



# Tobacco Use Among South Asians in Southern California



**Neetu Chawla, MPH, Beth Glenn, PhD, Zul Surani, BS,  
Minal Patel, MPH, & Roshan Bastani, PhD**

**UCLA Division of Cancer Prevention & Control Research,  
School of Public Health and Jonsson Comprehensive  
Cancer Center**

**&  
South Asian Network**





# Collaboration



## Research Partners

South Asian Network (SAN) is a community-based organization serving the South Asian community of Southern California through outreach activities and direct services

UCLA Division of Cancer Prevention and Control Research, School of Public Health

## Funding

UCLA Center for Community Partnerships  
CDC Cancer Prevention & Control Research Network



## Who are South Asians?

- South Asians are individuals originating from India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, Burma, and the Maldives
- South Asians speak many languages including Hindi, Urdu, Gujarati, Punjabi, Marathi, Bangla, Burmese, Nepali, Sindhi, Tamil, Telugu, Sinhalese
- South Asians come from many religious backgrounds, including Hinduism, Sikhism, Islam, Jainism, Buddhism, Christianity, Catholicism, Zoroastrianism



## Who are South Asians?

- South Asians are the 3<sup>rd</sup> largest Asian ethnic group in the U.S. (1.8 million)
- South Asians are the 6<sup>th</sup> largest Asian ethnic group in Los Angeles county (70,000)
- Recent South Asian immigrants come from more socio-economically diverse backgrounds (i.e. lower income, less educated, non-English speaking) due to changes in immigration policies before and after 1980s
- Due to changing waves of immigration, larger number of South Asians do not fit the “model minority” myth



# Why is tobacco important?



- Tobacco use is a central risk factor for many chronic conditions, including heart disease, diabetes, lung and oral cancers, and stroke

- South Asians have high rates of cardiovascular disease, diabetes and some cancers (oral, cervical)

- In India, oral cancer is #1 cancer in men and #3 in women**

  - 9<sup>th</sup> cancer among South Asians in California**

- South Asians in the U.S. tend to have lower rates of smoking than the general population, but these rates are higher for certain ethnic groups and do not reflect smokeless product use

- Little is known about the smokeless product use practices among South Asians in the United States



## Aim of Present Study

- Aims of parent study: conduct needs assessment focusing on health behaviors among South Asian adults living in Southern California
- Study assessed a variety of domains including demographic characteristics, access to care, cancer screening, domestic violence, and tobacco use
- This presentation focuses on rates and predictors of smokeless tobacco use
- Parent study provided data to assist program planning and direct service activities of South Asian Network

# Methods

## Participant Sampling

■ 344 South Asian adults

■ Recruitment using multiple methods

–SAN client list

–Residential sampling

–Community outreach

»Places of worship

»Community events/festivals

»Health fairs

»Taxi stands

»Grocery stores/South Asian businesses



## Data Collection Modes

■ In-person, telephone, self-administered

# Sample Characteristics (n=344)

Female: 52%

Foreign-born: 96%

Age:

20-39 years: 33%;

40-49 years: 26%;

50-64 years: 30%;

65+: 12%



Ethnicity:

41% Indian

25% Pakistani

20% Bangladeshi

10% Sri Lankan

2% Nepali

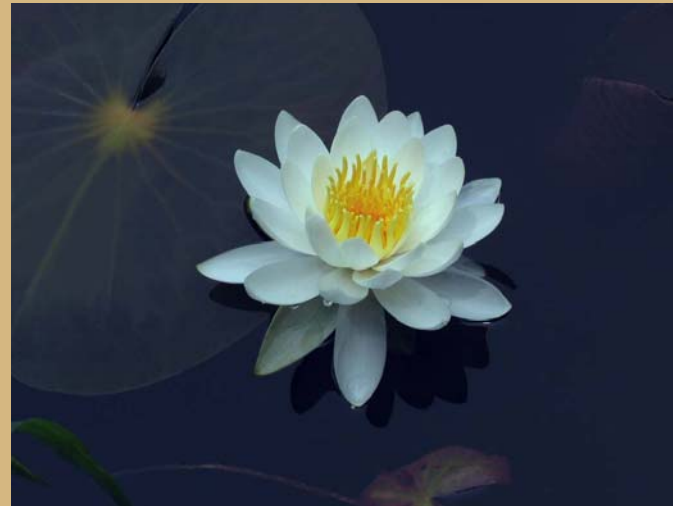
Married: 74%



# Sample Characteristics (n=344)

## Language of Interview

- English: 50%
- Urdu: 26%
- Gujarati: 8%
- Hindi: 8%
- Bengali: 6%
- Punjabi: 1%



## Education

- 4% No Formal School
- 19% Grade School
- 20% High School
- 57% College or higher

## Income

- 29% <\$17,000
- 27% \$18,000-\$31,000
- 16% \$32,000-\$54,000
- 28% More than \$54,000

## Access to care

- 30%: No private or public health insurance
- 16%: No usual source of care
- 28%: Difficulty in understanding physician
- 26%: Doctor does not speak my language



## Overview



- Current rates of smokeless tobacco product use
- Predictors of smokeless tobacco product use in total sample
- Predictors of smokeless tobacco product use among men vs. women
- Comparisons of rates with Healthy People 2010 goals and national data

# Smokeless Tobacco Products: What are they?

- There are a variety of “smokeless” tobacco products used by South Asians, including: paan, paan masala, supari, gutka, zarda, tambaku
  
- They are used in many ways, such as:
  - Chewing tobacco
  - Digestive aids
  - Breath freshener or mouth cleansers
  - As parts of religious festivals, weddings, and other cultural events
  
- Paan is a commonly used smokeless tobacco product
  - Chewed as a palate cleanser and a breath freshener
  - Mixture of various spices, fruits, and sugar, wrapped in the leaves of the Betel pepper
  - May or may not include tobacco and not well-regulated
  - Includes betel nut (areca nut): known carcinogen
  - Comes in many forms, such as paan masala and paan parag



# Smokeless Tobacco Product Use: Why is it a problem?

Use of smokeless tobacco products can lead to:

- Increased oral cancer
- Inflammation of gums
- Tooth loss



Oral cancer accounts for approximately 30% of all cancers among South Asians



Betel nut is one main ingredient and a known carcinogen

# Smokeless Tobacco Product Use

■ 28% of sample reported current use of 1 or more smokeless tobacco products



■ Most commonly used products were:

- Paan masala (22.9%)
- Paan (14.4%)
- Supari (11.5%)
- Paan Parag (5.6%)



# Smokeless Tobacco Product Use

- Rates of using 1 or more smokeless tobacco products were higher among certain groups:
  - 34% of men vs. 21% of women
  - 43% of Bangladeshis, 32% of Pakistanis vs. 21% of Asian Indians, 8% of Sri Lankans
- Rates of paan masala use were significantly higher among Pakistanis (54%) vs. Indians (13%) and Bangladeshis (13%)
- Bangladeshis had highest rates of using paan (29%) vs. Indians (13%) and Pakistanis (13%)
- Bangladeshis had highest rates of supari use (23%) vs. Indians (10%) and Pakistanis (6%)



## Multivariate Results Predicting Smokeless Tobacco Product Use

Ethnicity	Odds Ratio	P-value
Indian (reference)	1.0	
Pakistani	1.8	p = 0.159
<b>Bangladeshi</b>	<b>2.3</b>	<b>p=0.036</b>
<b>Sri Lankan</b>	<b>0.2</b>	<b>p=0.039</b>
Other ethnic	2.4	p=0.232
Perceived health		
Excellent (reference)	1.0	
Very good	1.8	p=0.186
Good	0.97	p=0.954
Fair	2.0	p=0.128
<b>Poor</b>	<b>7.6</b>	<b>p=0.002</b>
Gender		
Male	1.0	
<b>Female</b>	<b>0.47</b>	<b>p=0.016</b>

\* Other variables included in the model were age, income, health status, and years lived in the U.S.

## Multivariate Results Predicting Smokeless Tobacco Product Use Among Men

Ethnicity	Odds Ratio	P-value
Indian (reference)	1.0	
Pakistani	2.0	p = 0.191
Bangladeshi	2.6	p=0.088
<b>Sri Lankan</b>	<b>0.11</b>	<b>p=0.053</b>
Other ethnic	1.6	p=0.553
Perceived health		
Excellent (reference)	1.0	
<b>Very good</b>	<b>3.5</b>	<b>p=0.028</b>
Good	1.7	p=0.395
<b>Fair</b>	<b>4.2</b>	<b>p=0.023</b>
<b>Poor</b>	<b>15.2</b>	<b>p=0.012</b>

\* Other variables included in the model were age, income, health status, and years lived in the U.S.



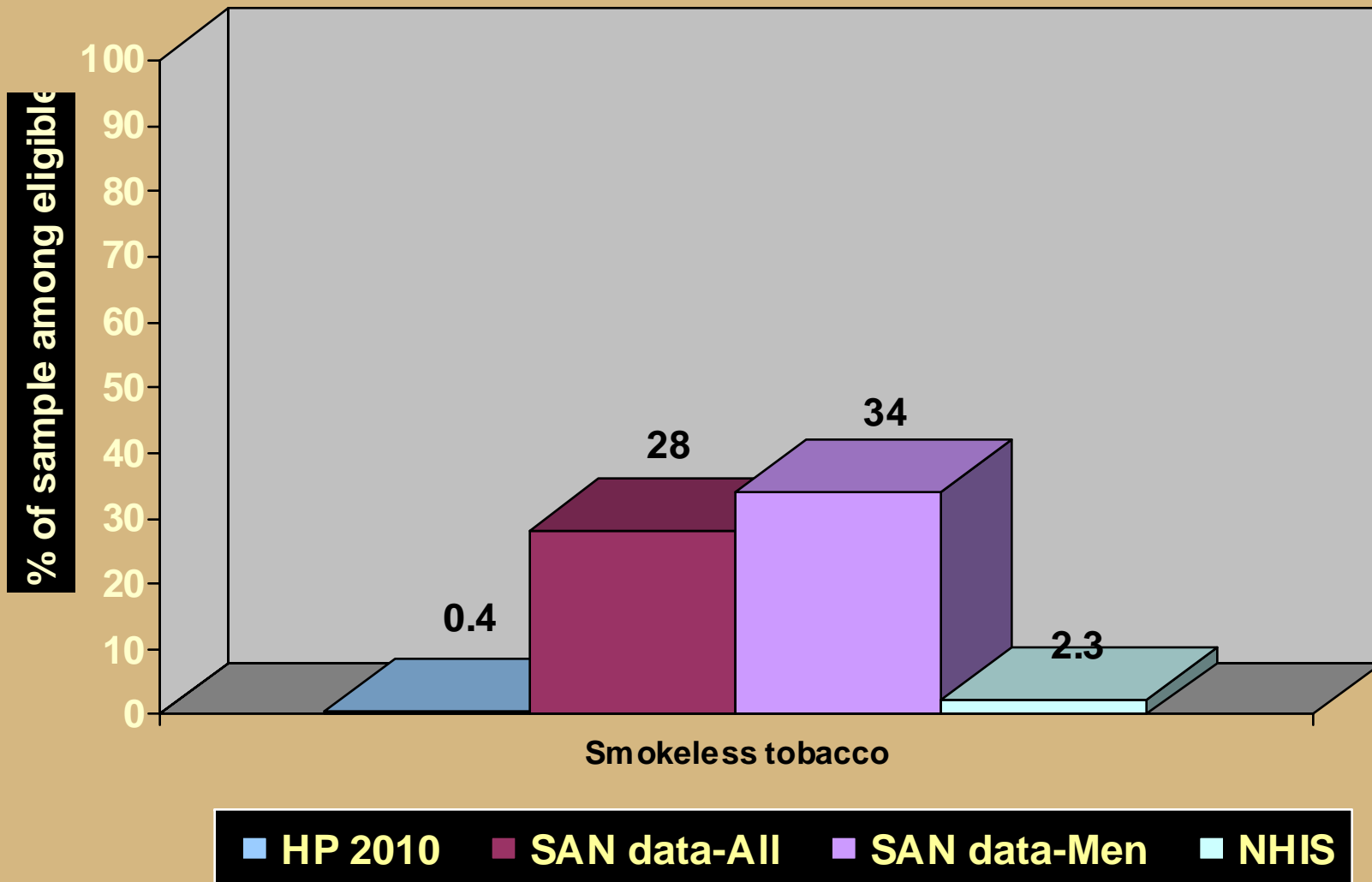
## Multivariate Results Predicting Smokeless Tobacco Product Use Among Women

Ethnicity	Odds Ratio	P-value
Indian (reference)	1.0	
Pakistani	2.7	p = 0.138
<b>Bangladeshi</b>	<b>3.2</b>	<b>p=0.051</b>
Sri Lankan	0.4	p=0.395
Perceived health		
Excellent (reference)	1.0	
Very good	0.7	p=0.708
Good	0.4	p=0.187
Fair	0.8	p=0.828
Poor	2.7	p=0.307

\*Other variables included in the model were age, income, health status, and years lived in the U.S

\*\*Other ethnic group dropped out of ethnicity variable since no women in that group reported use.

# Comparisons with Healthy People 2010 Goals & National Data





# Summary and Discussion



- Smokeless product use was high even among women and within certain ethnic groups
- Future research efforts should collect disaggregated data on South Asians in addition to collecting information on culturally relevant tobacco products
- Interventions must approach tobacco use among South Asians with cultural competence and sensitivity, particularly since products are used in many cultural and religious events
- Increased awareness and attention needs to be paid to the negative health effects of betel nut
- Smokeless tobacco products are not well regulated and policy efforts should address content of these products