

# Smoking during pregnancy puts children at risk of psychotic symptoms

October 1 2009

---

Mothers who smoke during pregnancy put their children at greater risk of developing psychotic symptoms in their teenage years.

New research published in the October issue of the *British Journal of Psychiatry* shows a link between maternal tobacco use and [psychotic symptoms](#).

Researchers from Cardiff, Bristol, Nottingham and Warwick Universities studied 6,356 12-year-olds from the Avon Longitudinal Study of Parents and Children. All the children completed an interview for psychotic-like symptoms, such as [hallucinations](#) or [delusions](#). Just over 11% of the children (734) had suspected or definite symptoms of psychosis.

Smoking during [pregnancy](#) was found to be associated with an increased risk of psychotic symptoms in the children. The researchers observed a 'dose-response effect', meaning that the risk of psychotic symptoms was highest in the children whose [mothers](#) smoked the most heavily during pregnancy.

The study also examined whether alcohol use and cannabis use during pregnancy was associated with a higher risk of psychotic symptoms.

Drinking during pregnancy was associated with increased psychotic symptoms, but only in the [children](#) of mothers who had drunk more than 21 units of alcohol a week in early pregnancy. Only a few mothers in the

study said they had smoked cannabis during pregnancy, and this was not found to have any significant association with psychotic symptoms.

The reasons for the link between maternal tobacco use and psychotic symptoms are uncertain. But the researchers suggest that exposure to tobacco in the [womb](#) may have an indirect impact by affecting children's impulsivity, attention or cognition. They have called for further studies to investigate how exposure to tobacco in utero affects on the development and function of children's brains.

It is estimated that between 15 and 20 per cent of women in the UK continue to smoke during their pregnancy.

Dr Stanley Zammit, a psychiatrist at Cardiff University's School of Medicine and lead author of the study, said "In our cohort, approximately 19 per cent of adolescents who were interviewed had mothers who smoked during pregnancy.

"If our results are non-biased and reflect a causal relationship, we can estimate that about 20 per cent of adolescents in this cohort would not have developed psychotic symptoms if their mothers had not smoked. Therefore, maternal smoking may be an important risk factor in the development of psychotic experiences in the population."

More information: Zammit S, Thomas K, Thompson A, Horwood J, Menezes P, Gunnell D, Hollis C, Wolke D, Lewis G and Harrison G (2009) Maternal tobacco, cannabis and alcohol use during pregnancy and risk of adolescent psychotic symptoms in offspring, [British Journal of Psychiatry](#), 195: 294-300

Source: Cardiff University ([news](#) : [web](#))

Citation: Smoking during pregnancy puts children at risk of psychotic symptoms (2009, October 1) retrieved 5 May 2024 from

<https://medicalxpress.com/news/2009-10-pregnancy-children-psychotic-symptoms.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.