Do the Majority of Asian-American and African-American Smokers Start as Adults?

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Background: Identifying ethnic differences in the age of smoking onset from nationally representative

data can lead to improved targeted prevention programs and policies to combat smoking

in ethnic communities.

Methods: Analyzing data from the Tobacco Use Supplements of the U.S. Census Bureau's Current

Population Surveys throughout the 1990s, differences in the age of regular smoking onset among Asians/Pacific Islanders (A/PI), African Americans (AA), Hispanics/Latinos (H/L) and non-Hispanic whites (WH) are reported. Data on people aged 26 to 50 years at the time of the survey interview (n = 130,356; mean age=38.4 years; 47.9% male; 1.9%

A/PI, 7.8% AA, 5.2% H/L, and 85.1% WH) were examined.

Results: Results indicate significant ethnic disparities in when people start smoking, among A/PIs

in particular, and AAs and H/Ls to a lesser degree, who initiate regular smoking at later ages than do WHs. The majority of A/PIs and AAs initiated smoking as young adults, with almost half (47.8%) of A/PIs who were ever regular smokers starting between ages 18 and

21, compared with 39.8% of AAs, 37.5% of H/Ls, and 36.7% of WHs.

Conclusions: These findings indicate significant ethnic disparities in relation to when people start

smoking, with the majority of A/PIs and AAs initiating as young adults. The findings suggest that prevention strategies should begin at a young age and continue throughout young adulthood, especially among ethnic minority populations. Further consideration of the different influences on later initiation in ethnic minorities may lead to suggestions to improve current smoking-prevention programs aimed at adolescents and young adults.

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Introduction

ith the recent increased focus on preventing adolescent smoking, 1,2 it is possible that ethnic and cultural differences may have led to increased adult smoking initiation nationwide across various ethnic groups. Identifying ethnic differences in the age of smoking onset can lead to improved targeted prevention programs and policies to combat smoking in ethnic communities.

Previous studies reporting on ethnic differences in smoking have either generally focused on adolescents, 3–7 leaving out the critical years of young adulthood, or on differences among African Americans (AA), Hispanics/Latinos (H/L), and non-Hispanic whites (WH), leaving out Asians/Pacific Islanders (A/PI). 5,8–10 Although A/PIs comprise a significant proportion of the U.S. population, population smoking data are not commonly reported as the representative

samples of A/PIs in surveys are small, resulting in most reports being based on more local data. A4,11 To overcome this problem, data from several years of comparable large population surveys were aggregated, increasing the precision of estimates. Using the Tobacco Use Supplements of the Current Population Surveys throughout the 1990s, differences in the age of regular smoking onset are reported for A/PIs, AAs, H/Ls, and WHs who initiated regular smoking between ages 10 and 25, the period during which the vast majority of initiation is known to occur.

Methods

Data Source

The U.S. Census Bureau's Current Population Survey (CPS) monitors labor force indicators for the civilian, non-institutionalized U.S. population aged ≥15 years. The CPS periodically includes a special Tobacco Use Supplement (TUS), developed by the National Cancer Institute, which was the source of the data for this analysis. The complete CPS methodology is published elsewhere. TUS data were included for the months of September, January, and May in 1992–1993, 1995–1996, and 1998–1999. For analysis purposes, data from all nine surveys were combined. To capture

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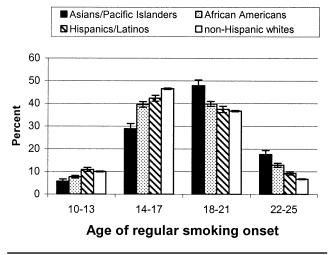


Figure 1. Age of onset of regular smoking and 95% confidence intervals, by ethnicity, for U.S. adults aged 26 to 50 in 1990s.

most smoking initiation and to avoid potential bias caused by differential mortality between smokers and nonsmokers, data on individuals aged 26 to 50 years at the time of the survey interview (n=130,356) were examined. This sample had a mean age of 38.4 years, was 1.9% A/PI, 7.8% AA, 5.2% H/L, and 85.1% WH, and 47.9% were male.

Questions Analyzed

CPS respondents were asked, "Have you smoked at least 100 cigarettes in your entire life?" Those who answered "yes" were classified as "ever smokers." All ever smokers were then asked, "How old were you when you first started smoking cigarettes fairly regularly?" To calculate age of onset of regular smoking, only ever smokers who gave a valid starting age between 10 to 25 were included. Each smoker's current age at the time of the survey was then subtracted from the date they completed the survey in order to estimate their year of birth. The age of regular smoking onset was then added to the year of birth to estimate the calendar year in which persons began to smoke fairly regularly. Ages were then aggregated into the following groups: 10 to 13, 14 to 17, 18 to 21, and 22 to 25.

Statistics

The CPSs have composite weights associated with each respondent that can be used to generate population-based estimates. Once base weights are developed that reflect the probability that a person is sampled, the weights are further adjusted to reflect the U.S. population at the time of the survey. The statistical package WesVarPC (Westat Inc., Rockville MD, 1996) was used, with balanced-repeated replicates, to compute ethnic distributions and 95% confidence intervals of regular smoking onset within each age group.

Results

Figure 1 presents the age of initiation reported for smokers aged 26 to 50 in the United States. There are significant differences in age of initiation across ethnic groups. A/PIs in particular, and AAs and H/Ls to a lesser degree, initiate regular smoking at later ages than do WHs, and the majority of A/PIs and AAs initiating as adults. There were smaller percentages of A/PIs and AAs starting regular smoking at ages 10 to 13 and 14 to 17 relative to WHs, and larger percentages at ages 18 to 21 and 22 to 25. Specifically, almost half (47.8%) of A/PIs who were ever regular smokers started between ages 18 and 21, compared with 39.8% of AAs, 37.5% of H/Ls, and 36.7% of WHs. Additionally, 17.6% of APIs who were ever regular smokers started between ages 22 and 25, compared with 12.9% of AAs, 9.3% of H/Ls, and 6.7% of WHs. Combining the percentages for ages 18 to 21 and 22 to 25 for A/PIs and AAs indicates that almost two thirds of A/PI and over half of AA smokers initiated as young adults. Comparisons between H/Ls and WHs revealed that smaller percentages of H/Ls initiated regular smoking at ages 14 to 17 than WHs (42.3% v 46.5%, respectively), while larger percentages initiated at ages 22 to 25 (9.3% v 6.7%, respectively). Age of smoking initiation did not vary significantly by calendar year.

Conclusions

These findings indicate significant ethnic disparities in relation to when people start smoking, with the majority of A/PIs and AAs initiating as young adults. These results suggest that prevention strategies should begin at a young age and continue throughout young adulthood, especially among ethnic minority populations. Based on national, representative data, these findings provide additional detail and confirm previous studies of delayed smoking initiation among A/PIs and AAs that analyzed smaller or more-local samples. 3,4,8,10

There is concern that recent marketing by the tobacco industry is effectively encouraging young adults to start smoking, 14,15 thus reducing the impact of successful adolescent interventions. Additional research is required to determine if young adult minority populations are being differentially targeted. Further consideration of the different influences on later smoking initiation in ethnic minority populations may lead to suggestions to improve current smoking-prevention programs aimed at adolescents and young adults.

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References

- Gilpin EA, Lee L, Evans NP, Pierce JP. Smoking initiation rates in adults and minors: United States, 1944–1988. Am J Epidemiol 1994;140:535–43.
- National Cancer Institute. Changing adolescent smoking prevalence: where it is and why. Bethesda MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 2001.

- =3. Chen X, Unger JB, Cruz TB, Johnson CA. Smoking patterns of Asian-American youth in California and their relationship with acculturation. J Adolesc Health 1999;24:321–8.
- Chen X, Unger JB. Hazards of smoking initiation among Asian American and non-Asian adolescents in California: a survival model analysis. Prev Med 1999;28:589–99.
- Anderson C, Burns DM. Patterns of adolescent smoking initiation rates by ethnicity and sex. Tob Control 2002;9:4–8.
- Johnson RA, Hoffmann JP. Adolescent cigarette smoking in U.S. racial/ ethnic subgroups: findings from the National Education Longitudinal Study. J Health Soc Behav 2000;41:392–407.
- Centers for Disease Control and Prevention. Trends in cigarette smoking among high school students—United States, 1991–2001. J Sch Health 2002;72:226–8.
- Centers for Disease Control and Prevention. Differences in the age of smoking initiation between blacks and whites—United States. MMWR Morb Mortal Wkly Rep 1991;40:754–7.
- Escobedo LG, Anda RF, Smith PF, Remington PL, Mast EE. Sociodemographic characteristics of cigarette smoking initiation in the United

- States. Implications for smoking prevention policy. JAMA 1990;264:1550 5
- Geronimus AT, Neidert LJ, Bound J. Age patterns of smoking in US black and white women of childbearing age. Am J Public Health 1993;83:1258–64.
- 11. Chen VW. Smoking and the health gap in minorities. Ann Epidemiol 1993;3:159–64.
- 12. U.S. Department of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.
- Bureau of Labor Statistics, U.S. Census Bureau. Current population survey: design and methodology. Technical paper 63RV. Washington DC: U.S. Department of Commerce, 2002.
- Sepe E, Ling PM, Glantz SA. Smooth moves: bar and nightclub tobacco promotions that target young adults. Am J Public Health 2002;92:414– q
- Sepe E, Glantz SA. Bar and club tobacco promotions in the alternative press: targeting young adults. Am J Public Health 2002;92:75–8.