

**Making the Difference in Tobacco-Related Health Disparities Science:  
TReND Progress, Process, and Opportunities for Future Investment****Poster Abstracts****Knowledge and Perceptions of Tobacco-Related Media in Rural  
Appalachia**

\*Steven A. Branstetter, Ph.D.<sup>1</sup>, Joshua Muscat, Ph.D.<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Biobehavioral Health, The Pennsylvania State University; <sup>2</sup>Professor, Public Health Sciences The Pennsylvania State University

Currently, 20% of all adults over the age of 18 are regular smokers, yet the smoking rate is as high as 32% among certain racial groups and as high as 41% in groups with lower educational achievement. For certain populations, such as those living in the Appalachian regions of the United States, there may be additional cultural factors unique to the geographical region which may promote smoking behavior. Furthermore, tobacco companies spend millions of dollars differentially targeting segments of the population, such as certain ethnicities and certain geographical regions. The ongoing existence of such disparities highlight the need for improved tobacco control initiatives specifically tailored to meet the needs of certain sub-groups of smokers. The development of effective tobacco control practices requires an understanding of exposure to both pro- and anti-tobacco media. This knowledge likely differs in the population, and may vary by geography, race and other subgroups. For the present study, several focus group sessions were conducted to identify the perceptions of tobacco-related media in the Appalachia region of Pennsylvania. Pro- tobacco ads and favorable messages were received through the internet, direct mail, convenience stores, billboards, the movies and others sources. Anti-tobacco messages were identified primarily from television as well as magazines. In general, participants concluded that quitting was a matter of choice and not influenced by pro- or antitobacco media. These results indicate that both pro and anti-tobacco from a variety of sources are highly recognized and remembered in detail in Appalachia, but the effectiveness of anti-tobacco messages is questionable. However, whereas successful in tobacco advertising may be judged by market penetration of icons such as the Marlboro Man, anti-tobacco messages can also be widely recognized if marketed in a similar iconic way, such as "the Truth" campaign.

## **Usability Testing for the TReND (Tobacco Research Network on Disparities) Web Portal**

\*Josephine Crisostomo, M.P.H.<sup>1</sup>, Lisa Lowery<sup>1</sup>, Lauren Becker, M.A.<sup>1</sup>, Vinu Ilakkuvan<sup>1,2</sup>, K. Vish Viswanath, Ph.D.<sup>1,2</sup>

<sup>1</sup>Dana-Farber Cancer Institute; <sup>2</sup>Harvard School of Public Health

In 2008, faculty and staff from the Dana-Farber Cancer Institute and the Dana-Farber/Harvard Cancer Centers Health Communication Core (HCC) developed and launched the Tobacco Research Network on Disparities (TReND) web portal, intended to be a resource for researchers, community advocates, policymakers and journalists about tobacco disparities research. However, it was impossible to know if the website was fulfilling this goal. To begin answering this question, we conducted usability tests to examine user experience, particularly how user-friendly and navigable users find the site. Testing was conducted in the HCCs Enhancing Communication for Health Outcomes (ECHO) Lab, which is equipped with technology to track mouse movements and record screenshots. Seven participants - four researchers, two community-organizational staff, and one journalist - were recruited. Depending on the participants profession, opinions on the sites design and layout diverged. The researchers generally liked the layout, citing it as clean, whereas other participants thought the site was too plain. We concluded that, if the site is meant to reach the aforementioned diverse groups, more color and graphics should be added. Similarly, while the researchers felt the language was clear and information useful, other participants commented that the language was too technical and questioned the utility of the information for their work. We decided to consider segmenting the website for different audiences, adding general background information on tobacco disparities and other profession-specific information for the non-research groups. The most common area of confusion around navigation occurred when links led to new windows displaying the National Cancer Institute (NCI) TReND projects webpage. We concluded that language needs to be added clarifying that TReND is a project of NCI and that these links open new windows on the NCI site. These and other conclusions resulting from usability testing prompted a major redesign of the TReND website.

*Acknowledgements:* This project was funded by TReND (NCI and American Legacy Foundation).

---

# **Experiences and Effect of the Smoking Ban, in the Exposition to Environmental Tobacco Smoke (ETS), Amongst a Highly Exposed Workforce in Casinos in Puerto Rico (PR) – *TReND Blue-Ribbon Award***

\*Elba C. Daz-Toro, D.M.D., M.S.D., M.P.H.<sup>1</sup>, Heriberto A. Marn, Ph.D.<sup>2</sup>

<sup>1</sup>School of Dental Medicine/ Puerto Rico Cancer Center Medical Sciences Campus University of Puerto Rico; <sup>2</sup>Health Services Administration Department Puerto Rico Health Services Research Institute School of Public Health Medical Sciences Campus University of Puerto Rico

*Statement of the problem:* No pre-post comparison studies, investigating impact of the smoking ban amongst those exposed to ETS at casinos, appear to have been conducted in the United States and its territories. *Purpose:* To examine experiences and to assess the effect of the smoking ban, implemented in PR (March of 2007), on the exposition of casino workers to ETS. *Methods:* Pre-post comparison design interviews, in order to assess experiences of the smoking ban implementation, and also saliva samples, to investigate the before and after implementation levels of cotinine to address recent exposition to environmental tobacco smoke, were taken from 20 non-smokers working in casino establishments. Also, measurements of indoor concentrations of fpm (2.5 mm diameter, PM 2.5) were taken in 10 casinos before and after the implementation of the law using a personal aerosol monitor. McNemars test were use to determine change in the interview pre-post answers. Paired t-tests were used to determine any statistically significant change in particulate matter (PM) and cotinine levels before and after the implementation of the smoking ban. *Results:* After six months of the implementation of the indoor smoking ban, 85% ( $p<0.01$ ) of no-smoker casino workers reported an improvement in their health status and 100% ( $p<0.01$ ) reported to be satisfied with the air quality of their workplace. Also, the average PM 2.5 levels in the casinos of San Juan decreased from 0.101 mg/m<sup>3</sup> to 0.018 mg/m<sup>3</sup> ( $p<0.01$ ) which is equivalent to a 88.5% reduction. Similarly, average cotinine levels for the sample of non-smoker casino workers decreased from 1.14 ng/ml to 0.55 ng/ml ( $p<0.01$ ) or a 52.0% reduction. *Conclusion:* The implementation of the indoor smoking ban was a very effective measure in reducing the exposure to environmental tobacco smoke for customers and workers in casinos in the metropolitan area of San Juan, Puerto Rico.

---

## **Southeast Asian Young Leaders (SEAYL) Tobacco Prevention Slideshow: The Truth About Tobacco**

Alex Douangdara<sup>1</sup>, Anthony Phongboupha<sup>1</sup>, and Bryan Phuthama<sup>1</sup>, Daniel Phan<sup>1</sup>,  
Mory Saengsourith<sup>1</sup>, Sang Saephan<sup>1</sup>, Sean Kirkpatrick<sup>1</sup>, Sharon Lipperman-Kreda<sup>2</sup>,  
\*Juliet Lee<sup>2</sup>

<sup>1</sup>SEAYL Tobacco Prevention Project, Community Health for Asian Americans; <sup>2</sup>Prevention Research Center, Pacific Institute for Research and Evaluation

Youth participation in tobacco prevention programs is important in the success of these programs, especially those focused on youths. Southeast Asian American youth are highly at-risk for tobacco use. In California, Laotians and Cambodians have had the highest rates of poverty and among the lowest levels of education in the state, two conditions which are implicated in cigarette smoking, including for Asian Americans. Although there is practically no national prevalence data, based on school health surveys in the West Contra Costa region of Northern California, smoking appears to be far more prevalent among Southeast Asians than other Asian Americans. Previously Southeast Asian American youths in WCC reported that cigarette use was highly normative, and cigarettes were very easy to obtain from stores as well as from friends. Community Health for Asian Americans (CHAA) and the Prevention Research Center (PRC) are collaborating in a youth-led project to reduce and prevent tobacco use among Southeast Asian Americans in WCC. At CHAA, youth enrolled in Southeast Asian Young Leaders (SEAYL) together with Southeast Asian American youth in a summer employment program at CHAA participated in trainings on social environmental aspects of tobacco in their community, including local tobacco control policies and tobacco industry marketing efforts targeting communities of color and developing nations. The youth conducted their own community-based research projects including: store observations; community surveys; photographic documentation (Photovoice); and a music-video based on publically-available images related to tobacco use and set to own original music and rap text written and performed by SEAYL members. In this presentation, the youth participants present their own analyses of these data including selected photographs with commentary and the video production. Although proposed for a poster session, ideally these materials will be presented in a slide and video format as developed by the youth.

*Acknowledgements:* The research and preparation of this manuscript were made possible by a grant from the University of California Office of the Presidents Tobacco-Related Disease Research Program (TRDRP #18BT0044, Co-P.I.s Juliet Lee and Sean Kirkpatrick). Additional funding for the SEAYL program was provided by Contra Costa County Alcohol and Other Drugs Services, The California Wellness Foundation, Contra Costa County Public Health, The California Endowment, and The Kaiser Foundation. The authors wish to acknowledge the members of Southeast Asian Young Leaders (SEAYL) and SEAYL staff members Adel Hazan, Zelda Coleman, John Abella and Sue Denny. We thank members of the Contra Costa County Tobacco Prevention Coalition for their help and support.

---

# **Patterns and Predictors of American Indian Cigarette Smoking in Rural Settings**

\*Felicia Schanche Hodge<sup>1</sup>, Karabi Sinha<sup>2</sup>

<sup>1</sup>Professor, Schools of Nursing/Public Health University of California, Los Angeles;

<sup>2</sup>Adjunct Assistant Professor, School of Nursing, University of California, Los Angeles

This poster presentation reports on the socio-demographics, prevalence and predictors of cigarette smoking among adult American Indian current, former and never smokers. Thirteen Indian health clinic registries formed the random household survey sampling frame (N=457). Measures included socio-demographics, smoking status, intention to quit, patterns of smoking and age of initiation. Statistical tests include chi-square and Fishers exact tests, as well as multiple logistic regression analysis. Respondents reported that they began smoking at an early age (<12 years) and generally smoke few cigarettes on a daily basis (average of a pack per day). Proportionally, females were more likely to be current smokers than males. Few reported intention to quit smoking (25%). Current cigarette smokers were associated with early smoking initiation, a history of sexual abuse as a child and adult, and have significantly higher suicide ideation and attempts. Very little is known about successful smoking cessation program development and interventions among this population group. This paper provides much needed information to researchers and policy-makers regarding the need for targeted smoking cessation programs for American Indians. We make recommendations for designing and implementing smoking prevention and cessation programs targeting American Indian.

*Acknowledgements:* This research was supported by a grant from the National Institute for Nursing Research, NIH, R01 NR04528.

# **Innovative Strategy to Increase Cessation Attempts in Low-Income African Americans**

\*Carol O. McGruder, B.A., DEF<sup>1</sup>, \*Valerie Yerger, N.D.<sup>2</sup>

<sup>1</sup>The URSA Institute; <sup>2</sup>University of California, San Francisco (authors are equal contributors)

Cigarette smoking is the most preventable public health problem, and studies reveal disparities in tobacco cessation rates of U.S. racial and ethnic populations. Tobacco-related diseases disproportionately burden African Americans and their communities. Since tobacco cessation has significant and immediate health benefits, identifying culturally appropriate strategies to increase successful cessation among African Americans is an urgent public health priority. The African American Pre-Cessation Enhancement Intervention (AAP-CEI) is an innovative smoking cessation model that utilizes the principles of social justice and community capacity building in the delivery of pre-cessation services to an underserved, over-burdened, and oftentimes hard to reach community. The AAP-CEI is a stand alone, one time intervention that utilizes a focus group methodology as a tool for recruitment and service delivery. The innovative AAP-CEI may significantly improve the cessation rates among African American adult smokers by increasing their readiness to quit, quit attempts and subsequent participation in existing cessation opportunities, such as attending local smoking cessation classes, accessing online smoking cessation programs, calling the California Quitline, quitting cold turkey, utilizing nicotine replacement therapy, or seeking some other type of alternative cessation aid such as hypnotherapy, acupuncture, or relaxation techniques. We learned from our earlier community-based participatory research projects that low income African American smokers face a multitude of barriers that make it difficult for them to commit to a rigorous five-week smoking cessation study. In response to these challenges, we designed the African American pre-cessation enhancement intervention (AAP-CEI), an innovative strategy for low income African Americans to increase their readiness to quit, promote quit attempts, and increase subsequent participation in cessation programs. AAP-CEI is a stand-alone, single dose intervention that incorporates tobacco industry documents, media deconstruction and capacity building exercises that will also contribute to community norm changes. This brief one time intervention is designed to accelerate a participants progression toward cessation and is appropriate for residents of low-income communities who are chronically faced with multiple barriers impacting their ability to attend multiple session interventions which may diminish their opportunity to successfully quit smoking. We utilized a community-based participatory research (CBPR) approach to build upon the infrastructure of an established and productive community-academic research partnership to pilot test and refine the AAP-CEI. 20 intervention sessions were held, with a total participation of 240 smokers. The vast majority of these smokers were low income and African American. We have collected follow-up surveys from 75% of our participants (some with multiple points); however, the follow-up process is still underway, as is entering and analyzing the data. As we are in the process of analyzing the data, we are unable to report our findings. However, we can at this time safely report that we have received an overwhelmingly positive response from participants.

---

# **Social and Cultural Influences on Tobacco-Related Health Disparities among South Asians in the United States**

\*Arnab Mukherjea, Dr.P.H., M.P.H.<sup>1,2</sup>

<sup>1</sup>Center for Tobacco Control Research & Education, University of California, San Francisco;

<sup>2</sup>School of Public Health, University of California, Berkeley

*Background:* South Asians are the 2nd largest Asian subgroup & fastest growing minority population in the U.S. Population-based research in the U.S. has concluded that tobacco does not contribute to existing disparities; these studies did not inquire about indigenous products commonly used by this group. Local surveys including culturally-specific tobacco demonstrate higher use rates, suggesting more consistent associations with tobacco-related disparities.

*Methods:* Focus groups (n=100) were conducted in 3 South Asian ethnic enclaves in the U.S. Participants were separated by key demographic variables but included diversity of religion and national origin. Deductive methods were used in content analyses to qualitatively describe patterns & predictors of tobacco use. *Results:* A large number of culturally-specific tobacco products are commonly used by South Asians. Knowledge of product-specific risks was lacking or inaccurate. Culturally-specific products were differentially considered to have beneficial attributes. Use of South Asian products was ascribed social & cultural value, seemingly superseding perception of impacts on health. South Asians use these products to preserve and express ethnic identity in a new dominant culture, and to distinguish themselves from mainstream society and other minority groups. Product use is often a symbolic behavior to maintain tradition, engage in cultural celebration, serve as reminders of common heritage, and facilitate socialization among persons with a shared ethnic identity. *Conclusions:* Many cultural factors govern tobacco use among South Asians in the United States and are not included in typical risk factor surveillance instruments. Measuring the prevalence and correlates of non-traditional tobacco use is pivotal to understanding the true contribution of all forms of tobacco to health disparities, and will facilitate identification of targets for intervention. For understudied minority groups, the role of social identity may strongly influence at-risk behaviors. Broader implications include extrapolation of findings to other culturally-framed behaviors among groups underrepresented in health disparities research.

*Acknowledgements:* The author would like to thank Patricia A. Morgan, PhD; Susan L. Ivey, MD, MHSA; Lonnie R. Snowden, PhD; and Pamela M. Ling, MD, MPH for their assistance in advisement and mentorship on this research for his doctoral dissertation and preparation for publication in peer-review journals and presentations at conferences and scientific meetings.

---



## **The Promise and Pitfalls of Using Core Measures: An Evaluation of the Priority Populations Initiative -- Phase 2**

\*Jennifer Pearson, M.P.H.<sup>1,2</sup>, Haijun Xiao, M.S.<sup>1</sup>, Yvonne Owens Ferguson, Ph.D., M.P.H.<sup>3</sup>, Jennifer Cullen, Ph.D., M.P.H.<sup>1</sup>, Natasha Sokol, B.A.<sup>1</sup>, Mary E. Northridge, Ph.D., M.P.H.<sup>4,5</sup>, Donna M. Vallone, Ph.D., M.P.H.<sup>1</sup>, Amber Hardy Thornton, M.P.H., CHES<sup>1</sup>

<sup>1</sup>Legacy, Washington, DC; <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD; <sup>3</sup>Independent Consultant, Haymarket, VA; <sup>4</sup>Columbia University Mailman School of Public Health, New York, NY; <sup>5</sup>New York University College of Dentistry, New York, NY

Despite the considerable progress made in reducing tobacco use over the past several decades, certain priority populations suffer disproportionately from tobacco-related disparities. This mixed method research highlights quantitative results and qualitative lessons learned from Legacys Priority Populations Initiative Phase 2 multisite grant initiative to increase access to tobacco control interventions in priority populations. Using a participatory evaluation approach, core measures for a diverse set of smoking cessation interventions were devised, enabling pooling across sites and comparisons to national data. Across the four sites chosen for analysis, the 3-month quit rate was 13.4%. In a multivariable logistic regression model, highest degree earned and seriously thinking of quitting were predictive of quit success across sites. Using key informant interviews to gain insight into the programs and evaluation process, we present reflections on what worked, what didnt, and why to further the discourse on meaningful evaluations of multisite tobacco control programs with the goal of eliminating disparities in smoking-related disability and premature deaths among US population groups.



## Smoke-Free Policies Among Asian-American Women: Comparisons by Education Status

\*Elisa Tong M.D.<sup>1</sup>, Hao Tang Ph.D.<sup>2</sup>, Janice Tsoh Ph.D.<sup>3</sup>, Candice Wong M.D., Ph.D.<sup>3</sup>, Moon S. Chen, Jr. Ph.D.<sup>1</sup>

<sup>1</sup>University of California, Davis; <sup>2</sup>Tobacco Control Program (Previously), California Department of Public Health; <sup>3</sup>University of California, San Francisco

*Background:* California has significantly decreased racial/ethnic and educational disparities in smokefree home and indoor work policies. Californias ethnic-specific surveys present an opportunity to disaggregate data and examine the impact of Californias smokefree social norm campaign for Asian American women. *Methods:* The California Tobacco Use Surveys for Chinese Americans and Korean Americans were conducted in 2003 and analyzed in 2008 to compare women with lower (< high school graduate) or higher education status for smokefree policy adoption and enforcement. *Results:* Lower-educated and higher-educated women had similar proportions of smokefree policies at home (58%) or indoor work (90%). However, lower-educated women were more likely than higher-educated women to report anyone ever smoking at home (OR=1.62, 95% CI 1.06-2.48, p=0.03) and exposure during the past 2 weeks at an indoor workplace (OR=2.43, 95% CI 1.30-4.55, p=0.005), even after controlling for ethnicity, smokefree policy, knowledge about the health consequences of secondhand smoke exposure, and acculturation. There was no interaction between education and knowledge about secondhand smoke health harms. *Conclusions:* The intended consequences of Californias tobacco control efforts have resulted in similar rates of smokefree policies at home and indoor work among Asian American women across educational levels. However, an unintended consequence of this success is a disparity in enforcement by educational status, with lower-educated Asian American women reporting greater smoke exposure despite similar rates of knowledge about the health consequences of secondhand smoke exposure. Besides establishing policies, lower-educated Asian American women may need to be empowered to assert and enforce their right for smokefree environments.

*Acknowledgements:* This research was published in the TReND special issue on low SES women: Am J Prev Med 2009. The research was funded in part by grants from the NIH Fogarty International Center grant TW05938; Grant Number U01CA114640 From the Center to Reduce Cancer Health Disparities/National Cancer Institute, and the California Department of Public Health.