

C-sections affect children's health less than previously assumed

October 17 2019



Credit: CC0 Public Domain

Conventional wisdom in medicine associates Cesarean sections to a wide variety of adverse short- and long-term health outcomes. However, a new study suggests that potentially avoidable unplanned cesarean sections increase the risk of asthma, but not the risk of other immunemediated disorders previously associated with C-sections.



To solve the methodological problems in existing research, researchers from the Finnish Institute for Health and Welfare, Pompeu Fabra University, University of Turku, and VATT Institute for Economic Research used novel <u>statistical methods</u> and followed the <u>health</u> of more than 1.4 million Finnish children from birth to teenage years.

The focus was on the common chronic conditions that have previously been associated with C-sections: asthma and other atopic diseases, type 1 diabetes, and obesity.

"The results suggest that C-section increases the risk of asthma from early childhood. However, we didn't find a <u>causal relationship</u> between C-section and diseases previously linked to it, such as allergies, type 1 diabetes and obesity. These findings suggest that the effect of C-sections on the development of the immune system is more complex than previously assumed," says Ana Rodríguez from Pompeu Fabra University.

Simple comparisons between babies born by C-section and vaginal delivery are likely to yield misleading conclusions, because it is difficult to separate the effect of C-sections from other differences between these two groups.

To solve this problem, the researchers used a novel research design to estimate the causal impact of C-sections.

Unplanned C-sections more common prior to holidays

Based on Finnish administrative data, the researches documented that physicians perform more unplanned C-sections during days that precede a weekend or public holiday.

"In these cases, prolonged labor was frequently the reason for the C-



section. The data shows that during the days preceding a public holiday, physicians make greater use of more discretionary diagnoses as justification for the C-section. This increased likelihood of C-sections regardless of the medical necessity enables comparisons among similar mothers and resembles a controlled experiment," says Lauri Sääksvuori from the Finnish Institute for Health and Welfare and VATT Institute for Economic Research.

Researchers also used comparisons between siblings born by different birth modes to verify their findings and better understand the causal effect of <u>cesarean sections</u>.

Cesarean section is currently the most commonly performed major surgery in many countries. Understanding the consequences of C-sections on later-life health and human capital development is important from a number of perspectives varying from clinical decision making to economic and health policy.

More information: Ana Costa-Ramón, et al.The Long-Run Effects of Cesarean Sections. Julkaisun pysyvä osoite,

urn.fi/URN:ISBN:978-952-274-244-5 www.doria.fi/handle/10024/172439

Provided by National Institute for Health and Welfare

Citation: C-sections affect children's health less than previously assumed (2019, October 17) retrieved 26 June 2024 from https://medicalxpress.com/news/2019-10-c-sections-affect-children-health-previously.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.