ASHES, Vol. 1(10) – In the face of anxiety: A smoker's struggle

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People smoke for a variety of reasons (e.g., losing weight, trying to appear cool, or pure pleasure). However, the motivation to smoke might be different for people who suffer from anxiety disorders. Individuals who have an anxiety disorder might smoke to reduce anxiety and obtain relief from their symptoms; ironically, because nicotine is a stimulant, smoking often worsens anxiety symptoms (McCabe, Chudzik, Antony, Young, Swinson & Zolvensky, 2004). Because of differences in motivations, smokers who have anxiety disorders also might have unique smoking cessation problems (Zvolensky, Feldner, Leen-Feldner, Bonn-Miller, McLeish, & Gregor, 2004). In this week's ASHES, we review a study by Zvolensky and his colleagues (2005) that compares smokers with panic disorders to other smokers.

One-hundred and seventy smokers participated in the study. There were eighty-eight females and the mean age of the total sample was 25.2 years. Although the majority of participants were Caucasian (85%), the sample also included African-American (6%), Asian American (3%), and Hispanic (2%) smokers. Sixty-nine participants had a diagnosis for panic disorder with or without agoraphobia (See Figure 1) while the rest reported no previous psychiatric diagnosis.

A. Both (1) and (2):

1. recurrent unexpected Panic Attacks

2. at least one of the attacks has been followed by 1 month (or more) of one (or more) of the following:

a. persistent concern about having additional attacks
b. worry about the implications of the attack or its consequences (e.g., losing control, having a heart attack, "going crazy")
c. a significant change in behavior related to the attacks

B. The presence of Agoraphobia or absence of Agoraphobia

C. The Panic Attacks are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism).

D. The Panic Attacks not better accounted for by another mental disorder, such as Social Phobia (e.g., occurring on exposure to feared social situations), Specific Phobia (e.g., on exposure to a specific phobic situation), Obsessive-Compulsive Disorder (e.g., on exposure to dirt in someone with an obsession about contamination), Posttraumatic Stress Disorder (e.g., in response to stimuli associated with a severe stressor), or Separation Anxiety Disorder (e.g., in response to being away from home or close relatives).

Figure. Diagnostic Criteria for Panic Disorder (Barlow & Durand, 2002)

Researchers recruited participants with panic disorder at anxiety research centers; they recruited the participants without psychiatric history at the University of Vermont. The investigators screened the potential participants. Those with panic disorder who also had an alcohol use disorder, substance use disorder, and/or schizophrenia were excluded from the study.

The researchers administered the Structured Clinical Interview for DSM-IV and the Anxiety Disorders Interview Schedule-IV. The participants completed the Smoking History Questionnaire, Fagerstrom Test for Nicotine Dependence (Heatherton et al., 1991), Reasons for Smoking scale (Ikard, Green, & Horn, 1969), and the Smoking Cessation Self-Efficacy scale (Velicer, Diclemente, Rossi, & Prochaska, 1990). To assess mood the researchers administered the Negative Affect section of the Positive Affect Negative Affect Scale (PANAS) (Watson, Clark, & Tellegen, 1988).

The researchers examined the relationship between these measures and anxiety. Using regression analyses, researchers found that smoking to reduce negative affect, anxiety-related problems in quitting, and less confidence in quitting when emotionally distressed were characteristic of anxious smokers (.R2 = .03, ß = .17, sr2 = .03; .R2 = .13, ß = -.42, sr2 = .13; .R2 = .11, ß = -.38, sr2 = .11, respectively). More specifically, people with panic disorders reported greater motivation to reduce negative affect, more anxiety-related problems with quitting,

and less confidence in quitting under emotional distress. No other smoking motivation was significant: addiction (r =.02, p>.1), stimulation (r = .03, p> .1), relaxation (r = -.08, p>.1), sensorimotor (r = -.03, p>.1), and habitual smoking (r = .11, p> .1). Therefore, one might argue that smokers with panic disorders predominantly use smoking as a coping mechanism. In addition, smokers with panic disorders had a significant amount of anxiety-related problems when attempting to quit. Furthermore, when in emotional distress, smokers with panic disorders had less confidence in their ability to quit smoking than their counterparts.

Since the study relied on self-report measures, participants might have withheld relevant information or reported information inaccurately. The recruitment process might have been biased because researchers recruited smokers with panic disorders from four research sites, whereas smokers with no psychiatric history were obtained from the same site. This study only examined the current behavior of the smokers and not past events or future behavior; thus, longitudinal research will provide more insight on both predictors and smoking patterns of smokers with anxiety disorders.

It is important to determine whether the factors that influence smoking are different for smokers with anxiety disorders from other smokers. In fact, by using psychostimulants, smoking might increase susceptibility to these disorders. It is paramount for clinicians to consider both behavior patterns, smoking and anxiety, when proposing treatments for smokers with anxiety disorders. Different quitting obstacles are additionally important to consider during the development of treatment programs. Because a significant number of smokers suffer with anxiety disorders (Baker-Morissette, S.L., Gulliver, S.B., Wiegel, M., & Barlow, D.H., 2004 & Zvolensky, M.J., Feldner, M.T., Leen-Feldner, E., Bonn-Miller, M.O., McLeish, A.C., & Gregor, K., 2004), it is time to better integrate anxiety and other disorders into smoking research and treatment programs.

–Sarbani Hazra.

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