Postnatal Depression Predicts New Mothers’ Smoking in Northeast Tennessee

Lana McGrady, MS, Anna Ermakova, MA, Beth Bailey, PhD

**Background:** The rate of pregnancy smoking in Northeast Tennessee is three times the national average, and more than twice the rate for the rest of Tennessee. While many women are able to quit during pregnancy, the post-delivery smoking rate is high, particularly among women with mental health issues. In addition to multiple health risks that smoking poses to the mother, second-hand smoke increases the infant’s chance of health and developmental problems.

**Objectives:** The long-term objective is to identify predictors of postnatal smoking relapse and recommend an effective intervention. Currently, postnatal depression (PND) was hypothesized to be a predictive factor of post-delivery smoking.

**Methods:** The participants were recruited prenatally as a part of the Tennessee Intervention for Pregnant Smokers program \((N=275)\). Edinburgh Postnatal Depression Scale was used as a measure of PND at six weeks postpartum, while smoking status was determined by self-reported number of cigarettes smoked on an average day.

**Results:** Over 25% of participants were found to be depressed postnatally. Income, education level, experience of intimate partner violence, prenatal depression and PND were used as predictors of post-partum smoking in a hierarchical multiple regression model. PND was a significant predictor of postnatal smoking after control for covariates, with women with PND three times more likely to smoke after delivery.

**Conclusions:** Healthcare providers should screen new mothers for PND and recognize it as a smoking predictor.
Clinical Implications: Addressing PND will likely lead to reduced smoking rates among new mothers, while improving quality of life for them and their infants.

Presented at the Tennessee Public Health Association annual meeting, September 2011.