focused on increasing vaccine uptake. Therefore, we aimed to assess vaccination coverage for several vaccines among disaggregated Asian-American subgroups. Methods: We examined National Health Interview Survey (NHIS) data from 2015-18 to analyse the vaccination status of Chinese, Asian Indian, Filipino, other Asian, and non-Hispanic White adults (n=253,626) for seven vaccines recommended by the US Centers for Disease Control and Prevention: human papillomavirus (HPV), hepatitis B (HBV), influenza, tetanus, tetanus-diphtheria-pertussis (Tdap), shingles, and the pneumococcal vaccine. We used NHIS data from 2006-18 (n=880,210) to analyse changes in vaccination rates for each ethnic group over time. We used logistic regression to estimate differences in vaccination rates while controlling for demographic, socioeconomic and health-related variables. Findings: Among the seven vaccines, HPV and shingles vaccines had the lowest uptake, whereas Tdap had the highest uptake among all groups. Compared with the non-Hispanic White group, Asian Indians were almost half as likely to receive the HPV vaccine (odds ratio 0.56, 95% CI 0.41-0.92), whereas Filipinos (1.51, 1.02-2.25) and other Asians (1.42, 1.02-1.97) were more likely to receive it. The Filipino (1.50, 1.21-1.88) and other Asian groups (1.42, 1.19-1.71) were more likely to receive the HBV vaccine than the non-Hispanic White group. For the influenza vaccine, the Asian Indian (1.28, 1.05-1.56), Filipino (1.44, 1.17-1.79) and other Asian (1.38, 1.16-1.65) groups were more likely to receive the vaccine than the non-Hispanic White group. For the pneumococcal vaccine, the Chinese (0.57, 0.34-0.94) and other Asian (0.66, 0.47-0.92) groups were less likely to receive the vaccine than the non-Hispanic White group. Interpretation: Among US adults, we found significant disparities in vaccine uptake among different Asian and Asian-American ethnic groups. US policy makers trying to improve vaccine uptake among Asian and Asian-American people could learn from successful international immunisation programmes to develop culturally appropriate interventions to improve vaccine uptake in Asian and Asian-American individuals.
Nontuberculous mycobacterial skin and soft tissue infection in Hawai‘i
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DOI: 10.1186/s12879-022-07345-y
Abstract: Background: Hawai‘i has the highest nontuberculous mycobacterial (NTM) lung infection prevalence in the United States. Limited data regarding skin and soft tissue infections (SSTI) due to NTM in Hawai‘i exists. This study describes patient demographics, clinical courses of infection, treatment patterns, and clinical outcomes of NTM SSTIs in Hawai‘i. Methods: A retrospective chart review (n = 50) of patients diagnosed and treated at Hawai‘i Pacific Health facilities for NTM SSTIs between January 2010 and July 2021 was conducted. Patient demographics, clinical course, and treatment data were collected from electronic medical records. Results: Half of the patient population consisted of females, and the average age of patients during infection was 49 years (SD = 25.6). The majority of cases (80%) were caused by rapidly growing mycobacteria (RGM), most commonly Mycobacterium abscessus. NTM SSTI by race were Asian (48%), White (28%), and Native Hawaiian and Other Pacific Islanders (16%). Almost all Asian patients with NTM SSTI were Filipino or Japanese. Diagnosis was frequently delayed. The average time to diagnosis was 116 days. Most patients achieved complete resolution (72%) following a prolonged course of antimicrobial treatment (mean = 196 days) with surgical debridement. Conclusion: Increased awareness among physicians and the community of non-mycobacterial skin infections is essential in Hawai‘i due to the high prevalence of NTM and the high percentage of predisposed populations. Increased awareness of NTM could reduce delayed diagnosis and improve patient care. Further studies are required to inform optimal treatment and diagnostic strategies, improve patient outcomes, and aid public health surveillance efforts.

Rates of Diabetes-Related Major Amputations Among Racial and Ethnic Minority Adults Following Medicaid Expansion Under the Patient Protection and Affordable Care Act
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DOI: 10.1001/jamanetworkopen.2022.3991
Abstract: Importance: It is not known whether implementation of Medicaid expansion under the Patient Protection and Affordable Care Act (ACA) was associated with improvements in the outcomes among racial and ethnic minority adults at risk of diabetes-related major amputations. Objective: To explore the association of early Medicaid expansion with outcomes of diabetic foot ulcerations (DFUs). Design, setting, and participants: This cohort study included hospitalizations for DFUs among African American, Asian and Pacific Islander, American Indian or Alaska Native, and Hispanic adults as well as adults with another minority racial or ethnic identification aged 20 to 64 years. Data were collected from the State Inpatient Databases for 19 states and the District of Columbia for 2013 to the third quarter of 2015. The analysis was performed on December 4, 2019, and updated on November 9, 2021. Exposures: States were categorized into early-adopter states (expansion by January 2014) and nonadopter states. Main outcomes and measures: Poisson regression was performed to examine the associations of state type, time, and their combined association with the proportional changes of major amputation rate per year per 100 000 population. Results: Among the 115 071 hospitalizations among racial and ethnic minority adults with DFUs (64% of sample aged 50 to 64 years; 35%, female; 61%, African American; 25%, Hispanic; 14%, other racial and ethnic minority group), there were 36 829 hospitalizations (32%) for Medicaid beneficiaries and 10 500 hospitalizations (9%) for uninsured patients. Hospitalizations increased 3% (95% CI, 1% to 5%) in early-adopter states and increased 8% (95% CI, 6% to 10%) in nonadopter states after expansion, a significant difference (P for interaction < .001). Although there was no change in the amputation rate (0.08%; 95% CI, -6% to 7%) in early-adopter states after expansion, there was a 9% (95% CI, 3% to 16%) increase in nonadopter states after expansion, a significant difference (P = .04). For uninsured adults, the amputation rate decreased 33% (95% CI, 10% to 50%) in early-adopter states and did not change (12%; 95% CI, -10% to 58%) in nonadopter states after expansion, a significant difference (P = .006). There was no difference in the change of amputation rate among Medicaid beneficiaries between state types after expansion. Conclusions and relevance: This study found a relative improvement in the major amputation rate among African American, Hispanic, and other racial and ethnic minority adults in early-expansion states compared with nonexpansion states, which could be because of the recruitment of at-risk uninsured adults into the Medicaid program during the first 2 years of ACA implementation. Future study is required to evaluate the long-term association of Medicaid expansion and the rates of amputation.
Effects of a Lifestyle Intervention to Prevent Deterioration in Glycemic Status Among South Asian Women with Recent Gestational Diabetes: A Randomized Clinical Trial

DOI: 10.1001/jamanetworkopen.2022.0773

Abstract: Importance: Women with recent gestational diabetes (GDM) have increased risk of developing type 2 diabetes. Objective: To investigate whether a resource-appropriate and context-appropriate lifestyle intervention could prevent glycemic deterioration among women with recent GDM in South Asia. Design, setting, and participants: This randomized, participant-unblinded controlled trial investigated a 12-month lifestyle intervention vs usual care at 19 urban hospitals in India, Sri Lanka, and Bangladesh. Participants included women with recent diagnosis of GDM who did not have type 2 diabetes at an oral glucose tolerance test (OGTT) 3 to 18 months postpartum. They were enrolled from November 2017 to January 2020, and follow-up ended in January 2021. Data were analyzed from April to July 2021. Interventions: A 12-month lifestyle intervention focused on diet and physical activity involving group and individual sessions, as well as remote engagement, adapted to local context and resources. This was compared with usual care. Main outcomes and measures: The primary outcome was worsening category of glycemia based on OGTT using American Diabetes Association criteria: (1) normal glucose tolerance to prediabetes (ie, impaired fasting glucose or impaired glucose tolerance) or type 2 diabetes or (2) prediabetes to type 2 diabetes. The primary analysis consisted of a survival analysis of time to change in glycemic status at or prior to the final patient visit, which occurred at varying times after 12 months for each patient. Secondary outcomes included new-onset type 2 diabetes and change in body weight. Results: A total of 1823 women (baseline mean [SD] age, 30.9 [4.9] years and mean [SD] body mass index, 26.6 [4.6]) underwent OGTT at a median (IQR) 6.5 (4.8-8.2) months postpartum. After excluding 160 women (8.8%) with type 2 diabetes, 2 women (0.1%) who met other exclusion criteria, and 49 women (2.7%) who did not consent or were uncontactable, 1612 women were randomized. Subsequently, 11 randomized participants were identified as ineligible and excluded from the primary analysis, leaving 1601 women randomized (800 women randomized to the intervention group and 801 women randomized to usual care). These included 600 women (37.5%) with prediabetes and 1001 women (62.5%) with normoglycemia. Among participants randomized to the intervention, 644 women (80.5%) received all program content, although COVID-19 lockdowns impacted the delivery model (ie, among 644 participants who engaged in all group sessions, 476 women [73.9%] received some or all content through individual engagement, and 315 women [48.9%] received some or all content remotely). After a median (IQR) 14.1 (11.4–20.1) months of follow-up, 1308 participants (81.2%) had primary outcome data. The intervention, compared with usual care, did not reduce worsening glycemic status (204 women [25.5%] vs 217 women [27.1%]; hazard ratio, 0.92; [95% CI, 0.76-1.12]; P = .42) or improve any secondary outcome. Conclusions and relevance: This study found that a large proportion of women in South Asian urban settings developed dysglycemia soon after a GDM-affected pregnancy and that a lifestyle intervention, modified owing to the COVID-19 pandemic, did not prevent subsequent glycemie deterioration. These findings suggest that alternate or additional approaches are needed, especially among high-risk individuals. Trial registration: Clinical Trials Registry of India Identifier: CTRI/2017/06/008744; Sri Lanka Clinical Trials Registry Identifier: SLCTR/2017/001; and ClinicalTrials.gov Identifier: NCT03505939.

Through Our Eyes, Hear Our Stories: A Virtual Photovoice Project to Document and Archive Asian American and Pacific Islander Community Experiences During COVID-19

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DOI: 10.1177/15248399211060777

Abstract: Through Our Eyes, Hear Our Voices is a virtual photovoice project that documents the impact of COVID-19 on Asian American and Pacific Islander (AAPI) communities. Quantitative studies on the disproportionate impact of COVID-19 are still emerging, but they do not reveal qualitative experiences of a racialized pandemic exacerbated by political leaders labeling it “China virus.” As a qualitative participatory action research approach, photovoice is an ideal archival and pedagogical tool to capture the lived experience of AAPI communities. However, we had to adapt photovoice to a virtual research environment. We did so by adopting a variety of digital learning and information sharing platforms. In addition, we enlisted community-based organizations who are providing essential services for underrepresented communities to serve as research mentors for university student researchers. Finally, given the historic nature of the pandemic and the underrepresentation of AAPI experiences in mainstream archives, we emphasized the importance of students as co-producers of archival knowledge.
Eating Disorder Examination-Questionnaire: Evaluating factor structures and establishing measurement invariance with Asian/Hawaiian/Pacific Islander, Black, and White American college men
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DOI: 10.1002/eat.23696

Abstract: Objective: This study evaluated the factor structure and invariance of the Eating Disorder Examination-Questionnaire (EDE-Q) in a sample of Asian/Hawaiian/Pacific Islander (n = 163), Black (n = 155), and White (n = 367) American university men. Method: Twelve different EDE-Q factor structures reported in the literature were evaluated using multi-group confirmatory factor analyses, and measurement invariance assessed. Results: A respecified four-factor structure proposed by Parker et al. (2016) showed superior fit and was invariant across groups. Significant differences emerged across all latent factors, with small to medium effects. Asian/Hawaiian/Pacific Islander men reported significantly higher scores on factors assessing Appearance Concern, Overvaluation of Shape/Weight, and Eating Concerns, and were more likely to endorse regular objective binge eating (OBE) and fasting episodes than their Black and White peers. Both White and Asian/Hawaiian/Pacific Islander men reported greater dietary restraint than Black men. Among this sample, frequencies of regular compensatory exercise ranged from 10% to 16%, fasting 6% to 14%, and OBEs 1% to 10%. Discussion: Results provide further support for the use of alternate EDE-Q factor structures, especially among non-White men. In this study, Asian/Hawaiian/Pacific Islander men reported the highest levels of ED psychopathology relative to White and Black men, indicating they might be particularly vulnerable to EDs. Public significance: This study failed to find support for using the original Eating Disorder Examination-Questionnaire four-factor structure to detect disordered eating in Asian, Black, and White American college men. An alternate model proposed by Parker et al. in 2016 may be more appropriate. Asian men also reported the highest levels of eating psychopathology relative to their peers, suggesting they may be at high risk for developing eating disorders.

Skin Cancer Risk Factors and Screening Among Asian American Individuals
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DOI: 10.1001/jamadermatol.2021.5657

Abstract: Importance: Asian American individuals are the fastest growing racial group in the US but remain underrepresented in health disparities research, including research on skin cancer risk factors and screening. Improved understanding of preventable skin cancer risk factors and screening may demonstrate unmet needs among Asian American individuals. Objective: To examine sunburns, sun-protective behaviors, indoor tanning, and total body skin examinations (TBSEs) for skin cancer screening among Asian American subgroups compared with non-Hispanic White individuals. Design, setting, and participants: The National Health Interview Survey is a nationally representative cross-sectional survey in the US that assesses health behaviors. Self-identified Asian Indian, Chinese, Filipino, non-Hispanic White, and other Asian respondents from survey years 2000, 2005, 2010, and 2015 were included. Data were analyzed from July to November 2021. Main outcomes and measures: Any sunburn within the last year; sun-protective behaviors included applying sunscreen, staying under shade, wearing long-sleeved shirts, wearing long clothing to the ankles, wearing hats, and wearing caps most of the time or always when out in the sun; any indoor tanning within the last year; any TBSE ever. Results: Of 84,030 participants, 5694 were Asian American (6.8%) and 78,336 (93.2%) were Non-Hispanic White; of these individuals, 1075 (weighted prevalence, 21.0%) were Asian Indian, 1165 (19.4%) Chinese, 1512 (23.5%) Filipino, and 2144 (36.1%) Other Asian. All Asian American subgroups were more likely to seek shade, wear long clothing to the ankles, and wear long-sleeved shirts but less likely to sunburn, apply sunscreen, tan indoors, and receive TBSE than Non-Hispanic White individuals. Asian Indian individuals were less likely than Chinese participants to apply sunscreen (adjusted odds ratio [aOR], 0.55; 95% CI, 0.41-0.74) or wear a hat (aOR, 0.53; 95% CI, 0.37-0.76) and more likely to wear long-sleeved shirts (aOR, 1.89; 95% CI, 1.52-2.33) or long clothing to the ankles (aOR, 1.56; 95% CI, 1.28-1.90). Conclusions and relevance: The results of this cross-sectional study found that disaggregated comparisons among Asian American individuals demonstrated differences in skin cancer risk factors that may be used to identify high-risk subgroups and inform culturally aware counseling when indicated. Future studies should further sample Asian American individuals to evaluate for potential masked health disparities through disaggregated analysis.
Disease characteristics and mortality among Asian women with breast cancer
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DOI: 10.1002/cncr.34015
Abstract: Background: Asian women with breast cancer are often studied in aggregate, belying significant intragroup diversity. The authors sought to examine differences in breast cancer characteristics and outcomes among Asian women. Methods: Asian, non-Hispanic Black, Hispanic, and non-Hispanic White women aged 18 years and older who were diagnosed with breast cancer from 1990 to 2016 were identified in the Surveillance, Epidemiology, and End Results 18 database. Asian patients were subclassified as Chinese, Japanese, Korean, Filipino, Vietnamese, South Asian (Asian Indian or Pakistani), Southeast Asian (SEA, i.e., Cambodian, Laotian, Hmong, or Thai), or other Asian. Unadjusted overall survival (OS) and cancer-specific survival (CSS) were estimated using the Kaplan-Meier method. Cox proportional hazards models were used to estimate adjusted OS and CSS. Results: In total, 910,415 women were included (Asian, n = 63,405; Black, n = 92,226; Hispanic, n = 84,451; White, n = 670,333). Asian women had higher rates of human epidermal growth factor receptor 2 (HER2)-positive disease compared with White women (18.7% vs 13.8%) and had the highest 10-year unadjusted OS and CSS among all racial/ethnic groups (all P < .001). SEA women had the highest rates of stage IV disease at presentation, whereas Japanese women had the lowest rates (5.9% vs 2.7%; P < .001). Japanese women had the highest 10-year unadjusted CSS (89.4%; 95% confidence interval, 88.7%-90.1%) of any distinct Asian group, whereas SEA women had the worst unadjusted CSS (78%; 95% confidence interval, 74.1%-81.3%; P < .001). After adjustment, SEA women had the worst OS of any Asian group and were the only Asian group without improved OS compared with White women (reference category; P = .08). Conclusions: Breast cancer characteristics and outcomes vary significantly among Asian women. Future research should consider disaggregation by country or region of origin to identify subgroups that are at risk for worse outcomes than aggregated data may suggest. Lay summary: Asian women with breast cancer are frequently studied as a single entity. However, Asian ethnic groups differ greatly by country of origin, genetic ancestry, disease frequency, socioeconomic status, patterns of immigration, as well as dietary and cultural practices. Women of different Asian ethnicities vary significantly with regard to cancer characteristics, such as mortality and tumor subtype. Future research should disaggregate these populations to better understand, treat, and counsel Asian patients with breast cancer.

Persistent and toxic chemical pollutants in fish consumed by Asians in Chicago, United States
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Abstract: Consumption of seafood brings health benefits but may increase the ingestion of contaminants. Compared with other ethnic groups in the U.S., Asians consume seafood more frequently. However, there is little information about how culturally specific fish consumption contributes to exposure to toxicants. In this work, we surveyed fish consumption among Chinese, Korean and Vietnamese communities and purchased 103 seafood samples from local markets in Chicago. Each sample was analyzed for mercury (Hg) and 92 organic chemicals including polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), polybrominated diphenyl ethers (PBDEs), and Dechlorane Plus and related compounds (DPs). The rank order of pollutant concentration in all samples was Hg ≫ Σ66PCBs > Σ17OCPs > Σ8PBDEs > Σ8DPs. Positive correlations were noted among most contaminant groups. Bluefish, pike and tuna steak had the highest mean Hg (>1 mg/kg). The mean Σ66PCBs was highest in pike and bluefish (>100 ng/g) followed by pollock and mackerel (>40 ng/g). Overall, octopus, shrimp and tilapia were the least contaminated; while pike, bluefish, and pollock were the most contaminated. Omega-3 fatty acids were more strongly affiliated with the organic contaminants than mercury. A risk assessment identified seven types of fish that should have consumption limitations and six that should not be consumed. For these seafoods, consumption advice based on Hg levels would adequately protect health. In the survey participants, 17% of seafood mass consumed is from types of fish that should be limited to 1 or 2 meals/week, while 7% of the seafood mass consumed comes from types that should not be consumed at all. This work adds additional contaminants to the profile of health risks resulting from fish consumption among Asian Americans, which can be used in interventions aimed at conserving consumption of healthy fish while avoiding contaminants.
Impact of Culture, Spirituality, and Mental Health Attitudes on Intergenerational Asian-American Caregivers: A Pilot Study

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Abstract: Importance: Asian-Americans are more likely than other ethnic groups to care for older family members and less likely to seek mental health services. The research on caregiver burden among Asian-American intergenerational caregivers is limited. Objective: To investigate how spirituality and mental health help-seeking attitudes correlate with and predict perceived feelings of caregiver burden among Asian-American caregivers. Favorable mental health help-seeking attitudes were predicted to negatively correlate with caregiver burden, and spirituality was predicted to negatively correlate with and negatively predict caregiver burden. Design: Quantitative survey research. Setting: Community mental health. Participants: One hundred one participants were recruited using the following inclusion criteria: Asian-Americans who currently or previously provided care to an Asian family member at least one generation older than the caregiver for at least 1 mo and in the past 3 yr. Outcomes and Measures: Items from the Burden Scale for Family Caregivers, Spirituality Scale, Expressions of Spirituality Inventory-Revised, Mental Help Seeking Attitudes Scale, and Self-Stigma of Seeking Psychological Help measured caregiver burden, spirituality, and mental health help-seeking attitudes. Results: A statistically significant negative correlation was found between caregiver burden and spirituality and between caregiver burden and mental health help-seeking attitudes. Spirituality and number of domains of care were statistically significant predictors of caregiver burden. Conclusions and relevance: Spirituality was found to negatively predict caregiver burden among Asian-American intergenerational caregivers. Mental health help-seeking attitudes were negatively correlated with caregiver burden. Occupational therapy practitioners have the opportunity to integrate spirituality and culturally sensitive mental health promotion into their services to Asian-Americans. What This Article Adds: Evidence that spirituality is a negative predictor of caregiver burden for Asian-American intergenerational caregivers offers a unique opportunity for occupational therapy practitioners to offer alternative methods of mental health promotion with this population. Understanding that spirituality and mental health help-seeking attitudes are culturally mediated allows practitioners to be informed about a dynamic in Asian-American culture.

Knowledge Gaps, Challenges, and Opportunities in Health and Prevention Research for Asian Americans, Native Hawaiians, and Pacific Islanders: A Report From the 2021 National Institutes of Health Workshop


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Abstract: Asian Americans (AsA), Native Hawaiians, and Pacific Islanders (NHPi) comprise 7.7% of the U.S. population, and AsA have had the fastest growth rate since 2010. Yet the National Institutes of Health (NIH) has invested only 0.17% of its budget on AsA and NHPi research between 1992 and 2018. More than 40 ethnic subgroups are included within AsA and NHPi (with no majority subgroup), which are highly diverse culturally, demographically, linguistically, and socioeconomically. However, data for these groups are often aggregated, masking critical health disparities and their drivers. To address these issues, in March 2021, the National Heart, Lung, and Blood Institute, in partnership with 8 other NIH institutes, convened a multidisciplinary workshop to review current research, knowledge gaps, opportunities, barriers, and approaches for prevention research for AsA and NHPi populations. The workshop covered 5 domains: 1) sociocultural, environmental, psychological health, and lifestyle dimensions; 2) metabolic disorders; 3) cardiovascular and lung diseases; 4) cancer; and 5) cognitive function and healthy aging. Two recurring themes emerged: Very limited data on the epidemiology, risk factors, and outcomes for most conditions are available, and most existing data are not disaggregated by subgroup, masking variation in risk factors, disease occurrence, and trajectories. Leveraging the vast phenotypic differences among AsA and NHPi groups was identified as a key opportunity to yield novel clues into etiologic and prognostic factors to inform prevention efforts and intervention strategies. Promising approaches for future research include developing collaborations with community partners, investing in infrastructure support for cohort studies, enhancing existing data sources to enable data disaggregation, and incorporating novel technology for objective measurement. Research on AsA and NHPi subgroups is urgently needed to eliminate disparities and promote health equity in these populations.
Disentangling the roles of generational status and acculturation on dietary behaviors in disaggregated Asian American subgroups

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Abstract: Introduction: Little is known on the independent effects of generational status and acculturation on the consumption of specific foods among disaggregated Asian American (AA) populations. This study explores the associations of generational status and acculturation with dietary behaviors of a nationwide non-probability sample of 3018 AAs (57.6% East Asian American (EAA), 18.9% South Asian American (SAA), 19.4% Southeast Asian American (SEAA)). Methods: Recruited participants completed an online dietary survey designed and adapted for AAs to assess a range of diet and food purchasing behaviors. Generational status was assessed through participant and parental country of birth (1st-Gen, 2nd-Gen, 3rd-Gen); the Marin Short Acculturation Scale was adapted to measure acculturation. Linear regression models assessed the association of generational status and acculturation with consumption of 11 food/nutrient groups, adjusted for socio-economic variables. Results: Compared to estimated US averages, participants reported lower fruit, dairy, and seafood intake yet lower red and processed meat, and higher whole grain, calcium, and fiber intake. Compared to EAA, SAA reported higher dairy (1.72 vs. 1.46 cups/day) and calcium (1029 vs. 954 mg/day) intakes, while SEAA reported lower vegetable intake (1.66 vs. 1.78 cups/day). In adjusted analyses, processed meat intake was higher among 2nd-Gen and 3rd-Gen (+0.029 times/day; +0.061 times/day) participants. Higher acculturation was associated with lower vegetable, fiber, and seafood intake (-0.005 cups/day; -0.02 g/day; -0.002 times/day). Conclusion: Greater attention to the role of generational status and acculturation in AA dietary behaviors is needed, and findings call for further research to understand the mechanisms behind the dietary influence of different socialization and acculturative processes.

Disparities in clinical and demographic characteristics among Asian/Pacific Islander and Non-Hispanic White newly diagnosed lung cancer patients

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Abstract: Purpose: Racial disparities persist among lung cancer patients but have not been adequately studied among Asian/Pacific Islander [API] subgroups, which are heterogeneous. This study compared clinical and demographic characteristics at diagnosis of API subgroups and NHW patients. Methods: NHW and API adults diagnosed with lung cancer were identified from the Surveillance, Epidemiology, and End Results database (1990-2015). API was divided into eight subgroups: Chinese, Japanese, Filipino, Hawaiian/Pacific Islander, Korean, Vietnamese, Asian Indian/Pakistani, and Other. Multivariable multinomial logistic regression models were used to assess adjusted associations of clinical and demographic factors with API/subgroups. Results: There were 522,702 (92.6%) NHW and 41,479 (7.4%) API lung cancer patients. API were less likely to be diagnosed at the age of ≥ 80 years (ORadj 0.53, 95% CI 0.48-0.58 for ≥ 80 vs. ≤ 39 years) than NHW. However, Japanese patients were more often diagnosed at ≥ 80 years compared to other ethnic subgroups. API were less often female (ORadj 0.85, 95% CI 0.83-0.86), and unmarried (ORadj 0.71, 95% CI 0.68-0.74); however, among API, Japanese, Hawaiian/Pacific Islander, Korean, and Vietnamese were more often unmarried, compared to Chinese patients. API were more frequently diagnosed at stage IV, compared to stage I (ORadj 1.31, 95% CI 1.27-1.35). API had significantly less squamous cell carcinoma (ORadj 0.54, 95% CI 0.52-0.56, compared to adenocarcinoma); among API, Japanese, Filipino, Hawaiian/Pacific Islander, Korean, Asian Indian/Pakistani, and Other were more likely than Chinese patients to present with squamous cell histology (range: ORadj[Other] 1.24, 95% CI 1.09-1.41; ORadj[Hawaiian/Pacific Islander] 2.47, 95% CI 2.22-2.75). Conclusion: At diagnosis, there are significant differences in demographic and clinical characteristics between NHW, API, and API subgroups. Treating API patients as a single population may overlook biological, environmental, and behavioral differences that might be beneficial in designing prevention strategies and treatment.
Prospective study of oral microbiome and gastric cancer risk among Asian, African American and European American populations
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Abstract: Colonization of specific bacteria in the human mouth was reported to be associated with gastric cancer risk. However, previous studies were limited by retrospective study designs and low taxonomic resolutions. We performed a prospective case-control study nested within three cohorts to investigate the relationship between oral microbiome and gastric cancer risk. Shotgun metagenomic sequencing was employed to characterize the microbiome in prediagnostic buccal samples from 165 cases and 323 matched controls. Associations of overall microbial richness and abundance of microbial taxa, gene families and metabolic pathways with gastric cancer risk were evaluated via conditional logistic regression. Analyses were performed within each cohort, and results were combined by meta-analyses. We found that overall microbial richness was associated with decreased gastric cancer risk, with an odds ratio (OR) per standard deviation (SD) increase in Simpson’s reciprocal index of 0.77 (95% confidence interval [CI] = 0.61-0.99). Nine taxa, 38 gene families and six pathways also showed associations with gastric cancer risk at P < .05. Neisseria mucosa and Prevotella pleuritidis were enriched, while Mycoplasma orale and Eubacterium yurii were depleted among cases with ORs and 95% CIs per SD increase in centered log-ratio transformed taxa abundance of 1.31 (1.03-1.67), 1.26 (1.00-1.57), 0.74 (0.59-0.94) and 0.80 (0.65-0.98), respectively. The top two gene families (P = 3.75 × 10^{-4} and 3.91 × 10^{-4} ) and pathways (P = 1.75 × 10^{-3} and 1.53 × 10^{-3} ) associated with gastric cancer were related to the decreased risk and are involved in hexitol metabolism. Our study supports the hypothesis that oral microbiota may play a role in gastric cancer etiology.

Low Amount and Intensity of Leisure-time Physical Activity in Asian Indian Adults
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Abstract: Purpose: We sought to describe leisure-time, aerobic, and muscle strengthening physical activity (PA) patterns in U.S. Asian Indians, in comparison to other races/ethnicities. Design, setting, and sample: We utilized the 2011-2018 National Health Interview Surveys, a set of cross-sectional, nationally representative surveys of the U.S. noninstitutionalized population. Our study population included 257 652 adults who answered PA questions. Measures: PA was classified per 2008 U.S. guidelines and continuously per estimated metabolic equivalents (METs). Race was classified into White, Black, Asian Indian, Other Asian, and American Indian/Alaskan Native/Multiracial. Analysis: We used survey design-adjusted, multivariable logistic regression to determine odds of sufficient and highly active physical activity levels, adjusting for predisposing, enabling, need, and health care service factors as guided by the Anderson Model. We also used linear regression to determine racial differences in average MET-minutes/week. Analysis was additionally stratified by comorbidity status. Results: While Asian Indians (N = 3049) demonstrated similar odds of sufficient aerobic PA as Whites [aOR [95% CI]: .97 [.88,1.07]], Asian Indians had 22% lower odds of meeting highly active aerobic PA levels [.78 [.71,0.87]] and 18% lower odds of meeting sufficient muscle strengthening PA levels [.82 [.73,0.91]]. This translated to an average 172 (95% CI: 45 300) fewer MET-minutes. Furthermore, this decrease in MET-minutes/week was especially apparent in those without hypertension [β[95% CI]: -164 [-314,-15]] without diabetes [-185 [-319,-52]], and low/normal BMI [-422 [-623,-222]]. Conclusion: Asian Indians, especially those without comorbidities, are less likely to engage in high-intensity physical activity than Whites.
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Forum
Tuesday to Wednesday, June 7th-8th, 2022 (Open to the public)
Registration info and links will be released on rootedresilientrising.wordpress.com website in May

This event will highlight the current state of health disparities research focused in Asian American (AA), Native Hawaiian, and Pacific Islander (NH/PI) populations. Speaker sessions will weave together how community-led and community-participatory efforts and strategic collaboration help to triangulate our actions toward collective growth. We are proud to include special focus on the critical importance of AA and NH/PI community coalition efforts that reinforce the importance of storytelling in research practice to address health disparities and bolster the health of diverse AA and NH/PI populations.