

ARCH Newsletter December 2013

1) Updates:

We have added materials from the **Health Research Partnership in Asian Communities (HRPAC)** Research Partnership Development and Grant Writing Training Program to the Research Resources page. This is a program that was led by Dr. Bang Nguyen at the Cancer Prevention Institute of California and with the collaborations of ARCH members at UCSF and the Vietnamese Reach for Health Coalition. Included are presentations on how to form community-based participatory research (CBPR) partnerships and how to write CBPR grants.

- 2) ARCH members **Jun Wang, Adam Burke, Janice Tsoh, Gem Le, Tung Nguyen, and Elaine Chow (NICOS Chinese Health Coalition)** recently published an article entitled “Exploring a culturally relevant model of cancer prevention involving traditional Chinese medicine providers in a Chinese American community” in the European Journal of Integrative Medicine which described a process of integrating biomedicine and traditional Chinese medicine (TCM) concepts to engage TCM providers to teach their clients and social networks about colorectal cancer screening (see Abstracts).

3) Abstract Highlights

In yet another study that shows the problem of diabetes among Asian Americans and Pacific Islanders may be dependent on factors other than obesity, in a large population-based study of women who gave birth in California from 2007-2009 published in the American Journal of Public Health, the estimated prevalence for gestational diabetes among Asian/Pacific Islander women was 11.9% compared to 5.4% for White women. This is in spite of the fact that the percentage of gestational diabetes attributed to overweight and obesity among APIs was only 17.8% compared to 41.2% among Whites. The highest rates among any racial/ethnic group were among Filipinos, Asian Indians, and Vietnamese.

Dr. Moon Chen at UC Davis and his colleagues published the results of a randomized controlled trial of lay health workers' efficacy in promoting hepatitis B screening among Hmong Americans, a highly underserved and understudied Asian American group. Lay health worker outreach led to a higher rate of self-reported serologic testing for HBV (24% vs. 10%, $P = 0.0056$) than control group participants.

Does it seem that more Asian American children have myopia than White children? That is true in a large population-based study from Southern California.

Kim SY, Saraiva C, Curtis M, et al. Fraction of gestational diabetes mellitus attributable to overweight and obesity by race/ethnicity, California, 2007-2009. Am J Public Health. 2013 Oct;103(10):e65-72. doi: 10.2105/AJPH.2013.301469. Epub 2013 Aug 15. <http://www.ncbi.nlm.nih.gov/pubmed/23947320>

OBJECTIVES:

We calculated the racial/ethnic-specific percentages of gestational diabetes mellitus (GDM) attributable to overweight and obesity.

METHODS:

We analyzed 1 228 265 records of women aged 20 years or older with a live, singleton birth in California during 2007 to 2009. Using logistic regression, we estimated the magnitude of the association between prepregnancy body mass index and GDM and calculated the percentages of GDM attributable to overweight and obesity overall and by race/ethnicity.

RESULTS:

The overall estimated GDM prevalence ranged from 5.4% among White women to 11.9% among Asian/Pacific Islander women. The adjusted percentages of GDM deliveries attributable to overweight and obesity were 17.8% among Asians/Pacific Islander, 41.2% among White, 44.2% among Hispanic, 51.2% among Black, and 57.8% among American Indian women. Select Asian subgroups, such as Vietnamese (13.0%), Asian Indian (14.0%), and Filipino (14.2%), had the highest GDM prevalence, but the lowest percentage attributable to obesity.

CONCLUSIONS:

Elevated prepregnancy body mass index contributed to GDM in all racial/ethnic groups, which suggests that decreasing overweight and obesity among women of reproductive age could reduce GDM, associated delivery complications, and future risk of diabetes in both the mother and offspring.

Chen MS Jr, Fang DM, Stewart SL, et al. Increasing hepatitis B screening for Hmong adults: results from a randomized controlled community-based study. Cancer Epidemiol Biomarkers Prev. 2013 May;22(5):782-91. <http://www.ncbi.nlm.nih.gov/pubmed/23613027>

BACKGROUND:

Hepatitis B-linked liver cancer disproportionately affects Hmong Americans. With an incidence rate of 18.9 per 100,000, Hmong Americans experience liver cancer at a rate that is 6 to 7 times more than that of non-Hispanic Whites. Serologic testing for the hepatitis B virus (HBV) is a principal means to prevent liver cancer-related deaths through earlier identification of those at risk.

METHODS:

Academic researchers and Hmong leaders collaborated in the design, conduct, and evaluation of a 5-year randomized controlled trial testing a lay health worker (LHW) intervention to promote HBV testing among 260 Hmong adults through in-home education and patient navigation.

RESULTS:

Intervention group participants were more likely to report receiving serologic testing for HBV (24% vs. 10%, $P = 0.0056$) and showed a greater mean increase in knowledge score (1.3 vs.

0.3 points, $P = 0.0003$) than control group participants. Multivariable modeling indicated that self-reported test receipt was associated with intervention group assignment [OR 3.5; 95% confidence interval (CI) 1.3-9.2], improvement in knowledge score (OR 1.3 per point; 95% CI 1.02-1.7), female gender (OR 5.3; 95% CI 1.7-16.6), and having seen a doctor in the past year at baseline (OR 4.8; 95% CI 1.3-17.6). The most often cited reason for testing was a doctor's recommendation.

CONCLUSIONS:

LHWs were effective in bringing about HBV screening. Doctor visits and adherence to doctors' recommendations were pivotal. Participation of health care providers is essential to increase HBV testing.

IMPACT:

LHWs can significantly increase HBV screening rates for Hmong but their doctors' recommendation is highly influential and should be pursued.

Wang J, Burke A, Tsoh JY, et al. Exploring a culturally relevant model of cancer prevention involving traditional Chinese medicine providers in a Chinese American community. *European Journal of Integrative Medicine*, November 2013. Epub ahead of print. <http://www.europeanintegrativemedicinejrn.com/article/S1876-3820%2813%2900163-7/abstract>

INTRODUCTION

Colorectal cancer (CRC) is the third most commonly diagnosed cancer in all racial and ethnic groups. Although CRC screening is very cost-effective, screening rates are low among most ethnic groups, including Asian Americans. Given the high use of traditional Chinese medicine (TCM) among Chinese Americans, one potentially useful approach to promote CRC screening in these communities could involve TCM providers in outreach efforts.

METHODS

A two-phase study was conducted. The perceived suitability of TCM providers in CRC prevention was explored in Phase 1. Guided by Phase 1 findings, in Phase 2, a 38-page integrative educational flipchart was developed and tested. Focus groups and observations were conducted with TCM providers (acupuncturists and herbalists) and with limited English proficient Chinese American immigrants living in San Francisco, California.

RESULTS

In Phase 1, the role of TCM providers as CRC screening educators was deemed acceptable by both providers and community members, although some providers had reservations about engaging in CRC outreach activities due to lack of expertise. The majority of providers were not aware of regular CRC screening as a preventive measure, and most were not up-to-date in their own screening. In Phase 2, the integrative CRC education flipchart was perceived as culturally appropriate based on stakeholder input and feedback.

CONCLUSION

This study shows that TCM providers have the potential to be a valuable and culturally appropriate community resource for providing information on CRC screening. It suggests a potential role for traditional healers as change agents in the immigrant community health network.

Wen G, Tarczy-Hornoch K, McKean-Cowdin R, et al. Prevalence of myopia, hyperopia, and astigmatism in non-Hispanic white and Asian children: multi-ethnic pediatric eye disease study. Multi-Ethnic Pediatric Eye Disease Study Group. Ophthalmology. 2013 Oct;120(10):2109-16. doi: 10.1016/j.ophtha.2013.06.039. Epub 2013 Aug 14. <http://www.ncbi.nlm.nih.gov/pubmed/23953098>

PURPOSE:

To determine the age-, gender-, and ethnicity-specific prevalence of myopia, hyperopia, and astigmatism in non-Hispanic white (NHW) and Asian preschool children.

DESIGN:

Population-based, cross-sectional study.

PARTICIPANTS:

A population-based sample of 1501 NHW children and 1507 Asian children aged 6-72 months from Los Angeles County and Riverside County, California.

METHODS:

Eligible children underwent an in-home and in-clinic interview and a comprehensive eye examination including cycloplegic autorefractometry from 100 census tracts.

MAIN OUTCOME MEASURES:

The proportion of children with myopia (spherical equivalent [SE] ≤ -1.00 diopter [D]), hyperopia (SE $\geq +2.00$ D) and cylindrical refractive error ≥ 1.50 D in the worse eye. The astigmatism type was defined as with-the-rule (WTR; +cylinder axis $90^\circ \pm 15^\circ$) and against-the-rule (ATR; + cylinder axis $180^\circ \pm 15^\circ$); all other orientations were considered oblique (OBL).

RESULTS:

The prevalence of myopia, hyperopia, and astigmatism in NHW children was 1.20% (95% confidence interval [CI], 0.76%-1.89%), 25.65% (95% CI, 23.5%-27.9%), and 6.33% (95% CI, 5.21%-7.68%), respectively. The prevalence of WTR, ATR, and OBL astigmatism in NHW children was 4.33%, 1.00%, and 1.00%, respectively. Prevalence was lower with older age groups for astigmatism ($P = 0.0002$), but not for myopia ($P = 0.82$) or hyperopia ($P = 0.31$). In Asian children, the prevalence of myopia, hyperopia, and astigmatism was 3.98% (95% CI, 3.11%-5.09%), 13.47% (95% CI, 11.8%-15.3%), and 8.29% (95% CI, 7.01%-9.80%), respectively. The prevalence of WTR, ATR, and OBL astigmatism was 6.50%, 0.80%, and 1.00% respectively. The prevalence of hyperopia was higher in girls than boys ($P = 0.0002$), but no differences were found for myopia and astigmatism.

CONCLUSIONS:

Hyperopia was the most common refractive error in both Asian and NHW children. However, compared with NHW children, myopia was relatively more prevalent, and hyperopia less prevalent, among Asian children. The prevalence of astigmatism was greatest in infants, and WTR astigmatism predominated at all ages. Myopia showed relatively stable prevalence across age groups, whereas hyperopia prevalence decreased after infancy and then increased again in older age groups; however, longitudinal studies are needed to evaluate refractive changes over time in individual children.