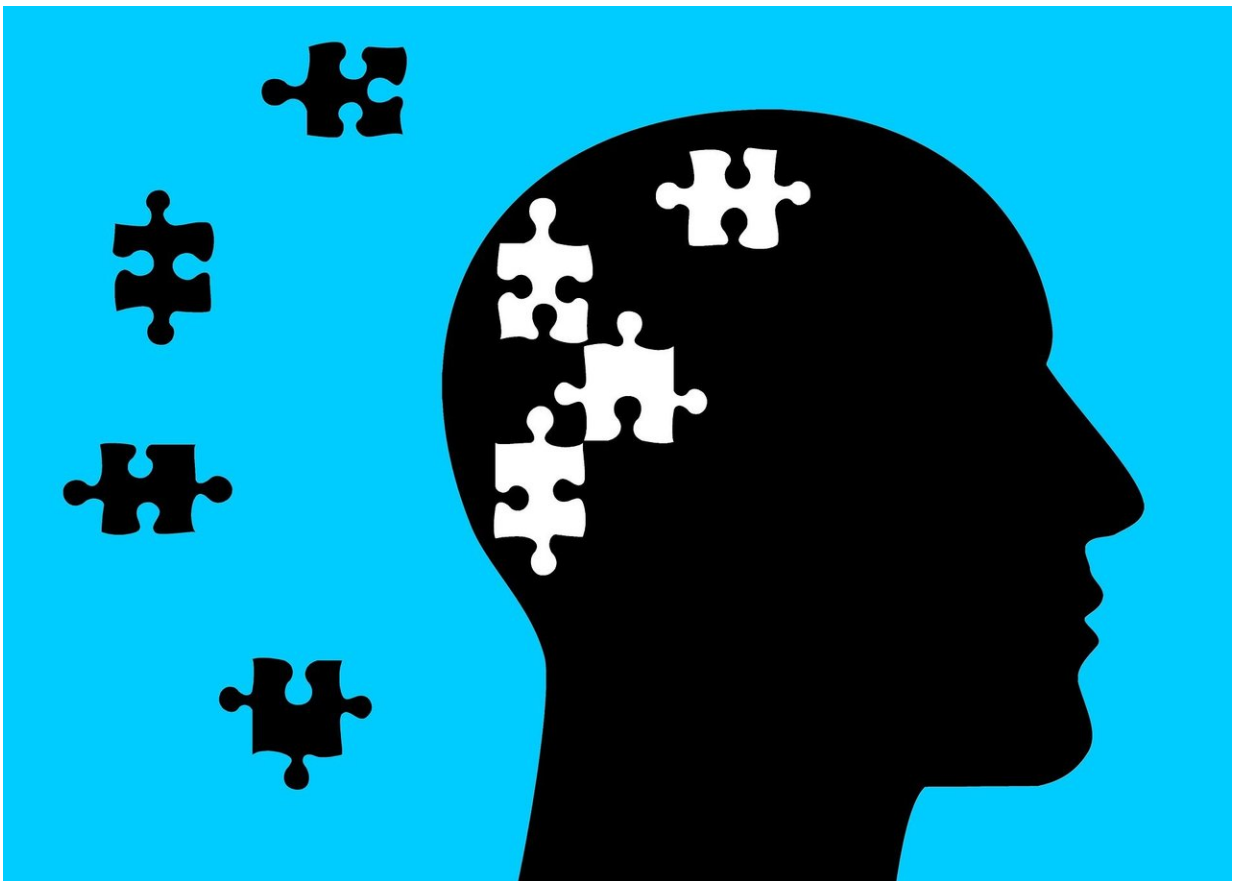


Antidepressants linked to heightened pregnancy related diabetes risk

October 1 2019



Credit: CC0 Public Domain

Taking antidepressants while expecting a baby is linked to a heightened risk of developing diabetes that is specifically related to pregnancy,

known as gestational diabetes, finds research published in the online journal *BMJ Open*.

The risk was greatest among mums to be who were taking venlafaxine, a type of drug known as a serotonin and norepinephrine reuptake inhibitor (SNRI), and amitriptyline, which belongs to an older class of antidepressant, known as tricyclics, the findings indicate.

Gestational [diabetes](#) affects up to one in five pregnant women worldwide. These pregnancies are prone to complications, such as overweight babies and prolonged labour due to the baby getting stuck in the [birth canal](#).

The children of these pregnancies may also be more vulnerable to obesity and diabetes later on, while the mums are more likely to develop type 2 diabetes and cardiovascular disease.

Previous research looking at the potential link between antidepressant use and [gestational diabetes](#) risk has proved inconclusive and has been hampered by study design, say the researchers.

They drew on information from the Quebec Pregnancy Cohort, which incorporates three Canadian databases, and includes all pregnancies and children born in Quebec between 1998 and 2015.

Each case of gestational diabetes (20,905), identified after 20 weeks of [pregnancy](#), was randomly matched with 10 unaffected pregnancies (209,050) of the same age and calendar year of delivery.

Antidepressant use was assessed using information on prescriptions filled for these drugs between the start of pregnancy and the diagnosis of gestational diabetes. In all, 9741 (just over 4%) of the mums took [antidepressants](#), singly or combined.

These included citalopram, fluoxetine, fluvoxamine, paroxetine and sertraline, which belong to a class of drugs known as [selective serotonin reuptake inhibitors](#), or SSRIs for short; venlafaxine; and amitriptyline.

After taking account of potentially influential factors, such as the mum's age, welfare assistance, area of residence and other underlying conditions, taking antidepressants during pregnancy was associated with a heightened risk of developing gestational diabetes.

Taking any of these drugs was associated with a 19% heightened risk of being diagnosed with the condition compared with not taking antidepressants during pregnancy.

The risk was greatest for two antidepressant drugs, in particular: venlafaxine (27% heightened risk); and amitriptyline (52% heightened risk).

What's more, the risk increased, the longer certain types of antidepressants were taken, specifically SNRIs and tricyclics, singly or when combined.

Short term use was associated with a 15% heightened risk; medium term use was associated with a 17% heightened risk; and long term use with a 29% heightened risk.

When further analysis was done on a smaller group of women (21,395) who had been diagnosed with depression/anxiety before they became pregnant, the results were similar to those of the main analysis.

This is an observational study, and as such, can't establish cause. But there are some possible explanations for what they found, say the researchers.

This includes that antidepressants directly affect glucose metabolism, especially as serotonin is involved in this process. And one of the side effects of antidepressants is weight gain, a risk factor for diabetes.

But the pros and cons of taking antidepressants during pregnancy need to be weighed up carefully, caution the researchers, particularly for women whose depression is severe.

"The treatment of depression is a major concern and is challenging because depression is prevalent before and during pregnancy, and untreated depression can lead to relapse during pregnancy and in the [period immediately after birth]," they write.

More information: Antidepressant use during pregnancy and the risk of gestational diabetes mellitus: a nested case-control study, *BMJ Open* (2019). [DOI: 10.1136/bmjopen-2018-025908](https://doi.org/10.1136/bmjopen-2018-025908)

Provided by British Medical Journal

Citation: Antidepressants linked to heightened pregnancy related diabetes risk (2019, October 1) retrieved 24 April 2024 from

<https://medicalxpress.com/news/2019-10-antidepressants-linked-heightened-pregnancy-diabetes.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.