



¹ Department of Women and Children's Health, School of Life Course Sciences, King's College London, London, UK

² Fetal Medicine Unit, St George's, University of London, London, UK

³ Evelina London Children's Hospital, London, UK

⁴ Harris Birthright Centre, King's College Hospital NHS Foundation Trust, London, UK

⁵ University College London Hospitals NHS Foundation Trust, London, UK

pvd@kcl.ac.uk

Cite this as: *BMJ* 2020;369:m2287

<http://dx.doi.org/10.1136/bmj.m2287>

Published: 10 June 2020

RISKS TO CHILDREN DURING COVID-19 PANDEMIC

“Women and children last”—effects of the covid-19 pandemic on reproductive, perinatal, and paediatric health

Peter von Dadelszen,¹ Asma Khalil,² Ingrid Wolfe,³ Nikos A Kametas,⁴ Patrick O'Brien,⁵ Laura A Magee¹

The covid-19 pandemic has led to abrupt changes in health service delivery—from face-to-face to largely virtual interactions—to protect those vulnerable to the virus (beneficial) and to cope with staff shortages (potentially harmful). This was evidence based for those with substantial comorbidities; pregnant women have been labelled as vulnerable from the beginning. But, as Green says, the secondary harms to vulnerable children have not been properly considered.¹

The Royal Colleges of Obstetricians and Gynaecologists, Midwives, Paediatrics and Child Health, and General Practitioners and the UK government have updated, at an astonishing speed, guidance to reconfigure services towards virtual care, guide safeguarding, and emphasise social distancing for pregnant women and vulnerable children.²⁻⁴

However, as it has become clear that young women and children usually experience mild symptoms of covid-19, service delivery changes might have gone too far and jeopardised non-covid-19 related health.

When the *Titanic* suffered its catastrophic maritime shock, the safety and survival of women and children were prioritised. But this health system shock might have resulted in an inadvertent “reverse *Titanic*” phenomenon⁵—for example, preterm and caesarean birth rates might rise,⁶ paediatric vaccination rates fall,⁷ and too few face-to-face antenatal visits per pregnancy can increase risks associated with severe hypertension.⁸ System transformations are under way to optimise paediatric outcomes.^{9,10}

We need to assess the maternal, perinatal, and child health consequences of the pandemic, including changes in care seeking and care delivery, to discriminate between the direct and indirect effects of the pandemic. Just as the *Titanic* disaster led to major improvements in maritime design, this pandemic might catalyse important, beneficial, cost effective, and sustained health system improvements. This acute phase of risk to reproductive, perinatal, and child health must be acknowledged and measured. Health system responses must be monitored, and lessons learnt from innovations and challenges, to improve both future pandemic planning and health system performance during more stable times.

Competing interests: None declared.

Full response at: <https://www.bmj.com/content/369/bmj.m1669/rr>.

¹ Green P. Risks to children and young people during covid-19 pandemic. *BMJ* 2020;369:m1669. doi: 10.1136/bmj.m1669 pmid: 32345583

² Royal College of Obstetricians and Gynaecologists. Guidance for maternal medicine services in the evolving coronavirus (COVID-19) pandemic: information for health professionals. 2020. <https://www.rcog.org.uk/globalassets/documents/guidelines/2020-05-13-guidance-for-maternal-medicine-services-in-the-evolving-coronavirus-covid-19-pandemic.pdf>

³ Royal College of Paediatrics and Child Health. Key topics: covid-19. 2020. <https://www.rcpch.ac.uk/key-topics/covid-19>.

⁴ Public Health England. Covid-19: guidance on social distancing and for vulnerable people. Guidance on social distancing for everyone in the UK, including children, and protecting older people and vulnerable people. 2020. <https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people>.

⁵ Roxby P. Coronavirus: plea for public to get medical care when they need it. *BBC* 27 April 2020. <https://www.bbc.co.uk/news/health-52417599>

⁶ Khalil A, Kalafat E, O'Brien P, et al. SARS-CoV-2 infection in pregnancy: a systematic review and meta-analysis of clinical features and pregnancy outcomes. *EClinicalMedicine* 2020; [forthcoming].

⁷ Sample I. Missed vaccinations could lead to other fatal outbreaks, doctors warn. *Guardian* 26 April 2020. <https://www.theguardian.com/society/2020/apr/26/missed-vaccinations-could-lead-to-other-fatal-outbreaks-doctors-warn>

⁸ Magee LA, von Dadelszen P, Singer J, et al. CHIPS Study Group*. The CHIPS randomized controlled trial (Control of Hypertension in Pregnancy Study): is severe hypertension just an elevated blood pressure? *Hypertension* 2016;68:1153-9. doi: 10.1161/HYPERTENSIONAHA.116.07862 pmid: 27620393

⁹ Wolfe I, Satherley RM, Scotney E, Newham J, Lingam R. Integrated care models and child health: a meta-analysis. *Pediatrics* 2020;145. doi: 10.1542/peds.2018-3747 pmid: 31888959

¹⁰ Newham JJ, Forman J, Heys M, et al. Children and Young People's Health Partnership (CYPHP) Evelina London model of care: protocol for an opportunistic cluster randomised controlled trial (cRCT) to assess child health outcomes, healthcare quality and health service use. *BMJ Open* 2019;9. . doi: 10.1136/bmjopen-2018-027301 pmid: 31481366