

Does preterm delivery contribute to increased cardiovascular disease burden in women?

30 March 2020



Credit: Mary Ann Liebert, Inc., publishers

A new study quantifies the future economic burden of cardiovascular disease (CVD) in women with a history of preterm delivery (PTD). The study, which used a novel Markov microsimulation model to quantify CVD burden in terms of cost and years of life lost over a 50-year period, is published in *Journal of Women's Health*.

The article entitled "How Does Preterm Delivery Contribute to the Increased Burden of Cardiovascular Disease? Quantifying the

Economic Impact of CVD in Women with a History of Preterm Delivery" was coauthored by Lan Gao, Ph.D., Shu-chuen Li, Ph.D., and Marj Moodie, DrPh, Deakin University (Geelong) and The University of Newcastle (Callaghan), Australia. While PTD is not traditionally recognized as a CVD risk factor, it places the mother at increased risk of developing CVD, including [coronary heart disease](#) and stroke, later in life, and women who have a PTD have about twice the risk of CVD mortality.

Based on an Australian healthcare system perspective, the study comprised two models—a dynamic model and a static model—which showed the total CVD cost burden to be 11.4 billion Australian dollars and 4.5 billion Australian dollars, respectively, over the 50-year study period. The years of life lost were 0.34 per capita and 0.52 per capita, respectively.

In an accompanying Editorial entitled "The Economic Burden of CVD in Women with a History of Preterm Delivery", Margo Minissian, Ph.D., Cedars-Sinai Medical Center (Los Angeles, CA) states: "Considering the substantial economic burden eloquently described by Gao *et al.*, future prevention strategies for [women](#) who experience PTD are imperative." In addition, "recognizing PTD as a potential CVD risk factor/enhancer is important."

Dr. Minissian highlights the novel microsimulation modeling technique used in this study, which allows for subsequent recurrent CVD events to be captured over a lifetime. Most notable was the 19.8% 4-year recurrence rate of stroke.

More information: Lan Gao et al, How Does Preterm Delivery Contribute to the Increased Burden of Cardiovascular Disease? Quantifying the Economic Impact of Cardiovascular Disease in

Women with a History of Preterm Delivery, *Journal of Women's Health* (2020). DOI: [10.1089/jwh.2019.7995](https://doi.org/10.1089/jwh.2019.7995)

Provided by Mary Ann Liebert, Inc

APA citation: Does preterm delivery contribute to increased cardiovascular disease burden in women? (2020, March 30) retrieved 8 June 2022 from <https://medicalxpress.com/news/2020-03-preterm-delivery-contribute-cardiovascular-disease.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.