Disparities in Tobacco Use Behaviors by Adult and Youth Minority Populations in Maryland

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Quantitative Component

- 2006 Maryland Adult Tobacco Survey
  - Disparities in Tobacco Use Behaviors by Adult Minority Populations in Maryland
  - Lost Opportunities for Tobacco Cessation: Diabetics in the Maryland Adult Tobacco Survey

- 2006 Maryland Youth Tobacco Survey
  - Disparities in Tobacco Use Behaviors by Youth Minority Populations in Maryland
  - Disparities in Flavored and Smokeless Tobacco Use Behaviors by Youth Minority Populations in Maryland
Quantitative Component
Methodology

The 2006 Maryland Adult Tobacco Survey

- Large tobacco survey (n=21,799) administered using Computer-Assisted Telephone Interviewing technology in English and Spanish.
- Analytic sample sizes sufficient to provide detailed analysis for Whites and Blacks with diabetes, but not other racial/ethnic groups.

The 2006 Youth Tobacco Survey

- Large tobacco survey (308 schools, n= 82,500). Sample included 1,969 American Indian/Alaskan Natives, 3,226 Asians, 20,739 Blacks, 3,898 Hispanics, 1,015 Native Hawaiian/Pacific Islanders, 49,937 Whites, and 1,716 missing race/ethnicity.
- Paper-and-pencil format either in individual classrooms or in alternative locations using CDC protocols for administration and analysis of the Youth Tobacco Survey.
Adults
Adult Minority Populations in Maryland

Disparities in tobacco use

- In 2006, 13.7% of Maryland adults smoked cigarettes; American Indians have highest rate (20.1%).

- Men more likely to smoke cigarettes than women. Current smoking cigarette rates higher with lower education levels.

Figure 1. Current Cigarette Use Among Adults in Maryland by Race/Ethnicity
Disparities in tobacco use

- Among 18-29 year old former and never smokers, 8.6% reported an intention to smoke in the next year with Hispanics having the highest (15%) intention to start smoking and Blacks the least (4.2%).

- In 2006, 15.3% of Maryland adults believed that light cigarettes are safer than regular cigarettes, ranging from 14.8% for Hispanics to 19.5% for Asians.

- Consistent with their higher tobacco use, American Indians are the most likely to be exposed to secondhand smoke in the car (29.6%), and highest rate of smokers living in households with minors (41.5%).

- Hispanic males were the least likely to have been advised by their children to quit (33.6%).
In 2006, 28.5% of Marylanders were exposed to “1-800-QUIT-NOW” smoking cessation radio commercials, ranging from 24.7% (Whites) to 42.8% (American Indians).

Maryland adults with less education & lower incomes (<$50,000 per year) were more likely to report having been exposed to 1-800-QUIT-NOW smoking cessation radio commercials.

Figure 2. Exposure to “1-800-QUIT-NOW” Smoking Cessation Radio Commercials in the Past 30 Days Among Adults in Maryland by Race/Ethnicity

- Other: 30.4%
- Asian: 25.9%
- American Indian: 42.8%
- Hispanic: 35.2%
- Black: 35.1%
- White: 24.7%
- All: 28.5%
Eleven percent of Blacks and 7.7% of Whites reported previous diagnosis of diabetes.

Former smokers (12.9%) were more likely to have diabetes than current smokers (7.2%) or nonsmokers (6.9%), with Black former smokers having the highest rate of diabetes (21.3%).

Current/former smokers who smoked everyday for more than 10 years were almost three times as likely to have diabetes than those who smoked fewer years (14.5% vs. 5.6%).

One out of five Black current/former adult smokers (21.4%) who smoked more than 10 years had diabetes.
Diabetics and Tobacco

- Almost all diabetics, regardless of smoking status, had seen a doctor or other health professional in the previous year; less than half of current smokers had seen a dentist during the previous year.

- Among diabetics, 23.7% of Black current smokers and 16.4% of White current smokers had not received advice to quit smoking by a doctor/dentist/other health professional.

- Two-thirds of diabetics who were current smokers had not been advised to quit smoking by a dentist.
Youth
Youth Minority Populations in Maryland

Disparities in tobacco use

Current cigarette use is highest among Native Hawaiian/Pacific Islander youth followed by American Indian, Hispanic and White youth. Males slightly greater than females to be current smokers.

Figure 3. Current cigarette Use Among Under-age Youth by Race/Ethnicity
Youth Minority Populations in Maryland

**Disparities in tobacco use**

- Current cigarette use was higher with greater grade level, and overall patterns differ by ethnicity.

- Native Hawaiian/Pacific Islanders, American Indians/Alaskan Natives and Asian smokers had the highest prevalence of friends who smoke more than 4 cigarettes daily (70.6%, 67.2% and 65.5%).

- Native Hawaiian/Pacific Islander, American Indian and White youth had the highest overall **frequent smoking** rates with males higher than females.

- Native Hawaiian/Pacific Islanders, Hispanic and American Indians/Alaskan Natives smokers were more likely to **live with an adult smoker** (32.4%, 20.2% and 19.0%).

- Native Hawaiian/Pacific Islanders were least likely (37%) to have been **asked for age and refused purchase**, and Hispanics (70%) the most likely.
More American Indian and Black youth report hearing about the 1-800 quit-line. Asian and Hispanic youth were least likely to report hearing about the quit-line.

Figure 4. Ever Heard About “1-800-QUIT-NOW” Among Under-age Youth by Race/Ethnicity
Youth Minority Populations in Maryland

1-800-QUIT-NOW

- More females than males in all ethnic groups report hearing of the quit-line.
- Middle school students in all ethnic groups were more likely to hear about the quit-line compared to high school students.
- Youth from Southern Maryland were least likely to hear about the quit-line and youth from the lower Eastern Shore were the most likely to hear about the quit-line.
Youth Minority Populations in Maryland

Disparity in flavored and smokeless tobacco use

- Flavored cigarette use was highest among Asian smokers (56.8%) followed by Native Hawaiian/Pacific Islander smokers (55.5%) and American Indians/Alaskan natives (54.6%); with males (42.2%) greater than females (34.3%).

- Native Hawaiian/Pacific Islander males (25.5%) and American Indian/Alaskan Natives males (13.7%) in high school were the most likely to use bidi with a dramatic increase between 11th and 12th grade.

- Native Hawaiian/Pacific Islander (11.5%) and American Indians/Alaskan Natives (7.8%) were most likely to be smokeless tobacco users, with males (5.2%) more likely than females (1.7%). High school youth were also the most likely to use smokeless tobacco.
Qualitative Study
Latino/Hispanics

Exploring cultural, psychosocial, and environmental factors influencing tobacco use among Asian Americans in Maryland

Understanding Hispanic/Latino Barriers to Access and Use of Community Resources to Promote Smoking Cessation

Number of focus groups: 5

Asian Americans

Exploring cultural, psychosocial, and environmental factors influencing tobacco use among Asian Americans in Maryland

Number of focus groups: 4

American Indians

Understanding Social And Cultural Factors Associated with American Indians' High Smoking rates in Maryland

Number of focus groups: 4

African Americans

Understanding cultural attitudes and environmental factors for tobacco use among African Americans in Maryland to inform smoking cessation programs

Number of focus groups: 7
American Indians
Preliminary Findings
American Indians

Participants
- Adults living in MD who self-identify as American Indian.
  - Mostly current smokers thinking about quitting, 5 had already successfully quit.

Recruitment
- Outreach by a local non-profit service provider serving the American Indian community.

Design
- 4 focus groups, 1.5 – 2 hours in length
  - Group size ranged from 6-12; Total $N = 35$.
  - Card Sort Method to facilitate discussion about different cessation methods and programs
    - Participants were given note cards with 12 different smoking cessation program strategies and delivery agents and asked to pick the two they liked the most and two they liked the least.
    - Individual Card Sort was followed by a group discussion of the selections.
  - Digital recording with audiocassette backup.

Analysis
- Focus groups were professionally transcribed.
- Analysis of each group separately, followed by global analysis.
  - Analytical strategy: iterative coding strategy to identify major themes that emerged in the discussions, using question content as the initial structuring framework.
## Participant Characteristics

<table>
<thead>
<tr>
<th>Tribal Affiliation</th>
<th>Age</th>
<th>Number of Cigarettes per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumbee:</td>
<td>18-30</td>
<td>range</td>
</tr>
<tr>
<td>Cherokee:</td>
<td>31-40</td>
<td>Mean 18.4*</td>
</tr>
<tr>
<td>Other:</td>
<td>41-50</td>
<td>Ever tried to quit before?</td>
</tr>
<tr>
<td>Sex</td>
<td>51-60</td>
<td>Yes 89%</td>
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<tr>
<td>Male:</td>
<td>57%</td>
<td>Time in MD</td>
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<tr>
<td>Female:</td>
<td>31%</td>
<td>Area of Residence</td>
</tr>
<tr>
<td></td>
<td>Time in MD</td>
<td>Baltimore City 74%</td>
</tr>
<tr>
<td></td>
<td>Born in MD</td>
<td>Baltimore Co. 17%</td>
</tr>
<tr>
<td></td>
<td>&lt;7 years</td>
<td>Other** 8%</td>
</tr>
</tbody>
</table>

* Includes only current smokers. Five individuals had successfully quit
** Includes 2 individuals from Harford County and 1 from Howard County
Selected Findings

- Although a relatively small population, American Indians in Maryland were seen as a diverse group with respect to cultural orientation.

Cultural Factors and the Broader Context of Tobacco Use
  - Ceremonial Tobacco Use
    - Many Native American cultures have traditions of using tobacco for ceremonial purposes.
    - However, there was inconsistent knowledge and awareness of ceremonial tobacco use among participants. Only 2 reported using tobacco ceremonially on a regular basis.
  - History of Tobacco Farming among some American Indian groups
    - Lumbee American Indians who migrated from North Carolina have a history of tobacco farming as a subsistence strategy.
    - Some participants felt this history resulted in tobacco use norms that were deeply ingrained across generations.
  - Cultural Loss and Disintegration
    - Belief that cultural traditions were being lost by American Indians in Maryland (esp. urban-dwelling American Indians). Some felt that culturally-targeted strategies would resonate with certain segments of the population.

Barriers to Quitting
  - Addiction and Physical Dependence
  - Cigarette use as stress reliever for difficult life situations
    - Poverty and socioeconomic disadvantage
  - Social Influences and Ubiquity of Cigarettes
    - Pervasive cigarette use among friends and family members; association of cigarette use with other social behaviors (e.g., alcohol use at a bar).
Willpower as an Essential Component

- **Willpower**
  - Individual willpower was seen as the key to successfully quitting smoking.
  - One of the overarching themes that emerged in all 4 groups.
  - Blame for smoking; not being able to quit rests on individual.
  - The belief in willpower and individual agency was so strong that some participants felt that public health strategies to reduce smoking were doomed to failure.

Female: “I’ll be the first to tell you, I think they’re useless……It’s not the program that helps you, you have to help yourself.”

*Smoking cessation interventions were seen as having more potential when framed as helping to motivate and empower an individual to make healthy changes for themselves.*

- Emphasis on willpower should be viewed as tied to cultural values of self-reliance.
Attitudes Towards Selected Cessation Approaches

- **Nicotine Replacement Therapy**
  - NRT and medications generally seen as promising approaches
  - Mixed experiences with NRT
  - Incorrect use of patches and gum was seen as common (continuing to smoke, wearing patch at night, chewing gum incorrectly)
  - Severe side effects were cited by some (may be tied to incorrect use)

- **Through Physicians or Dentists**
  - May be viewed as more authoritative source of messages than alternatives.
  - Many American Indians not engaged in healthcare (self-reliance value).

- **Programs through Churches**
  - Many participants were active in local (Christian) churches.
  - Churches as venues for raising awareness and providing cessation resources were seen as having some potential.

- **Encouragement from Family and Friends**
  - Encouragement from family common, but seen as ineffective.
  - A useful strategy may be to provide non-smoking family members with the education, tools, and resources to help motivate loved ones to quit smoking or seek services.
  - Consistent with relational worldview more common in American Indian cultures.

- **Culturally-specific strategies**
  - Even some people with little experience with traditions/ceremonies were interested in strategies that emphasized culture or had a cultural component.
  - However, there were very mixed reactions to using pow-wows or ceremonies for delivering smoking cessation messages or services.
Participant-Driven Ideas to Reduce Cigarette Use

- While mailings were seen as a poor strategy, targeted mailings that include a coupon for nicotine replacement products would be less likely to be viewed as junk mail.

- Twelve-step style cessation programs with sponsorship and peer support.

- Advertising with culturally-specific emphasis
  - Example: Billboard with an American Indian elder dressed in full regalia, holding a pack of cigarettes, with a message saying: “This is not traditional tobacco.”

- Culturally-specific strategies (e.g., ceremonies with smoking cessation emphasis) must be organic from the community!
  - Opportunities for partnerships between health department and CBOs respected in the community.
Asian Americans
Preliminary Findings
Exploring cultural, psychosocial, and environmental factors influencing tobacco use among Asian Americans in Maryland

- Asian Americans are a very diverse group of people originating from many different countries
  - Have separate and distinct social and cultural backgrounds that may influence smoking

- Existing survey data collected in aggregated Asian Americans in Maryland has been too general, too broad, and lacking in depth of information.

- Conducted 4 focus groups in 4 major Asian American communities (Asian Indian, Chinese, Korean, and Vietnamese) in Maryland
## Characteristics of Study Participants

<table>
<thead>
<tr>
<th>Asian Sub Group</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Indian</td>
<td>11</td>
</tr>
<tr>
<td>Chinese American</td>
<td>10</td>
</tr>
<tr>
<td>Korean American</td>
<td>12</td>
</tr>
<tr>
<td>Vietnamese American</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>43</td>
</tr>
</tbody>
</table>

- **Males**: N=30, 69.77%
- **Females**: N=13, 30.23%
<table>
<thead>
<tr>
<th>Health Insurance Coverage</th>
<th>%, N= 43</th>
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<tr>
<td>Yes</td>
<td>70</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
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<table>
<thead>
<tr>
<th>Level of Education</th>
<th>%, N= 43</th>
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<tbody>
<tr>
<td>Less than high school</td>
<td>7.0</td>
</tr>
<tr>
<td>High school graduate</td>
<td>11.6</td>
</tr>
<tr>
<td>Some college</td>
<td>27.9</td>
</tr>
<tr>
<td>College graduate</td>
<td>18.6</td>
</tr>
<tr>
<td>Graduate school or more</td>
<td>34.9</td>
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<table>
<thead>
<tr>
<th>Annual family income</th>
<th>%, N= 43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20,000</td>
<td>25.6</td>
</tr>
<tr>
<td>$20,000-$39,000</td>
<td>25.6</td>
</tr>
<tr>
<td>$40,000-$49,000</td>
<td>9.3</td>
</tr>
<tr>
<td>$50,000-$75,000</td>
<td>4.7</td>
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<tr>
<td>$75,000-$100,000</td>
<td>18.6</td>
</tr>
<tr>
<td>More than $100,000</td>
<td>9.3</td>
</tr>
<tr>
<td>Not Known</td>
<td>7.0</td>
</tr>
</tbody>
</table>
Findings

Social Smoking
Social and cultural influences play a major role in smoking behaviors; smoking is an essential part of the culture

- “Because during a social gathering, if someone else is smoking and you don’t smoke, it is very awkward.”

Impact of Immigration
Immigrating to the US had impact on smoking behavior. However, there was a mixed response as to whether it increased or decreased their use

- “I think environments in the US is very discouraging. Actually you have no place to smoke.”

- “I feel that America encouraged and promoted my smoking more than China...Here it’s like smoking is bad behavior; all these advertisement on TV all said that smoking is bad, you shouldn’t smoke, especially young kids shouldn’t smoke. That actually gets me started to smoke... these advertisements totally get me start thinking about it. I started non-stop smoking ever since that.”
Findings

Gender Stigma
Male and female smokers are treated differently. There is higher social pressure and increased stigma among females smokers.

- “They give you a statement that women are not supposed to smoke. What does that look like? Have a woman smoking out there? They put you down. So there’s a lot of social pressure for women not to smoke…it’s sort of like seeing: I don’t look right, almost like you are a barbarian or something.”

Help-Seeking Behavior for Smoking Cessation
Past Smokers did not seek for external help for smoking cessation and preferred quitting on their own using self-control and willpower.

- “I stopped on my own. I know the options, but I thought they won’t work for me.”

- “I don’t wanna people know that I’m trying to quit smoking…I don’t wanna being judged by that..”
Recommendations

- **Increase program visibility:** None of participants were aware of existing smoking cessation programs available through the state.

- **Utilize community specific communication channels:**
  CBOs, FBOs, community-specific medias (i.e., newspaper, radio and TV stations), grocery stores, restaurants

- **Ensure linguistically appropriate and culturally sensitive programming**

- **Employ healthcare professionals or former smokers as educators**

- **Offer dual programming**
  - “What if you do combine Taichi class and smoking program kind of together? Because if I’m only talking about smoking, I don’t feel so good and patient. Chinese people would respond to that, because that’s kind of a social thing. What I’m saying is that there’s a combination of activities, talk to each other about what you are doing now, or what progress you made; so it’s like an accidental support group.”
Latinos/Hispanics
Preliminary Findings
Latinos/Hispanics in Maryland

Barriers for Quitting Smoking

- The top 2 barriers for quitting smoking: (1) seeing/smelling other smoking, either socially or at work, & (2) anxiousness, depression or stress. They needed to smoke cigarettes to relax.

Methods and Techniques to Quit Smoking

- For male smokers & social smokers, the most common method was to use another oral alternative/keep mouth busy, while for men & women ex-smokers the majority used will power.

- Men ex-smokers also looked to God for strength to quit smoking.

- Women smokers had used natural remedies and alternative activities.

- No one relied on traditional medicine for quitting smoking.
Role of Social Factors, Family, Friends and Co-workers in Continuing to Smoke

- Social factors/friends are very influential in perpetuating the cycle of smoking.

- Most participants agreed that alcohol was highly associated with smoking.

- Current smokers agreed that smoking was used to ‘start a conversation’ with or ‘look attractive’ to someone of the opposite sex. Female ex-smokers felt differently: they all agreed that it was ‘ugly’ to see a woman smoking.

- Most participants stated that family members were influential in persuading them to quit smoking. Only one or two participants mentioned that family members influenced their smoking initiation.
Majority of participants were unaware of smoking cessation services available to Hispanics in Maryland.

10 participants became aware of the 1-800-quit-now service by looking at local newspapers & announcements on the side of a bus. Among respondents who were aware of the service, nobody called. Nobody had specific reasons for not calling, but one respondent said because it seemed like it was in English.

Respondents mentioned that they receive health information from: Spanish-language television (Channels 32 and 26); newspapers; radio (99.1 El Sol); through friends and word-of-mouth; health promoters from Casa de Maryland; Internet; school; and magazines. The most popular methods seemed to be television and radio.
Intervention Approaches

How to reach the Hispanic community in Maryland to promote smoking cessation:

- **Men Smokers**
  - Best: an ex-smoker, Spanish-speaking, and well trained health promotor.
  - Worst: physician/dentist; Internet; and church/clergy. (Cost, no health insurance and access to internet are barriers).

- **Women Smokers**
  - Best: Spanish-speaking television and radio.
  - Worst: traditional medicine/curanderos.
Intervention Approaches (cont.)

- **Social Smokers**
  - Best: an ex-smoker, Spanish-speaking, and well trained health promotor.
  - Worst: nicotine patches and traditional medicine/curanderos.

- **Men Ex-smokers**
  - Best: an ex-smoker, Spanish-speaking, and well trained health promotor.
  - Worst: nicotine patches and traditional medicine/curanderos.

- **Women Ex-smokers**
  - Best: an ex-smoker, Spanish-speaking, and well trained health promotor as well as group sessions in the evenings or during the weekend.
  - Worst: traditional medicine/curanderos.
Conclusions

- Understanding differing patterns of initiation, access issues & second hand smoke exposure between diverse ethnic & gender groups can result in targeted interventions that are more likely to be effective in preventing initiation, reducing exposure & access as well as targeting groups that are most in need of cessation services.

- Findings will be used to inform state & local tobacco programs on how best to incorporate cultural & social elements into effective smoking prevention & cessation services for each racial/ethnic group.
Structured program focuses on providing participants with educational material & intense counseling to help quit.

Except in the presence of contraindications, nicotine replacement therapy was offered to clients attempting to quit smoking.

Part of educational sessions with smokers has consisted in helping them to transition from the *pre-contemplation* and *contemplation* phase, so that they can complete the six-week group sessions.

4 groups conducted during FY08.

Met for six 2½ hours long weekly sessions.
<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals educated by LHI’s Visa program on the risk of tobacco use and prevention</td>
<td>5502</td>
</tr>
<tr>
<td>Number of smokers individually counseled on smoking cessation by the program coordinator</td>
<td>133</td>
</tr>
<tr>
<td>Number of persons registered for the group sessions</td>
<td>68</td>
</tr>
<tr>
<td>Number of persons who participated in the group sessions</td>
<td>30</td>
</tr>
<tr>
<td>Percentage of participants that completed the program</td>
<td>86.6%   (n = 26)</td>
</tr>
<tr>
<td>Percentage of smoke-free participants at the end of the 6 week group intervention</td>
<td>81% (n = 26)</td>
</tr>
<tr>
<td>Percentage of participants that cut down significantly (reduced the number of cigarettes daily at least by 50%) by the end of the intervention</td>
<td>19% (n = 5)</td>
</tr>
<tr>
<td>Percentage of smoke-free participants after 3 months follow-up (Groups 1, 2, &amp; 3)</td>
<td>80% (n = 22) *</td>
</tr>
<tr>
<td>Percentage of smoke-free participants after 6 months follow-up (Groups 1 &amp; 2)</td>
<td>73% (n = 11) **</td>
</tr>
<tr>
<td>Percentage of smoke-free participants after 12 months follow-up</td>
<td>None of the participants had reached the 12 month measure by the end of FY08</td>
</tr>
<tr>
<td>% change in participants knowledge about the use and hazards of tobacco use based on pre and post tests</td>
<td>34% (Pretest = 61.5% &amp; Post-test 81.9%)</td>
</tr>
</tbody>
</table>

* 4 participants from group 4 had not reached the three month evaluation period.
** 11 participants from groups 3& 4 had not reached the six month evaluation period.
### Percentage of Smoke Free Participants at end of class in FY06-07*

<table>
<thead>
<tr>
<th></th>
<th>Smoke free after 3 months</th>
<th>Smoke free after 6 months</th>
<th>Smoke free after 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>80% (n = 16)</td>
<td>65% (n = 13)</td>
<td>50% (n = 10)</td>
<td>60% (n = 12)</td>
</tr>
</tbody>
</table>
Acknowledgments

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Joint Program in Survey Methodology
Richard Valliant, PhD, Research Professor

Lifelines

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