Children whose mothers smoked during pregnancy, early childhood more likely to smoke as adults
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Children of mothers who smoked during pregnancy and their early childhood years may be predisposed to take up smoking as teens and young adults, compounding the physical damage they sustained from the smoke exposure.

"It is well-known that maternal smoking influences a developing fetus in myriad ways, contributing to low birth weight, premature birth and a host of other health problems after birth," said Roni Grad, M.D., associate professor of clinical pediatrics at the University of Arizona College of Medicine. "Previous studies have suggested that maternal smoking during pregnancy may increase the risk of the offspring becoming regular smokers as adults, but the impact of postnatal cigarette smoke exposure was hard to differentiate from prenatal exposure."

The study results will be presented on Tuesday, May 19, at the American Thoracic Society's 105th International Conference in San Diego.

To determine the impact of maternal smoking during pregnancy and early childhood, the on the smoking behavior of the offspring as young adults, the researchers used data from the Tucson Children's Respiratory Study. Maternal smoking during pregnancy, at nine days, 1.5 months and 1.5 years was used to assess smoke exposure during pregnancy and the early life of the child. Maternal smoking was further assessed at ages six, nine and eleven years to evaluate smoke exposure during the school age years of the child. The smoking behavior of the offspring was then assessed at ages 16 and 22 years.

The researchers found that maternal smoking during pregnancy and the early childhood years was associated with the offspring being regular smokers at the age of 22, independent of whether the mother smoked during the school age years of the child. Furthermore, of all of the offspring who had ever smoked, offspring of mothers who smoked during pregnancy and early life were less likely to quit than those of mothers who had never smoked or who had taken up the habit only when the child reaches the school age years. Finally, the impact of early maternal smoking was independent of the effect of paternal smoking and also the effect of exposure to peer smoking during the offspring's adolescence. The greatest impact on the smoking behavior of the offspring as young adults was linked to .

"Smoking during pregnancy by mothers who stopped smoking by the time the child reached the school age years is a risk factor for smoking in their offspring during early adulthood," said Dr. Grad. "The data suggest that a biological effect is in play, and that eliminating maternal smoking during pregnancy and the preschool years of the child will reduce the risk of her children becoming regular smokers in adulthood. In children of mothers who did smoke during this critical period, it is important to prevent experimentation with tobacco during the adolescent years."

Source: American Thoracic Society (news : web)