

Chinese Community Smoking Cessation Project



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Supported by the National Heart, Lung and Blood Institute 1 R01 HL69363
and the Chinese Community Health Plan

UCSF Chinese Community Smoking Cessation Project

University of California, San Francisco

Key Community Partners:

Chinese Community Health Care Association,
Chinese Community Health Plan, Chinese
Hospital, Chinatown Public Health Center,
Sunset Health Services, Kaiser Permanente

Research on Asian Americans

- Lack of ethnic specific data (mask health disparities)
- Small sample sizes (unreliable estimates)
- Lack of systematic data collection (comparability and generalizability)
- Lack of up-to-date population based data (Honolulu Heart Study – prior to '80s)
- Cross-sectional, descriptive, surveys

NCHS Age-Adjusted All Cause Mortality by Race/Ethnicity (per 100,000), 1992*

White	527.4
Black	816.8
AAPI	350.5
Vietnamese	415.9
Filipino	329.4
Chinese	304.0
Japanese	298.8
Korean	293.3
South Asian	275.2

*Hoyert and Kung, 1997

Percent in the Awareness, Treatment and Control of High Blood Pressure in Adults

	Aware	Treated	Controlled	Con/Rx
NHANES ('88-'91)				
White	70	54	24	45
Black	74	57	25	44
Mexican	54	35	14	40
California ('79-'85)				
Chinese	46	35	13	37
Japanese	57	27	8	30
Filipino	63	49	8	16
Other	49	18	4	22

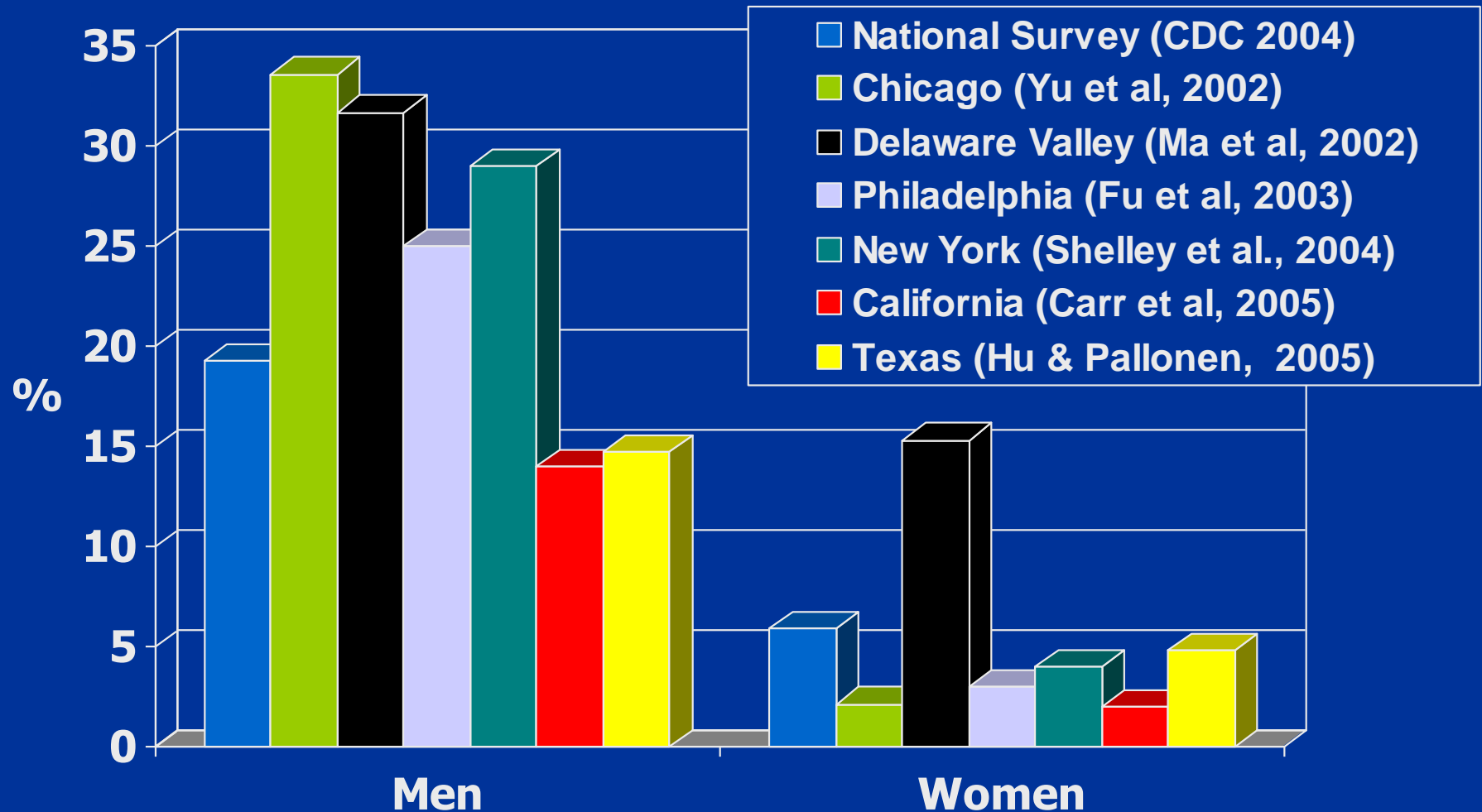
Why Focus on Chinese?

- Census 2000: Chinese are the largest AAPI subgroup (23%)
- ~2.5 million Chinese in the U.S. (↑48% in ten years)
- San Francisco Bay Area: 152,620 (64% of AAPI)
- >69% are foreign born (Taiwan and China)
- 20% increase in cigarette use in China from '85-'92
- ~75% smoking prevalence among men in China

Background

- ❑ Empirical data on effective smoking cessation strategies targeting Chinese American smokers, especially new immigrants, are scarce.
- ❑ Almost 70% of Chinese Americans are first generation immigrants with over 90% originating from China (U.S. Department of Homeland Security, 2004) where smoking prevalence among men is high (e.g. Gu et al., 2004), .
- ❑ The prevalence rates of smoking ranged from 9.7% among English-speaking Chinese (Chen, Cruz, Unger, & Johnson, 1998) to 34% among Chinese men residing in Chicago (Yu, Chen, Kim, & Abdulrahim, 2002).

Smoking Prevalence of Chinese Residing in U.S. (published data since 2000)



Abstinence Rates x Interventions

Intervention Type	# of Studies	Odds Ratio	Abstinence Rate (95% CI)
Structure and Intensity			
MD Advice to Quit	7	1.3 (1.1, 1.6)	10.2 (8.5, 12.0)
High Intensity Counseling (>10 min)	45	2.3 (2.0, 2.7)	22.1 (19.4, 24.7)
Total Contact Time (31-90 min)	35	3.0 (2.3, 3.8)	26.5 (21.5, 31.4)
Number of sessions (4-8)	45	1.9 (1.6, 2.2)	20.9 (18.1, 23.6)
Telephone counseling	58	1.2 (1.1, 1.4)	13.1 (11.4, 14.8)
Behavioral Counseling			
Problem solving & Skill Training	62	1.5 (1.3, 1.8)	16.2 (14.0, 18.5)
Intra-treatment social support	62	1.3 (1.1, 1.6)	14.4 (12.3, 16.5)
Extra-treatment social support	62	1.5 (1.1, 2.1)	16.2 (11.8, 20.6)
Pharmacotherapy			
Nicotine patch	32	1.9 (1.7, 2.2)	17.7 (16.0, 19.5)
Nicotine gum	18	1.5 (1.3, 1.8)	23.7 (20.6, 26.7)

Design

5-Year Prospective study:

- To test the efficacy of a multi-component, smoking cessation and relapse prevention intervention
- To examine a set of measures (e.g. psychosocial and smoking process) that are associated with smoking cessation

Randomized clinical trial to compare:

Minimal vs. Intensive interventions

Follow-up to assess smoking status:

6-, 12- and 24-month assessments

Study Sample

- A convenience sample of adult Chinese smokers who have smoked in the last 3 months
- Willing to quit smoking
- Have a medical condition

Inclusion Criteria

- Self identified as Chinese descent
- Adult 18 years and above
- Smoked a cigarette, cigar, or tobacco pipe during 3 months
- Resides in San Francisco Bay Area
- Speaks English, Mandarin, or Cantonese
- Not currently engaging in assisted smoking cessation efforts

Minimal Intervention

- Scripted MD advice
- Nurse/health educator strong message
- *Victory over Smoking* self-help manual
- Smoking cessation medication supplement
- Community resources for smoking cessation programs

Intensive Intervention

- Scripted MD advice
- Nurse/health educator strong message
- *Victory over Smoking* self-help manual
- Smoking cessation medication supplement
- Community resources for smoking cessation
- 45-min counseling and skill-building session
- Nicotine replacement therapy for high-risk patients

Intensive Intervention

- *Victory over Smoking* videotape
- Relaxation audiotape
- Five 15-minutes telephone calls at 2, 7, 21, 45, and 90 days
- For slipper/relapser
one additional intervention phone call

為您和您家人而編的
戒煙指南



戰勝吸煙惡習



Outcomes

- Smoking status at 6-, 12- and 24 months
- Number of quit attempts
- Number of cigarettes smoked/day
- Saliva cotinine level – biochemical verification of abstinence

Demographic Profile (N= 380)

Female gender (%)	8.4
Mean Age; $y \pm SD$	58.9 ± 14.4
Formal Education (%)	
< High School	61.3
Graduated high school	16.8
Vocational/some college	12.1
Bachelor's and above	9.8
Employment (%)	
Employed	42.4
Unemployed	12.4
Not in labor market	45.3

Demographic Profile (cont.)

English Fluency (%)

Not at all	40.5
So-So	48.4
Well/extremely well	11.6

Annual Household Income (%)

< \$10,000	24.0
\$10 – 19,000	28.4
\$20 – 39,000	16.1
> \$40,000	17.9
Declined to state	13.7

Birthplace (%)

Mainland China	71.8
Hong Kong	11.3
Taiwan	1.6
United States	5.5

Baseline Smoking Patterns (N=380)

Mean age of first smoke, yr \pm SD	18.1 \pm 6.4
One serious quit attempt past year, %	41.9
Only tried to quit 'Cold Turkey', %	64.0
Used pharmacotherapy to quit, %	11.7

Number of cigs/day, mean \pm SD	7.8 \pm 6.7
Non-daily users, (%)	14.8

Tobacco use category, (%)

\leq 5 cigs/day	36.1
6-10 cigs/day	27.9
11-20 cigs/day	31.3
>20 cigs/day	4.7

Nicotine Dependence (N=

380)

Hate to give up 1 st cig of the day, %	53.4
Smoke more in the morning, %	53.4
Smoke when ill, %	18.9
Difficulty refraining from smoking	24.2

1st smoke of the day from awakening, (%)

0-5 minutes	33.3
6-30 minutes	28.8
31-60 minutes	19.6
>60 minutes	20.3

Nicotine Addiction Score, (%)

Low (0-3)	9.2
Medium (4-6)	46.5
High (7-10)	44.3

Proportions of Disease Distribution

<u>Primary Diagnosis</u>	<u>%</u>
CVD & risk factors	44.8
Pulmonary disease	26.6
GI	7.0
Diabetes mellitus	6.9
Renal	2.0
Cancer (other than lung)	2.0
Other diseases	8.0

Demographic Profile and Smoking Behavior By Patient Status

	In-Pt n=131	Out-Pt n=249	Total N=380
Mean Age (yrs)	66.3	54.9*	58.9
Mean age first smoke	17.5	18.3	18.0
Acculturation score	2.1	2.4*	2.3
Tobacco Use Category, (%)			
≤ 5 cigs/day	64.0	21.1*	36.0
6-10 cigs/day	19.0	32.5*	27.9
11-20 cigs/day	16.8	39.9*	31.3
>20 cig/day	0	7.2	4.7
Nicotine Addiction Score, (mean)			
	2.8	3.7*	3.4

Readiness to Quit By Patient Status

	In-Pt n=131	Out-Pt n=249	Total N=380
Goal of Abstinence, (%)			
No clear goal	23.7	9.2*	14.2
Slowly cut down	14.5	30.5*	25.0
Abstinence w/ slip	10.7	19.3	16.3
Total abstinence	50.4	41.0	44.2
Confidence to Stay off Cigarette (0=none, 10=100%), mean	8.0	6.6*	7.7
Self Efficacy Scale (0=none, 10=100%), mean	6.7	5.9*	6.2

Readiness to Quit By Patient Status

	In-Pt n=131	Out-Pt n=249	Total N=380
Stages of Change, (%)			
Precontemplation	10.5	6.0	7.9
Contemplation	59.3	62.4	61.1
Preparation	30.2	31.6	31.0

Number (%) Self-reported Abstinence at 6-month Follow up Assessment

	In-Pt n=104	Out-Pt n=229	Total N=333
Intensive Arm	28 (54)	32 (27)*	59 (35)
Minimal Arm	27 (52)	18 (16)*	45 (28)
Total	55 (53)	50 (22)	104 (31)

Number (%) Self-reported Abstinence at 12-month Follow up Assessment

	In-Pt n=89	Out-Pt n=196	Total N=285
Intensive	21 (48)	32 (32)*	53 (37)
Minimal	23 (51)	25 (26)*	45 (34)
Total	44 (49)	57 (29)	101 (35)

Significant Findings:

Majority of smokers in our study:

- Smoke few cigs/day
- Have medium-high nicotine addiction score
- Displayed highly addicted behavior ...
 - Smoked more in AM
 - Smoked within 30 minutes from awakening

Significant Findings

Compared to in-patient smokers, out-patient smokers:

- Younger age and more acculturated
- Smoked more cigs/day
- Higher nicotine addiction score
- Less confident to stay off cigarette
- Goal of abstinence is to “Slowly Cut Down”

Cross Cultural Issues

- Low adherence with nicotine replacement therapy ~ 60% agree to use among those eligible for NRT; ~40% reported actual use, ~25% completed full course of treatment
- Notion of “Quit Date” → total abstinence vs. cut down (44% vs. 25%)
- Importance of MD referral → lower than expected refusal rate (< 10%)
- Minimal loss of follow up at 12- month (~ 8%)