PII-9: Depression, Stress, Tobacco Dependence and Cessation

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Abstract:
Introduction: Recent genetic studies suggest shared susceptibility polymorphisms for depression, stress, and nicotine addiction. In light of this, the purpose of this study was to
examine associations among depression, stress, tobacco dependence and cessation. It was hypothesized that depressive symptoms and stressful life events would be correlated with tobacco dependence and cessation.

**Method(s):** This was a secondary analysis of data from a study to test effectiveness of a Quit and Win smoking cessation contest. The study was quasiexperimental, with 494 participants exposed to the contest (treatment group) and 512 participants not exposed (control group); participants were interviewed at baseline, 3, 6, and 12 months. The current study was from baseline and 3-month interviews from control group participants. All had used tobacco in the past 30 days at baseline. Measures included self-reported tobacco cessation, nicotine dependence (Fagerström Tolerance questionnaire), depressive symptoms (Center for Epidemiologic Studies Depression Scale [CES-D]), and number of stressful life events from a checklist of seven. Bivariate relationships were assessed using t-tests and correlation. Multiple logistic regression determined predictors of quit status at 3 months.

**Results:** Those who had quit by 3 months had lower Fagerström scores at baseline compared to those still using tobacco (3.9 vs. 5.3; \( t = 2.3, p = .02 \)). While baseline Fagerström was not correlated with 3-month CES-D or life events score, CES-D and number of life events were positively associated (\( r = .17, p < .001 \)). Among those smoking at 3 months, Fagerström and CES-D were correlated (\( r = .18, p = .001 \)). In the regression of quit status at 3 months on Fagerström score, CES-D and life events, nicotine dependence and life events were significant. Lower Fagerström scores and a greater number of life events were predictive of successful quitting.

**Discussion & Conclusions:** The findings are consistent with research suggesting shared genetic susceptibility to nicotine addiction and depression. The positive association between stress and cessation may be due to gene-environment interactions or moderating effects of certain genotypes. The results have implications for genetic research and associated biobehavioral interventions.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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