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Tobacco Exposure Linked To Behavioral Problems In Children

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New research suggests that children exposed to tobacco at an early age are more likely to have behavioral problems.

Researchers from Inserm and Pierre and Marie Curie University (UPMC), in collaboration with the university hospitals of six French cities, found that early exposure to tobacco is associated with a risk of behavioral disorders in children, particularly emotional and conduct disorders.

"Exposure to environmental tobacco smoke in the postnatal period, alone or in association with exposure during pregnancy, increases the risk of behavioral disorders in primary school children," Inserm Research Director Isabella Annesi-Maesano said in a statement.

For the study, researchers collected and analyzed data on pre- and postnatal exposure to tobacco in the homes of more than 5,200 primary school children.

They found that the association between early exposure to tobacco smoke and a child's behavior is stronger when exposure takes place both during pregnancy and after birth. These data show the risk associated with smoking in early life and its behavioral repercussions when the child is of school-going age.

They found that emotional disorders are associated with exposure to tobacco smoke during both the prenatal and postnatal periods, which concerns 21 percent of the children in the study. Conduct disorders are also associated with environmental tobacco exposure in these children. The association also exists in cases of prenatal or postnatal exposure alone, but is less pronounced.

These observations seem to confirm those carried out in animals, i.e. that the nicotine contained in tobacco smoke may have a neurotoxic effect on the brain. During pregnancy, nicotine in tobacco smoke stimulates acetylcholine receptors, and causes structural changes in the brain. In the first months of life, exposure to tobacco smoke generates a protein imbalance that leads to altered neuronal growth.

"Our data indicate that passive smoking, in addition to the well-known effects on health, should also be avoided because of the behavioral disorders it may cause in children," concludes the researcher.

The findings are detailed in the journal *PLOS One*.

Read more: <http://www.universityherald.com/articles/24120/20150928/tobacco-exposure-linked-to-behavioral-problems-in-children.htm#ixzz3n8oVgC2j>