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Parent, sibling and peer influences on smoking initiation, regular smoking and nicotine dependence. Results from a genetically informative design.

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Source

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Abstract

We sought to determine whether parenting, sibling and peer influences are associated with offspring ever smoking, regular smoking and nicotine dependence (ND) after controlling for familial factors. We used a twin-family design and data from structured diagnostic surveys of 1919 biological offspring (ages 12-32 years), 1107 twin fathers, and 1023 mothers. Offspring were classified into one of four familial risk groups based on twin fathers' and their co-twins' history of DSM-III-R nicotine dependence. Multivariate multinomial logistic regression was used to model familial risk, paternal and maternal parenting behavior and substance use, sibling substance use, and friend and school peer smoking, alcohol and drug use. Ever smoking was associated with increasing offspring age, white race, high maternal pressure to succeed in school, sibling drug use, and friend smoking, alcohol and drug use. Offspring regular smoking was associated with these same factors with additional contribution from maternal ND. Offspring ND was associated with increasing offspring age, male gender, biological parents divorce, high genetic risk from father and mother ND, maternal problem drinking. maternal rule inconsistency and sibling drug use, and friend smoking, alcohol and drug use. Friend smoking had the largest magnitude of association with offspring smoking. This effect remains after accounting for familial liability and numerous parent and sibling level effects. Smoking interventions may have greatest impact by targeting smoking prevention among peer groups in adolescent and young adult populations.

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