Tobacco Cessation and Working with Diverse Populations: General Considerations, Asian American and American Indian Perspectives

Steven S. Fu, MD, MSCE

Minneapolis VAMC
University of Minnesota

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Overview

I. Framework for understanding racial/ethnic differences

II. Burden of tobacco use in racial/ethnic minority populations

III. Tobacco cessation in racial/ethnic populations: Asian Americans and American Indians
A Framework for Understanding Ethnic Differences

Race/Ethnicity

- **Racism**
  - Perceived Discrimination
- **Cultural**
  - Health beliefs
  - Acculturation
- **Socio-economic**
  - Education
  - Income
- **Biological**
  - Nicotine dependence
  - Nicotine metabolism

Cognitive
- Self-efficacy
- Motivation to quit

Medical Care
- Access and quality
- Provider behavior
- System-level factors

Environmental
- Social support/norms
- Tobacco advertising

Adapted from Gary King, 1995
Race and Ethnicity as a Social Construct

“race is a dynamic social construct reflecting societal transformations in relations between racially classified social groups”

(Gary King, 2004)
Burden of Tobacco Use

• Population-based and epidemiologic studies consistently demonstrate racial/ethnic differences in:
  – Smoking prevalence rates
  – Smoking cessation rates
  – Documented disparities in tobacco-related morbidity and mortality
Wide Variation in Smoking Rates

Percentage of U.S. adults who smoke

Source: National Health Interview Survey, National Center for Health Statistics, CDC, 1978-1995

SGR, 1998
Smoking Prevalence, NHIS 2004

- White: 24.1% (Men) 20.4% (Women)
- African American: 23.9% (Men) 17.2% (Women)
- Hispanic: 18.9% (Men) 10.9% (Women)
- Asian: 17.8% (Men) 4.9% (Women)
- Native: 37.3% (Men) 28.5% (Women)
Tobacco Use in Asian Americans

• Aggregate vs. Disaggregate data

• State and Local Surveys
  – Korean men 26%-42%
  – SE Asian men 29%-44%
  – Chinese men 14%-39%
  – Japanese men 13%-30%

• Higher rates with non-English surveys and less acculturated samples
Asian Women: An At Risk Group

• Smoking rates low in Asian women- less than 10%
• Smoking rates increasing, especially among younger, more acculturated women
• A study of SE Asian women—underreport smoking behavior (6% versus 15%)
Acculturation and Health

• Important moderator of health, health-related behavior and healthcare utilization in ethnic minorities

• Promising way to explain and understand inter- and intra-ethnic differences in health
Acculturation

“Comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups”

-Redfield (1936)
Process of Acculturation

• Bidirectional process, where an individual is acquiring, retaining, or relinquishing behaviors and values of both cultures

• Negotiation of 2 central issues (Berry, 1980)
  – adoption or immersion into dominant society
  – retention or immersion into ethnic society
Modes of Acculturation

Adoption of dominant society

Retention of ethnic society

YES

Bicultural (Integrated)

Acculturated

NO

Traditional

Marginal
Cigarette Smoking among Chinese Americans and the Influence of Acculturation
### Chinese Men: Language Proficiency and Smoking

<table>
<thead>
<tr>
<th>Language Proficiency</th>
<th>Current Smoking</th>
<th>Ever Smoked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower English</td>
<td>33%*</td>
<td>65%*</td>
</tr>
<tr>
<td></td>
<td>*P&lt;.01</td>
<td>*P&lt;.01</td>
</tr>
<tr>
<td>Higher English</td>
<td>18%</td>
<td>45%</td>
</tr>
<tr>
<td>Lower Chinese</td>
<td>27%</td>
<td>51%</td>
</tr>
<tr>
<td>Higher Chinese</td>
<td>24%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Fu, NTR 2003
English Proficiency and Smoking among Chinese Men

• Current Smokers vs. Non-Smokers

<table>
<thead>
<tr>
<th></th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unadjusted</td>
<td>0.43</td>
<td>0.23, 0.80</td>
</tr>
<tr>
<td>Adjusted</td>
<td>0.38</td>
<td>0.16, 0.89</td>
</tr>
</tbody>
</table>

• Adjusted for age, study site, education and income
### Quitting Behavior in Chinese Smokers (N=56)

<table>
<thead>
<tr>
<th></th>
<th>Lower English (n=35)</th>
<th>Higher English (n=21)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine Replacement</td>
<td>6%</td>
<td>19%</td>
<td>11%</td>
</tr>
<tr>
<td>Received advice to quit from</td>
<td>50%* P=.01</td>
<td>85%</td>
<td>63%</td>
</tr>
<tr>
<td>Physician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received advice to quit from</td>
<td>35%</td>
<td>57%</td>
<td>44%</td>
</tr>
<tr>
<td>Dentist</td>
<td></td>
<td></td>
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</tbody>
</table>
American Indians
Tobacco Use in American Indians

What is traditional tobacco use?

• Traditional uses of tobacco
  – Spiritual
  – Medicinal

• Uses
  – Not always burned
  – Burned **but not inhaled**
American Indian cultural issues  What tobacco is used?

Types of tobacco used

- Commercial
  - Loose tobacco
  - Cigarettes
- Not commercial
  - Indian tobacco
  - Mixture that may not contain tobacco
Why are AI tobacco issues so complex?

- Lack of religious freedom until 1978
- Historical trauma ➔ current issues
- Boarding schools ➔ loss of culture
- Economic issues
- Identity
  - AI imagery on tobacco products
  - Smokeless tobacco tied to rodeo culture (not in MN)
- Social Norm
- Commercial use in cultural practices and ceremonies
  - Funerals, jingle dress
  - Limited access to traditional tobacco
- Sovereignty = government to government relationship with States & Federal

*American Indians cannot be considered another minority group*
Burden of tobacco addiction
What AI tobacco data are available?

- Not enough good AI data
  - Usually not reported due to small samples
  - If it is reported, it is U.S., not local or tribal specific
  - Often problems in how it was collected

- Some new research efforts funded by ClearWay
  Minnesota means tobacco data for MN American Indians
  - American Indian Community Tobacco Projects (John Poupart & Dr. Jean Forster)
  - POEMS (Dr. Steve Fu & Dr. Anne Joseph)
## Burden of tobacco addiction
### AI Youth Smoking Prevalence

<table>
<thead>
<tr>
<th>Comparison of Youth Smoking Rates</th>
<th>High School</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis/St. Paul AI</td>
<td>47%</td>
<td>16%</td>
</tr>
<tr>
<td>U.S. AI/AN</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Oklahoma AI</td>
<td>50%</td>
<td>26%</td>
</tr>
<tr>
<td>New Mexico AI</td>
<td>31%</td>
<td>15%</td>
</tr>
<tr>
<td>U.S. - all races</td>
<td>29%</td>
<td>10%</td>
</tr>
<tr>
<td>MN - all races</td>
<td>23%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Burden of tobacco addiction
AI Youth Smoking Prevalence in MN

Source: American Indian Community Tobacco Project, 2006
## Burden of tobacco addiction

### Adult Smoking Prevalence

<table>
<thead>
<tr>
<th>Comparison of Adult Smoking Rates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis/St. Paul AI</td>
<td>62%</td>
</tr>
<tr>
<td>Northern Plains AI</td>
<td>44%</td>
</tr>
<tr>
<td>U.S. AI/AN</td>
<td>32%</td>
</tr>
<tr>
<td>Oklahoma AI</td>
<td>33%</td>
</tr>
<tr>
<td>New Mexico AI</td>
<td>16%</td>
</tr>
<tr>
<td>U.S. population - all races</td>
<td>21%</td>
</tr>
<tr>
<td>MN population - all races</td>
<td>18%</td>
</tr>
</tbody>
</table>
Burden of tobacco addiction
Adult Smoking Prevalence in MN

Sources: MATS, 2002 (all races) and American Indian Community Tobacco Project, 2005 (AI).
Burden of tobacco addiction
Length of last quit attempt

Source: American Indian Community Tobacco Project, 2005.
Tobacco Cessation in Racial/Ethnic Populations
Racial/Ethnic Differences in Quitting

- Minority smokers are more likely than white smokers to attempt quitting, but do not have higher long-term quit rates (USDHHS, 1998)
- Asian and Hispanic American smokers less likely to receive physician counseling to quit smoking (Commonwealth Fund, 2001)
- Quit Ratio lower (Giovino, 2002)
  - African American 38%
  - Hispanic American 43%
  - White 50%
Racial/Ethnic Disparities in Quit Ratio

National Health Interview Surveys, Giovino, 2002
Little data about efficacy of pharmacotherapy in racial minority groups

- None of 192 studies available for meta-analysis reported smoking abstinence by race
- Only 3 randomized, controlled clinical trials of pharmacotherapies in African Americans
- 1 clinical trial in Latinos
- No clinical trials in American Indians or Asian Americans
Pharmacologic Interventions
Only 4 clinical trials in racial/ethnic minority smokers

1. Leischow, 1996- Nicotine patch in Hispanics
   - 46% vs. 26% (p = 0.05) at 10 weeks

2. Ahluwalia, 1998- Nicotine patch in urban African Americans
   - 21.5% vs. 13.7% at 10 weeks
   - 17.1% vs. 11.7% at 6 months (NS)

3. Ahluwalia, 2002- Bupropion SR in African Americans
   - 36% vs. 19.0% at 7 weeks (p < 0.001)
   - 21% vs. 13.7% at 6 months (p = 0.02)

Long-Term Smoking Abstinence Outcomes by Race After Treatment with NRT in Low Income Smokers (N = 1019)

Fu et al., AJPM 2008 (in press)
Implications

• Lower cessation rates for minorities observed in epidemiologic studies are not explained by lower treatment effectiveness of NRT
• Limited utilization of NRT, an evidence-based treatment, may be a more likely explanation
Use of Pharmacotherapy by Minority Smokers

• 1996 population-based study (Zhu et al, 2000): Use of NRT in past 12 months
  – White 16%
  – African American 5%
  – Hispanic American 5%
  – Asian American 8%

• Massachusetts study (Thorndike et al, 2002)
  – Use of NRT among past-year quitters after NRT became available OTC
  – White (24.0%) vs. Non-white (3.2%)
VIEWS ON SMOKING CESSATION METHODS IN ETHNIC MINORITY COMMUNITIES
Basic Structure of Questioning Strategy

General

Smoking
- Quitting: How?
- Help to quit
- Help from people
- SCAs/meds

Specific
Sample

- 16 focus groups (N = 95)
- African American (5 groups)
  - 11 men and 15 women
- American Indian (6 groups)
  - 18 men and 8 women
- Southeast Asians (5 groups)
  - 13 Hmong men and 5 Hmong women
  - 25 Vietnamese men
KEY THEMES

• In most cases- present majority viewpoint
• Focus on guideline recommended treatments
  – Views on counseling
  – Beliefs about pharmacotherapy
  – Seeking help from doctors
Counseling

• Few had ever participated in counseling for smoking cessation
• Considerable variability in individual attitudes
• Women generally more receptive than men
Views on Counseling

- “Hmong guys don’t like doing that. Hmong guys don’t like going to counseling…”

- A second smoker agreed. “Yeah, we’re really stubborn. Stubborn as mules… I mean people try to tell us just what to do. It really offends. So they tell you, you got to do this, you got to do this, you got to do this, it’s like pssh. Find my own way to do it”

Hmong men
Views on Counseling

- The topic of counseling elicited a strong, negative reaction because it evoked a hierarchical relationship with a “white person” who was going to interfere in “your business” and “going to shame you out about what you’re doing wrong”

*American Indian men*
Views in those receptive to counseling

• Among African Americans and American Indians
  – preferences tended to be for group over individual counseling.
    “People enjoy the fact they got support there with other people that they see who’ve gone through similar issues. They know they’re not alone…”
    *American Indian male former smoker*

• Among Vietnamese men
  – counseling was viewed as something for Americans
  – but greater levels of acculturation appeared to be associated with more positive attitudes
  – Vietnamese men preferred individual over group counseling
Pharmacotherapy

- Rarely utilized
- High awareness of the nicotine patch
- Knew people who used the patch
- Less awareness of other types
  - Zyban/bupropion
  - Nicotine nasal spray
Beliefs about Pharmacotherapy

- Skepticism about effectiveness
- Worries about safety and side effects
Beliefs about Pharmacotherapy

– “Yes, the younger brothers who’ve tried to quit use those, but the more you take the medication, the more you still want to smoke. But if you don’t use the medication, you begin to smoke less. The more medication used, the more you want to keep smoking.”

Hmong male smoker
Beliefs about Pharmacotherapy

– “Why would you take something to stop smoking and then get three or four different side effects? When you only got one with smoking?”

*African American male smoker*
Seeking Help from Doctors

- Few recalled receiving advice or help from a physician to quit smoking
- African Americans and American Indians expressed strong levels of mistrust in doctors and western medicine
Seeking Help from Doctors
African Americans and American Indians

“Native people have always gone up against the non-native people in a variety of different areas. And what’s happening is we’re constantly being told what to do, how to do it, and when to do it and that has a long history of forced assimilation…. I for a long time did not choose to go to the doctors simply because I don’t believe in western medicine. ….I for the longest time did not believe in doctors if I had anything wrong. I’d go talk to a healer. I’d go try to heal myself.”

American Indian male former smoker
Seeking Help from Doctors
African Americans and American Indians

- Explanations for not seeing doctors tended to focus on negative qualities of particular doctors or of the medical establishment. Doctors were viewed as impersonal, blaming and confrontational.
Seeking Help from Doctors
African Americans and American Indians

– “The doctor’s like a broken record. The doctors will repeat it, repeat it, repeat it, repeat it. They blame everything on smoking, you know”

*American Indian male smoker*
Seeking Help from Doctors
African Americans and American Indians

- Some believed doctors could be effective if they used a personal and non-confrontational approach.
Seeking Help from Doctors
African Americans and American Indians

– “Maybe instead of saying you should quit they more likely say—‘well, you know there are some things that you can do if you are ever thinking about quitting’…no one wants to be told what to do especially if you don’t think you have a problem doing it.”

*American Indian male smoker*
Seeking Help and Pharmacotherapy
African Americans and American Indians

• Negative attitudes towards pharmacotherapy appear to be grounded in distrust of the pharmaceutical industry
Seeking Help and Pharmacotherapy
African Americans and American Indians

– “I wouldn’t go to the doctor as much as finding out my own research…He’s [the doctor] going to give you whatever the drug companies are giving them at a discount…So the drug companies are going to be pushing products.”

American Indian male former smoker
Seeking Help and Pharmacotherapy
African Americans and American Indians

- Some women were receptive to help from their doctor and willing to try medications
- Word of mouth (or the “moccasin telegraph”) was a powerful influence on decisions to use or not use pharmacotherapy
- Personal testimony—particularly face-to-face communication—would increase acceptance of pharmacotherapy
Seeking Help from Doctors Southeast Asians

- Viewed doctors positively, highly regarded
- Trusted sources information
- Little awareness, especially among the Hmong, that doctors could help with quitting smoking
Seeking Help from Doctors Southeast Asians

- I think the ones who want to quit fast, they have to get checked and get a word from the doctor about the conditions of their lungs, telling them to stop smoking- telling them that quitting will help them be healthier. Maybe this will scare them and make them think that their life is worth more than a cigarette. This will help them make a decision faster.

_Hmong male smoker_
Seeking Help from Doctors
Southeast Asians

- Seeking help to quit was viewed as less important and not necessary
- Cultural importance of “mental control”
  - Making the decision
Seeking Help from Doctors
Southeast Asians

– “Quitting smoking is a self made decision to just stop. There’s no other way.”

Hmong male smoker
“Let me tell you, let me just say what it’s all about. It has to do with your brain and how determined you are. If you can quit or you can’t. If you go to someone and they encourage you to quit but you don’t have it in you then it won’t work.... It’s up to you whether or not you can quit.”

*Vietnamese male smoker*
Quit attempts in Urban American Indians

*Smoking Cessation Methods*

- Most quit attempts occurred without assistance
- Quitting strategies differed by gender:
  - Women were most likely to try an oral substitution, stay away from smoky places or people who smoke.
  - Men were less likely to avoid places or smokers, and more likely to use willpower.
- Few reported utilizing assistance from physicians, pharmaceuticals or cessation programs.

Source: American Indian Community Tobacco Project, 2005.
AI perspectives on cessation

Would you be willing to try this option to quit smoking?
- 78% Quit on my own
- 61% Talk to a doctor or nurse
- 59% Try medications
- 57% Read a book or pamphlet
- 56% Talk to a spiritual advisor
- 42% Ask friends/ family for help
- 38% Try acupuncture
- 32% Attend a stop smoking program
- 23% Call a quitline
- 16% Go to a quit website

Source: American Indian Community Tobacco Project, 2005.
A few conclusions

- Tobacco cessation interventions can be successful in ethnic minority populations
- Important determinants of the use of smoking cessation treatments
  - Personal beliefs
  - Views towards doctors
  - Lack of knowledge and awareness
- Among American Indians and African Americans, negative attitudes were partly grounded in a lack of trust in conventional medicine and, for some, were related to historic and continuing racism
- Acculturation is important moderator of knowledge, awareness and attitudes towards cessation methods among the Hmong and Vietnamese:
Efficacy
(validity, controlled conditions)

Effectiveness
(generalizability)
(diversity of patients and settings)

Implementation/Demonstration
(Practicality)
Future Directions

• **Efficacy studies**
  – Clinical trials of new tobacco treatments need to target specific ethnic minority groups

• **Effectiveness studies**
  – To determine what components of first-line “efficacious” treatments are most effective and acceptable for specific ethnic groups
  – To develop system level/population level approaches to improve delivery of tobacco treatments to diverse populations

• **Implementation studies**
  – To develop culturally appropriate interventions to increase consumer demand of current effective treatments in diverse populations