



Using a wealth of data obtained through a 25-year longitudinal study, NIDA-funded researcher Dr. Judith Brook of the Mount Sinai School of Medicine in New York, Dr. Patricia Cohen of Columbia University in New York, and their colleagues have documented adverse effects of smoking in several critical areas of functioning during young adulthood. Most recently, the team has reported a connection between tobacco use by adolescents and young adults and the likelihood that they will develop agoraphobia (fear of leaving home or of the outdoors), generalized anxiety disorder, or panic disorder. Analyzing data from their Children in the Community study, funded by NIDA and the National Institute of Mental Health, the researchers were able to separate the effects of smoking from the effects of age, gender, childhood temperament, alcohol and other drug abuse, and depression among the adolescents, as well as parents' smoking, education, and behavioral and/or mental health problems.

The researchers interviewed 688 youths and their mothers in 1983, between 1985 and 1986, and again between 1991 and 1993. A total of 69 of the youths smoked heavily - at least 20 cigarettes every day - and experienced an anxiety disorder during adolescence, early adulthood, or both. Of these 69 youths, 29 (42 percent) began smoking before they were diagnosed with an anxiety disorder. The remaining 40 youths were split between those who were diagnosed with anxiety disorders before they reported heavy smoking (13, or 19 percent) and those who reported smoking and were diagnosed with anxiety disorders at the same interview session (27, or 39 percent).

Adolescents who smoked heavily were 6.8 times more likely to develop agoraphobia, 5.5 times more likely to develop generalized anxiety disorder, and 15.6 times more likely to develop a panic disorder as young adults than were their counterparts who smoked fewer than 20 cigarettes a day or not at all. The investigators speculate that impaired respiration and the potentially damaging effects of nicotine on blood vessels to the brain may help explain why the adolescents who smoked heavily were at increased risk of developing anxiety disorders.

The long-held notion that depression causes some adolescents to smoke may be true. But Dr. Brook's study suggests the opposite may also be true - that smoking increases the risk of depression in this population. Dr. Brook and her team recommend that future research examine further the possible relationships between various anxiety disorders and smoking.

Source

Johnson, J.G.; Cohen, P.; Pine, D.S.; Klein, D.F.; Kasen, S.; and Brook, J.S. The association between cigarette smoking and anxiety disorders during adolescence and early adulthood. *Journal of the American Medical Association* 284(18):2348-2351, 2000.