

Does Smokeless Tobacco Help Smokers Quit Cigarettes?

UC San Diego Researchers Find No Such Association in the U.S.

January 26, 2009

Kim Edwards

Some smokers say they just can't quit cigarettes. But previous studies of smokers in Sweden have suggested that many have done just that, by switching to smokeless tobacco. While not without health risks, smokeless tobacco is less harmful than cigarettes. With that in mind, an international team of researchers asked the question, "Should public health officials start promoting smokeless tobacco as a way to reduce the overall harm caused by tobacco?" The answer: "Not so fast."

According to a study from the University of California, San Diego and Sweden's Karolinska Institutet, there are important differences between the United States and Sweden with respect to how people use-and quit-tobacco. The study, in the online issue of *Tobacco Control*, examined data from more than 15,000 individuals in the U.S. who were surveyed twice, a year apart, to get a picture of tobacco use and cessation in the U.S.

"In Sweden, many smokers have quit smoking by switching to snus," said Shu-Hong Zhu, Ph.D., Professor of Family and Preventive Medicine in the UCSD School of Medicine. (Snus-pronounced *snoos* -is a form of moist, powdered tobacco that comes in a small sachet and is placed under the lip.) "This has piqued a lot of interest, because anything that helps people quit cigarettes could have huge benefits due to the great harm caused by smoking."

"Historically, there has been no campaign to promote snus to Swedes as a safer alternative to cigarettes," said Hans Gilljam, M.D. a Professor at the Karolinska Institutet and a study author. "But snus has been popular among male smokers, and has helped them quit cigarettes. In fact, Swedish men have a higher smoking cessation rate than Swedish women, few of whom use snus."

The researchers looked for a similar effect among U.S. smokers, but didn't find one. Like their counterparts in Sweden, U.S. men are much more likely than women to use smokeless tobacco. But it does not boost their rate of quitting smoking.

Zhu explained, "With an ongoing tobacco control effort, men in the U.S. seem to be quitting smoking at higher rates than men in Sweden. And U.S. women are quitting at the same rate, unlike their counterparts in Sweden."

These findings are important because there has been a vigorous debate in the international public health community about whether tobacco control programs should stop advocating complete tobacco cessation and start promoting smokeless tobacco as a less-harmful alternative to smoking. If Sweden's results were to be replicated in a longitudinal study from another country, it would support promoting smokeless as a harm-reduction strategy.

The current study examined data from the *Tobacco Use Supplement to the Current Population Survey, 2002*, with one-year follow-up in 2003. Results showed both male and female smokers in the U.S. appear to have higher quit rates for smoking than their Swedish counterparts, despite greater use of smokeless tobacco in Sweden.

Over a one-year period, the study tracked the quit rates, and the rates of switching from one form of tobacco to another, of more than 15,000 adult participants. It showed that:

Among U.S. men, less than one percent of current smokers switched to smokeless tobacco during the 12 month study.

Only 1.7 percent of former smokers turned to smokeless tobacco.

Men's quit rate for smokeless tobacco was three times higher than for cigarettes.

Even though men were far more likely to use smokeless tobacco products than women, overall, they had no advantage over women in quitting smoking (11.7 percent vs. 12.4 percent).

The Swedish data showed just the opposite: Swedes who use smokeless tobacco are likely to keep using it, rather than switching to other tobacco products. Their habit is relatively stable. By comparison, Swedes who smoke cigarettes are more likely to switch to other tobacco products, such as smokeless tobacco. Their habit is less stable.

"Many public health officials and scientists have cautioned that the Swedish results may be unique to Sweden," explained Zhu. "This research confirms that idea."

The study can be accessed online here.

Background: Some have proposed that a campaign to promote smokeless tobacco as a safer alternative to cigarettes would lead to improved smoking cessation and reduced tobacco-related death and disease. Those who oppose this approach are concerned that it could dilute the overall anti-tobacco message and have a negative net impact on public health compared to current, proven tobacco control strategies.

It is difficult to gauge the likelihood of either a benefit or detriment to public health from promoting smokeless tobacco, because the arguments for each involve assumptions about population behavior, and empirical data to verify these assumptions are hard to obtain.

This work was supported in part by a supplemental grant to the Moores UCSD Cancer Center from the National Cancer Institute.

Authors on the current study include: Zhu, Julie B. Wang, Anne Hartman, Yuerong Zhuang, Anthony Gamst, James T. Gibson, Hans Gilljam, and Maria Rosaria Galanti. Authors' research affiliations include: University of California, San Diego, National Cancer Institute, Information Management Services, Rockville, Maryland, and Karolinska Institutet, Stockholm, Sweden.

Media Contact: Kim Edwards, 619-543-6163