

## NIMHD Researchers Gain New Insights into Smoking Beliefs of Minority Youth

The researchers' findings could aid in designing tailored interventions to reduce disparities in tobacco susceptibility among youth of some races and ethnicities.

Tobacco use remains the leading cause of preventable disease and death in the United States, causing nearly 480,000 premature deaths each year.<sup>1</sup> Although it has been declining in the country as a whole, mainly because of population-based interventions, cigarette smoking remains disproportionately high among people of certain races and ethnicities.<sup>2</sup>

NIMHD intramural researchers Sherine M. El-Toukhy, Ph.D., and Kelvin Choi, Ph.D., M.P.H., analyzed data from a national survey of middle and high school students to learn more about factors leading to disparities in smoking prevalence. “We know there is disparity in adults’ tobacco use by race/ethnicity and by socioeconomic status,” said Dr. El-Toukhy. “But the majority of smokers start as teenagers. That’s why we focused on young people in this study.”

The researchers investigated smoking-related beliefs and susceptibility—known precursors to starting smoking. The [study](#), published in the *Journal of Adolescent Health*, was based on an analysis of data collected in 2012 from 21,931 nonsmoking youths. The National Youth Tobacco Survey, conducted by the Centers for Disease Control and Prevention, collects data from students in grades 6 through 12 about their tobacco-related beliefs, attitudes, behaviors, and exposure to pro- and anti-tobacco influences.

By limiting the analysis to youth who never used cigarettes, the researchers were able to assess factors that might increase the likelihood that the young people would start smoking. “We wanted to learn about youths’ beliefs about smoking in order to get a better sense of how to intervene early,” said Dr. Choi.

Among the study’s key findings were the following:

- Compared with non-Hispanic whites, racial/ethnic minority youth were more likely to endorse pro-smoking beliefs and to start smoking.
- Non-Hispanic blacks, non-Hispanic Asians, and Hispanics embraced perceived social benefits of smoking.
- Hispanic and Asian youth were more likely to think that smoking made someone “look cool.”
- All racial/ethnic minority youth except Native Americans thought that smokers had more friends.
- Hispanic and Native American youth were more likely to be exposed to tobacco promotions, such as direct mail advertising, etc.
- Non-Hispanic blacks received less parental guidance about avoiding tobacco use.
- All racial/ethnic minority youth except Asians were more likely to think that many of their peers smoked.
- Hispanic youth had lower perceptions of tobacco-related risks and were more susceptible to smoking than youth of other races and ethnicities.

---

<sup>1</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services; 2014. Available at <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf> <http://www.cdc.gov/Other/disclaimer.html>.

<sup>2</sup> Jamal, A., Agaku, I.T., O’Connor, E., King, B.A., Kenemer, J.B., Neff, L. “Current Cigarette Smoking Among Adults—United States, 2005-2013.” *MMWR*. 2014;63(47):1108-12.

Although most of the findings were in line with what the researchers had expected, some of the study results surprised the authors. For example, as Dr. El-Toukhy explained, “Even after we controlled for various factors known to be associated with susceptibility to smoking—including advertising, parental guidance, perceptions of prevalence among peers, and smoking by others in the household—Hispanic youth were still more susceptible to smoking initiation.” This was particularly surprising, given that Hispanic youth were *more* likely than their peers of other races/ethnicities to receive parental guidance discouraging them from using tobacco.

What, then, might explain the greater susceptibility of Hispanic youth to initiate smoking? Dr. Choi said that other factors, such as discrimination or living in neighborhoods with higher density of smoking, could be affecting Hispanic youth’s susceptibility to tobacco use. “Smoking may be a strategy of self-medication to handle the stress of discrimination and other situations,” he said.

This new knowledge about disparities among American youth could be used to develop or refine anti-smoking programs. “Clearly we know that some population-level interventions work when it comes to reducing smoking,” Dr. Choi said. “But media campaigns, for example, do not always work. Some groups are left behind. For Hispanic youth in particular, this study suggests that campaigns to highlight the dangers of tobacco might help to counteract their susceptibility to smoking. By understanding the factors that underlie disparities, we can develop interventions to reduce and eliminate those disparities.”

*Sherine El-Toukhy, Ph.D., is a postdoctoral fellow working with epidemiologist Kelvin Choi, Ph.D., M.P.H., in NIMHD’s Division of Intramural Research. Dr. Choi’s group conducts research on tobacco use disparities, tobacco marketing, and counter-marketing, using qualitative, quantitative, observational, and experimental methodologies.*

El-Toukhy, Sherine, Choi, Kelvin. “Smoking-Related Beliefs and Susceptibility Among United States Youth Nonsmokers.” *Journal of Adolescent Health*. 2015 Aug 11. pii:S1054-139X(15)00261-X. doi: 10.1016/j.jadohealth.2015.06.016. [Epub ahead of print] PubMed [PMID: 26271160](#).