

Flu in pregnancy may quadruple child's risk for bipolar disorder

May 14 2013

Pregnant mothers' exposure to the flu was associated with a nearly fourfold increased risk that their child would develop bipolar disorder in adulthood, in a study funded by the National Institutes of Health. The findings add to mounting evidence of possible shared underlying causes and illness processes with schizophrenia, which some studies have also linked to prenatal exposure to influenza.

"Prospective mothers should take common sense [preventive measures](#), such as getting flu shots prior to and in the early stages of pregnancy and avoiding contact with people who are symptomatic," said Alan Brown, M.D., M.P.H, of Columbia University and New York State Psychiatric Institute, a grantee of the NIH's National Institute of Mental Health (NIMH). "In spite of public [health recommendations](#), only a relatively small fraction of such women get immunized. The weight of evidence now suggests that benefits of the vaccine likely outweigh any possible risk to the mother or newborn."

Brown and colleagues reported their findings online May 8, 2013 in *JAMA Psychiatry*.

Although there have been hints of a maternal influenza/bipolar disorder connection, the new study is the first to prospectively follow families in the same HMO, using physician-based diagnoses and structured standardized psychiatric measures. Access to unique Kaiser-Permanente, county and [Child Health](#) and Development Study databases made it possible to include more cases with detailed maternal flu exposure

information than in previous studies.

Among nearly a third of all children born in a northern California county during 1959-1966, researchers followed, 92 who developed bipolar disorder, comparing rates of maternal flu diagnoses during pregnancy with 722 matched controls.

The nearly fourfold increased risk implicated [influenza infection](#) at any time during pregnancy, but there was evidence suggesting slightly higher risk if the flu occurred during the second or third trimesters. Moreover, the researchers linked flu exposure to a nearly sixfold increase in a subtype of bipolar disorder with psychotic features.

A previous study, by Brown and colleagues, in a related northern California sample, found a threefold increased risk for schizophrenia associated with maternal [influenza](#) during the first half of pregnancy. Autism has similarly been linked to first trimester maternal viral infections and to possibly related increases in inflammatory molecules.

"Future research might investigate whether this same environmental risk factor might give rise to different disorders, depending on how the timing of the prenatal insult affects the developing fetal brain," suggested Brown.

Bipolar disorder shares with schizophrenia a number of other suspected causes and illness features, the researchers note. For example, both share onset of symptoms in early adulthood, susceptibility genes, run in the same families, affect nearly one percent of the population, show psychotic behaviors and respond to antipsychotic medications.

Increasing evidence of such overlap between traditional diagnostic categories has led to the NIMH Research Domain Criteria (RDoC) project, which is laying the foundation for a new mental disorders

classification system based on brain circuits and dimensional mechanisms that cut across traditional diagnostic categories.

Provided by National Institutes of Health

Citation: Flu in pregnancy may quadruple child's risk for bipolar disorder (2013, May 14)
retrieved 3 May 2024 from

<https://medicalxpress.com/news/2013-05-flu-pregnancy-quadruple-child-bipolar.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.