

A DANDY Study: Tobacco Addiction Happens Earlier Than We Thought

by Michael Burke, Ph.D.

How early in a smoking life can a young person become addicted to tobacco? It seems to happen much earlier than we have suspected, according to remarkable new research by Joseph DiFranza, MD. Dr. DiFranza, a pediatrician at the forefront of looking into the effects of tobacco use and the marketing of tobacco products on children, presented the newly and widely published findings of his research study, Development and Assessment of Nicotine Dependence in Youth (DANDY), at the annual conference of the UMDNJ, School of Public Health, Tobacco Dependence Program.

Dr. DiFranza told the conference participants that his research began after he observed that some teenagers had a very difficult time quitting tobacco even though they were not shown to be dependent by the standard diagnostic tools. Models for tobacco addiction in young people describe youth addiction as developing over time, as a new smoker moves from experimental use to regular use, through daily use to addicted use. A person was typically considered to be addicted if he or she failed in an attempt to quit, smoked within 30 minutes of waking, smoked more than 15 cigarettes per day, smoked more in the morning than the rest of the day and/or while sick in bed (Fagerstrom scale). However, many teenagers who use tobacco do not present as addicted according to these models.

Why then would teens have a difficult time quitting if they were not addicted? Through talking to teenagers, Dr. DiFranza identified a set of "symptoms" that indicated that he or she had lost autonomy to quit tobacco use. He developed these symptoms into an easy to use questionnaire called the Hooked on Nicotine Checklist (HONC) (see next column). He then proceeded to test if these symptoms could provide an early indication of addiction.

Dr. DiFranza told the conference audience that he was surprised by the strength of his results. He followed more than 700 7th grade smokers who completed the HONC questionnaire. Teens who answered yes to 1 or more of the 10 HONC questions were 44 times more likely to still be smoking 2 ½ years later than those who reported that they had none of the HONC symptoms. Additionally, teens that answered yes (to one or more of the HONC questions) were 59 times more likely to be smoking daily by the end of the study. Dr. DiFranza found that some teens that answered yes to a HONC item were smoking as little as two or three cigarettes per week. In other words - loss of autonomy to quit smoking might be occurring much earlier and with many fewer cigarettes than was thought.

Dr. DiFranza encouraged all to use the questionnaire within their own settings, and especially to provide feedback to young people to promote early treatment for nicotine dependence. Addiction occurs before a person is aware of being addicted. This tool can be used to help children identify that they are much more likely to be developing addiction or to already be addicted to tobacco. Please feel free to reprint the following HONC items and use it within your practice to illustrate the addictive nature of tobacco and to encourage early intervention.

Hooked on Nicotine Checklist

- ✓ Have you ever tried to quit, but couldn't?
- ✓ Do you smoke now because it is really hard to quit?
- ✓ Have you ever felt like you were addicted to tobacco?
- ✓ Do you ever have strong cravings to smoke?
- ✓ Have you ever felt like you really needed a cigarette?
- ✓ Is it hard to keep from smoking in places where you are not supposed to, like school? When you tried to stop smoking...(or, when you haven't used tobacco for a while...)
- ✓ Did you find it hard to concentrate because you couldn't smoke?
- ✓ Did you feel more irritable because you couldn't smoke?
- ✓ Did you feel a strong need or urge to smoke?
- ✓ Did you feel nervous, restless or anxious because you couldn't smoke?

New Jersey Decreases Youth Tobacco Use

By Mia Hanos Zimmermann, MPH



The 2001 New Jersey Youth Tobacco Survey showed an impressive decrease among middle school smokers. Current cigarette use, defined as smoking a cigarette on one or more days in the past 30 days, decreased by 42%. In 1999, 10.5% of middle school students identified themselves as current smokers, whereas in 2001 only 6.1% of middle school students identified themselves as current cigarette smokers. This is half the national prevalence of current tobacco use by middle school students (12.8%).

This is an extraordinary finding, considering the continued advertising onslaught by the tobacco industry to young people. Although these results are encouraging, NJ students in 7th-12th grade continue to smoke 500,000 packs of cigarettes a month (2001 NJYTS).

In addition to this dramatic decrease in cigarette smoking, lower rates of current tobacco use were also noted in 2001 for current use of cigars, smokeless tobacco, and bidis among middle and high school students. The reduction in bidi use is encouraging due to the fact that NJ has the highest rate of bidi use among high school students in the nation. Further research needs to be conducted to determine the drivers of the reduction of middle and high school tobacco use.

Since The College Summit: A Call to Action, last year, several colleges around the state of NJ have taken steps to reduce tobacco use on campus. These activities include policy development and the development of programs to help college students stop using tobacco.