- Fetus

Common medications could hamper fetal brain development

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A new, wide-ranging review of existing scientific data released Tuesday is pointing to the possibility that dozens of commonly prescribed drugs could adversely affect brain development in unborn children.

Evidence compiled by the scientific community so far suggests that unintended side effects of these drugs on the brain chemistry of children in utero presents "urgent pregnancy safety concerns," especially for those who may be at particular genetic risk, the review shows.

The group of more than 30 drugs includes those whose side effects have been shown to inhibit the biosynthesis of brain cholesterol in animal studies. This process in unborn children is deemed essential for avoiding intellectual and developmental disabilities by promoting proper nerve cell connection formation and myelin production.

Antidepressants such as trazodone and fluoxetine and antipsychotic drugs such as cariprazine and aripiprazole are among those shown to affect brain cholesterol synthesis in mice.

The paper, published Monday in the scientific journal Brain Medicine, was authored by two University of Nebraska Medical Center academic researchers, Károly Mirnics and Zeljka Korade. Both have done previous work linking disruptions of sterol biosynthesis with common drugs, and they now have issued a new perspective on the available literature.

Their review found "concerning evidence" that brain development of unborn children could be at risk when exposed to these drugs. Additionally,

up to 3 percent of the population that possesses a specific genetic variation could be particularly vulnerable to these medication effects, data shows.

The findings suggest medication safety protocols for pregnant women urgently need to be reviewed, Mirnics told UPI.

You'd want to make sure that if they do so, it would state clearly on the drug's label, 'Do not use during pregnancy.' If that is the case, alternative medications should be used."