

# Exposure to prenatal smoking may lead to psychiatric problems

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It is well-known that maternal smoking during pregnancy can have long-term effects on the physical health of the child, including increased risk for respiratory disease, ear infections and asthma. New research shows that prenatal smoking also can lead to psychiatric problems and increase the need for psychotropic medications in childhood and young adulthood.

Finnish researchers found that adolescents who had been exposed to prenatal [smoking](#) were at increased risk for use of all psychiatric drugs especially those uses to treat depression, attention-deficit/hyperactivity disorder (ADHD) and addiction compared to non-exposed youths. The study will be presented Tuesday, May 4 at the Pediatric Academic Societies (PAS) annual meeting in Vancouver, British Columbia, Canada.

"Recent studies show that maternal smoking during [pregnancy](#) may interfere with [brain development](#) of the growing fetus," said Mikael Ekblad, lead author of the study and a pediatric researcher at Turku University Hospital in Finland. "By avoiding smoking during pregnancy, all the later [psychiatric problems](#) caused by smoking exposure could be prevented."

Ekblad and his colleagues collected information from the Finnish Medical Birth Register on maternal smoking, gestational age, birthweight and 5-minute Apgar scores for all children born in Finland from 1987 through 1989. They also analyzed records on mothers' psychiatric

inpatient care from 1969-1989 and children's use of psychiatric drugs.

Results showed that 12.3 percent of the young adults had used psychiatric drugs, and of these, 19.2 percent had been exposed to prenatal smoking.

The rate of psychotropic medication use was highest in [young adults](#) whose mothers smoked more than 10 cigarettes a day while pregnant (16.9 percent), followed by youths whose mothers smoked fewer than 10 cigarettes a day (14.7 percent) and unexposed youths (11.7 percent).

The risk for medication use was similar in males and females, and remained after adjusting for risk factors at birth, such as Apgar scores and birthweight, and the mother's previous inpatient care for mental disorders.

Smoking exposure increased the risk for use of all psychotropic drugs, especially stimulants used to treat ADHD (unexposed: 0.2 percent; less than 10 cigarettes/day: 0.4 percent; and more than 10 cigarettes/day: 0.6 percent) and drugs for addiction. An increased risk for use of drugs to treat depression also was seen (unexposed: 6 percent; less than 10 cigarettes/day: 8.6 percent; and more than 10 cigarettes/day: 10.3 percent).

"Smoking during pregnancy is still quite common even though the knowledge of its harmful effects has risen in recent years," Ekblad concluded. "Recent studies have shown that smoking during pregnancy has negative long-term effects on the health of the child. Therefore, women should avoid smoking during their pregnancy."

Provided by American Academy of Pediatrics

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