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L69 - Coronavirus (COVID-19) - Labour, birth and intrapartum care
(352)

2023-13139

Dancing during labor in the midst of COVID-19 outbreak: as an alternative non-pharmacological treatment after digital interventions. Situmorang DDB (2022), Journal of Public Health vol 44, no 4, December 2022, pp e617–e618

Full URL: https://doi.org/10.1093/pubmed/fdab315

As a result of this writing, I encourage future academics to conduct further study on what sorts of music and movements are acceptable for women during birth, as this is a highly intriguing issue, especially in the midst of the COVID-19 outbreak. Music and dance can also be used as an alternative to non-pharmacological treatments, so that enough pregnant women can be assisted and their tension and anxiety during delivery can be decreased. (Author)

2023-13071

Association of maternal SARS-CoV-2 infection at the time of admission for delivery with labor process and outcomes of vaginal birth: A cohort study. Chen A, Acharya G, Hu M, et al (2023), Acta Obstetricia et Gynecologica Scandinavica 5 November 2023, online

Full URL: https://doi.org/10.1111/aogs.14704

Introduction
This study aimed to investigate the impact of maternal SARS-CoV-2 infection at the time of admission for delivery on labor process and outcomes of vaginal birth.

Material and methods
A cohort study was carried out at the Obstetrics Department of Anhui Provincial Hospital, China, where universal reverse transcriptase polymerase chain reaction (RT-PCR) testing for SARS-CoV-2 infection was introduced for all women admitted for labor and delivery from December 1–31, 2022. Women were divided into positive and negative groups based on the test result. All women having a singleton vaginal birth were included in final analysis. The effect of SARS-CoV-2 positivity on labor process and outcomes of vaginal birth was estimated by regression analyses.

Results
Among a total of 360 women included, 87 had a positive SARS-CoV-2 test and 273 a negative test. Women in the positive group had an increased likelihood of having longer labor (median 9.3 vs 8.3 hours; sB [log-transformed] 0.19; 95% confidence interval [CI] 0.09–0.28), episiotomy (39.1% vs 23.8%; adjusted odds ratio [aOR] 2.31; 95% CI 1.27–4.21), grade III meconium-stained amniotic fluid (19.5% vs 7.0%; aOR 2.52; 95% CI 1.15–5.54) and postpartum hospital stay exceeding 37 hours (58.6% vs 46.5%; aOR 1.71; 95% CI 1.00–2.91). They had reduced rates exclusive breastfeeding (26.7% vs 39%; aOR 0.21; 95% CI 0.09–0.46) as well as mixed feeding (46.5% vs 52.2%; aOR 0.28; 95% CI 0.13–0.60) at 1 week postpartum. No significant differences were observed in other aspects of labor process and birth outcomes, including the uptake of labor analgesia, postpartum hemorrhage (>500 mL) or neonatal outcomes.

Conclusions
A positive maternal SARS-CoV-2 test in labor among women having vaginal birth was associated with a slightly longer duration of labor, increased likelihood of episiotomy, increased incidence of grade III meconium-stained amniotic fluid, a longer postpartum hospital stay and a lower rate of breastfeeding 1 week postpartum. However, it did not have an adverse impact on other birth outcomes. (Author)

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2023-11801

Experiences of Midwives Attending Home Births in Massachusetts During the COVID-19 Pandemic. George EK, Kimball J, Edmonds JK (2023), Journal of Midwifery & Women's Health 27 September 2023, online

Introduction

Public interest in home birth in the United States increased during the COVID-19 pandemic. Midwives attend the vast majority of home births and are experts in providing home birth care. However, limited data are available about the experiences of midwives attending home births during the pandemic in the United States.

Methods

We developed a cross-sectional survey comprising 34 questions, which included 5 open-ended questions. The survey was distributed online in June 2021 to midwives attending home birth in Massachusetts. We calculated descriptive statistics for the quantitative survey responses and identified qualitative free-text responses illustrating the results.

Results

Eighteen midwives and 2 midwife apprentices responded to the survey, approximately 50% of Massachusetts' total number of midwives known to attend homebirths. The majority of the 20 respondents reported an increase in public interest in home birth (n = 17) and higher caseloads (n = 14) since the start of the pandemic. Respondents reported an increase in the number of clients transferring to their practices at a later gestational age (n = 13) and who identified as people of color (n = 8). They described both better and worse transfer of care to hospital experiences. Work-life balance and unpredictable income were the top 2 reported obstacles to home birth practice.

Discussion

The results of our study indicate that midwives providing home birth care in Massachusetts witnessed a surge in demand for their services during the pandemic. Implementing policies and practices that provide support for certified professional midwives could strengthen the home birth workforce, enhance access to home birth options, and optimize transfers to hospital settings when necessary. (Author)

2023-11769

"Trauma, abandonment and isolation": experiences of pregnancy and maternity services in Scotland during COVID-19. Engender, Health and Social Care Alliance Scotland (2023), September 2023

Full URL: https://www.engender.org.uk/content/publications/MATFinalNEW.pdf

The report, '"Trauma, abandonment and isolation": Experiences of pregnancy and maternity services in Scotland during Covid-19', draws on survey responses from over 200 women across Scotland. It documents the profound and negative impact that public health restrictions had on access to vital healthcare across all aspects of these services from antenatal care, fertility treatment, to miscarriage and baby loss, birth and the postnatal period. (Author)

2023-11680

Impact of the COVID-19 Pandemic on Obstetric Interventions at a Public Hospital. Johnson TA, Jamieson DJ, Geary FH, et al (2023), Women's Health Issues vol 33, no 1, January-February 2023, pp 10-16

Full URL: https://doi.org/10.1016/j.whi.2022.08.003

Introduction: In response to the COVID-19 pandemic, health systems quickly implemented changes in care delivery with a goal of balancing patient-focused obstetric care with the need to protect pregnant persons and health care providers from infection. Yet, there is no consensus within the scientific community on the impact these measures have on obstetric outcomes in vulnerable populations. We aimed to assess the impact of the COVID-19 pandemic on rates of obstetric procedures and severe maternal morbidity (SMM) among births at an urban safety net institution.

Methods: We used an interrupted time series design to calculate risk ratios (RRs) and 95% confidence intervals (CIs) comparing monthly rates of labor induction, cesarean births (overall and among nulliparous, term, singleton, vertex

births), operative vaginal births, and SMM among births occurring at a public hospital before (March 1, 2016, to February 29, 2020) and during (March 1, 2020, to May 31, 2021) the COVID-19 pandemic.

Results: There were 10,714 and 2,736 births in the prepandemic and postpandemic periods, respectively. Overall, the rates of obstetric interventions and SMM were constant over the two time periods. There were no significant differences in rates of labor induction (42% during prepandemic period vs. 45% during pandemic period; RR, 1.12; 95% CI, 0.93-1.34), operative vaginal births (5% vs. 6%; RR, 1.24; 95% CI, 0.88-1.76), cesarean births (28% vs. 33%; RR, 1.10; 95% CI, 0.94-1.28), or nulliparous, term, singleton, vertex cesarean births (24% vs. 31%; RR, 1.27; 95% CI, 0.92-1.74). Rates of SMM (7% vs. 8%; RR, 1.19; 95% CI, 0.86-1.65) were also unchanged.

Conclusions: Our findings indicate that the rapid implementation of measures to reduce viral transmission in the labor and delivery setting did not materially affect routine clinical management or rates of serious maternal complications.

2023-11204

"It is not by choice that I gave birth at home": the social determinants of home births during COVID-19 in peri-urban and urban Kenya, a qualitative study. Sudhinaraset M, Woofter R, Mboya J, et al (2023), BMC Pregnancy and Childbirth vol 23, no 722, 2023

Full URL: https://doi.org/10.1186/s12884-023-06038-x

Background
The COVID-19 pandemic significantly impacted the provision of global maternal health services, with an increase in home births. However, there are little data on women's decision-making and experiences leading up to home births during the pandemic. The objective of this study is to examine the economic, social, and health system factors associated with home births in Kenya.

Methods
Community health volunteers (CHVs) and village leaders helped identify potential participants for an in-depth, one-on-one, qualitative telephone interview in Nairobi and Kiambu County in Kenya. In total, the study interviewed 28 mothers who had home births.

Results
This study identified a number of economic, social, neighborhood, and health system factors that were associated with birthing at home during the COVID-19 pandemic. Only one woman had planned on birthing at home, while all other participants described various reasons they had to birth at home. Themes related to home births during the pandemic included: (1) unmet preferences related to location of birth; (2) burdens and fear of contracting COVID-19 leading to delayed or missed care; (3) lack of perceived community safety and fear of encounters with law enforcement; and (4) healthcare system changes and uncertainty that led to home births.

Conclusion
Addressing and recognizing women's social determinants of health is critical to ensuring that preferences on location of birth are met. (Author)

2023-11076

Feeling anxious'- women's experiences of having a baby in Australia during the COVID-19 pandemic using the Voqual real time app. Keedle H, Tomczak K, Lequertier B, et al (2023), BMC Pregnancy and Childbirth vol 23, no 670, 2023

Full URL: https://doi.org/10.1186/s12884-023-05993-9

Purpose

Internationally, the COVID-19 pandemic impacted maternity services. In Australia, this included changes to antenatal appointments and the reduction of support people during labour and birth. For women pregnant during the pandemic there were increased stressors of infection in the community and in hospitals along with increased periods of isolation from friends and families during lockdown periods. The aim of this study was to explore the real-time experiences of women who were pregnant and had a baby during the first wave of the COVID-19 pandemic in Australia.

Methods
This study followed seven women throughout their pregnancy and early parenthood. Women created audio or video recordings in real time using the Voqual app and were followed up by in-depth interviews after they gave birth.

Results
Using narrative analysis their individual stories were compared and an overarching theme of 'feeling anxious' was found which was underpinned by the two themes 'model of care' and 'environment'.

Conclusions
These findings highlight the protective impact midwifery continuity of care has on reducing anxiety in women during the pandemic, and that the home environment can either be secure and safe or a place of isolation. (Author)

2023-10979

Saving lives, improving mothers care. Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2019-21. Knight M, Bunch K, Felker A, et al (2023), Oxford: National Perinatal Epidemiology Unit, University of Oxford, Healthcare Quality Improvement Partnership and National Perinatal Epidemiology Unit 12 October 2023. 108 pages

Full URL: https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/maternal-report-2023/MBRRACE-UK_Maternal_Compiled_Report_2023.pdf

Introduction
This report, the tenth MBRRACE-UK annual report of the Confidential Enquiry into Maternal Deaths and Morbidity, includes surveillance data on women who died during or up to one year after pregnancy between 2019 and 2021 in the UK. In addition, it also includes confidential enquiries into the care of women who died between 2019 and 2021 in the UK and Ireland from obstetric haemorrhage, amniotic fluid embolism, anaesthetic causes, infection, general medical and surgical disorders and epilepsy and stroke. The report also includes a Morbidity Confidential Enquiry into the care of women with morbidity following repeat caesarean birth. Surveillance information is included for 572 women who died during or up to one year after the end of pregnancy between 2019 and 2021. The care of 32 women with morbidity following repeat caesarean birth was reviewed in depth for the Morbidity Confidential Enquiry chapter. Following changes to funder requirements, this complied report includes the contents of the three national State of the Nation reports as well as supplementary material concerning additional data and areas of existing guidance needing improved implementation. It can be read as a single document, but each chapter is also designed to be read as a standalone report as, although the whole report is relevant to maternity staff, service providers and policymakers, there are specific clinicians and service providers for whom only single chapters are pertinent.
There are seven different chapters that may be read independently, the topics covered are:
1. Introduction and methodology
2. Surveillance of maternal deaths
3. Haemorrhage and amniotic fluid embolism
4. Anaesthesia
5. Morbidity after repeat caesarean birth
6. Infection
7. General medical and surgical disorders
8. Neurological conditions.

Methods

Maternal deaths are reported to MBRRACE-UK, NIMACH or to MDE Ireland by the staff caring for the women concerned, or through other sources including coroners, procurators fiscal and media reports. In addition, identification of deaths is cross-checked with records from the Office for National Statistics, National Records of Scotland and Public Health Scotland. Full medical records are obtained for all women who die as well as those identified for the Confidential Enquiry into Maternal Morbidity, and anonymised prior to undergoing confidential review. Each woman's care is examined by multidisciplinary expert reviewers and assessed against current guidelines and standards (such as those produced by NICE or relevant Royal Colleges and other professional organisations). Subsequently, the expert reviews of each woman's care are examined by a multidisciplinary writing group to enable the main themes for learning to be drawn out for the MBRRACE-UK report. These recommendations for future care are presented here, alongside a surveillance chapter reporting three years of UK statistical surveillance data.

IMPORTANT NOTE: Lessons for care are addressed to all health professionals involved in the care of women who are pregnant, have recently been pregnant or likely to become pregnant in the future as silo working leading to compromised care is a recurring theme identified in these enquiries. Some lessons may be more pertinent to specific professional groups than others but all should nonetheless be reviewed for relevance to practice by each group.

Causes and trends

There was a statistically non-significant increase in the overall maternal death rate in the UK between 2016-18 and 2019-21. When deaths due to COVID-19 in 2020 and 2021 were excluded, maternal death rates were very similar for the two periods, which suggests that an even greater focus on implementation of the recommendations of these reports is needed to achieve a reduction in maternal deaths. There remains a nearly four-fold difference in maternal mortality rates amongst women from Black ethnic backgrounds and an almost two-fold difference amongst women from Asian ethnic backgrounds compared to White women. Twelve percent of the women who died during or up to a year after pregnancy in the UK in 2019-21 were at severe and multiple disadvantage. The main elements of multiple disadvantage were a mental health diagnosis, substance use and domestic abuse. Women living in the most deprived areas continue to have the highest maternal mortality rates, emphasising the need for a continued focus on action to address these disparities. Deaths from mental health-related causes as a whole account for nearly 40% of deaths occurring between six weeks and a year after the end of pregnancy with maternal suicide remaining the leading cause of direct deaths in this period.

Key messages to improve care

The majority of recommendations that MBRRACE-UK assessors have identified to improve care are drawn directly from existing guidance or reports and denote areas where implementation of existing guidance needs strengthening. New national recommendations

from the two themed State of the Nation confidential enquiry reports are:

1. Update guidance to make certain that category 4 caesarean section lists are managed separately from more urgent caesarean sections to ensure these operations are not delayed to late in the day.
2. Update guidance on the use of coagulation tests in the context of obstetric haemorrhage including the timelines for availability and how to interpret these, noting that women should not be inappropriately denied clotting products based on a single measure of coagulation in the face of ongoing haemorrhage.
3. Review guidance on when to use balloon tamponade to control haemorrhage, how to insert the balloon and inflate it. Resources such as postpartum haemorrhage checklists should include when not to use balloon tamponade and when to abandon it and move on to a different haemostatic technique.
4. Review and revise the service specification for centres providing specialist services for managing abnormally invasive placentation to ensure that all specialist units can provide appropriate equipment, facilities and appropriately skilled personnel in an emergency situation occurring at any time of day or night.
5. Clarify that review of the care of women who return to theatre may provide important safety learning but should not be perceived as a performance metric after caesarean birth, as re-operation may be the appropriate response to control internal haemorrhage.
6. Ensure that pregnant and breastfeeding women are not excluded inappropriately from research, including new

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vaccine and treatment research, and ensure that messaging about benefits and risks of medication and vaccine use is clear and well informed with involvement of key opinion leaders and representatives of communities at risk from an early stage. Prepare a route to enable rapid dissemination of updated advice and data concerning new vaccines and treatments to both women and their clinicians in the future.
7. Update guidance on ECMO for severe acute respiratory failure in adults to include specific information on referral and admission of pregnant and recently pregnant women with respiratory failure to ECMO services.
8. Ensure that staff working within maternal medicine networks are equipped with the skills to care for the complex and multiple medical, surgical, mental health and social care needs of the current maternity population.
9. Ensure that guidance on care for pregnant women with complex social factors is updated to include a role for networked maternal medical care and postnatal follow-up to ensure that it is tailored to women's individual needs and that resources in particular target vulnerable women with medical and mental health co-morbidities and social complexity.
10. Develop training resources concerning shared decision making and counselling regarding medication use in pregnancy and breastfeeding, including specific information on the benefits and risks of different medications and non-adherence.
[The report specifies actions for Department of Health and Social Care and equivalents in Scotland, Wales and Ireland, UK Health Security Agency and equivalents in Scotland, Wales and Ireland, National Institute for Health Research and other funding agencies, National Institute for Health and Care Excellence (NICE), Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of Physicians, Royal College of General Practitioners, Obstetric Anaesthetists Association and the Maternal Medicine Networks].

Conclusions
This report includes the surveillance information for women who died during and after pregnancy for 2019-21, which includes two years of the COVID-19 pandemic, when there were many service-related changes. The clearest impact of the pandemic on maternal mortality rates has been evidence of health systems under pressure, a theme which recurred across several chapters in this report. If women who died from COVID-19 are excluded, the maternal mortality rate is lower than the corresponding rate for 2018-20, but not significantly so; the care of women who died from COVID-19 is discussed chapter 6. The lessons learned from the care of women who died from COVID-19 emphasise the need to ensure that pregnant and breastfeeding women are not excluded from research and that they receive
the same level of evidence-based care as non-pregnant women. The majority of women who died from COVID-19 in 2020 and 2021 were from ethnic minority groups and this is reflected in higher overall maternal mortality rates amongst women from Black and Asian ethnic groups compared to White women. This is a finding that is consistently emphasised in MBRRACE-UK reports. Similarly, disparities in maternal mortality rates continue to exist amongst women who live in the most deprived areas compared to those living in the least deprived areas. Assessors also identified important messages concerning the care of women with multiple adversity and multiple morbidities, who are once again over-represented among maternal deaths. As in the 2022 report, deaths from mental-health related causes continue to contribute significantly to the maternal mortality rate, particularly in the period between six weeks and a year after the end of pregnancy. Addressing these disparities, complexities and mental health concerns must remain an important focus.
(Author, edited)

2023-10815

Association of the presence of a COVID-19 infection at the time of birth and the rates of exclusive breastfeeding upon discharge in BFHI hospitals: a multicenter, prospective cohort study. Gabriel MAM, Lozoya SM, de las Heras Ibarra S, et al (2023), International Breastfeeding Journal vol 18, no 54, October 2023

Full URL: https://doi.org/10.1186/s13006-023-00590-0

Background
Very few studies have assessed the association between COVID-19 infection and the rates of exclusive breastfeeding (EBF) upon discharge following the first waves of the pandemic and after initiation of vaccination. The primary

objective of this study is to compare the rates of EBF since birth upon discharge in mothers diagnosed with COVID-19 infection at the time of the delivery versus a group of non-infected mothers in maternity hospitals with Baby Friendly Hospital Initiative (BFHI) accreditation. The secondary objectives include determining the rates of any breastfeeding at three and six months of life in both groups, as well as determining the possible factors associated with EBF rates observed upon discharge.

Methods
An observational, Spanish multi-center hospital, prospective cohort study conducted from 1 to 2021 to 31 March 2022 and with follow-up during the first six months of life. Follow-up was performed via telephone contact with calls performed at three and six months. A multivariate logistic regression analysis model was used to identify the factors related to a lower probability of EBF upon discharge.

Results
308 mother-infant pairs participated in the study, 111 in the cohort of women with COVID infection and 197 in the comparison group. EBF upon discharge was 62.7% in the COVID group vs. 81.2% in the comparison group (p = 0.002); at three months; 52.4% vs. 57.0% (p = 0.33) were performing EBF, with the rates of EBF at six months being 43.0% vs. 39.3% (p = 0.45), respectively. Exposure to COVID-19 at delivery (AOR 5.28; 95% CI 2.01, 13.86), not practicing BF previously (AOR 36.3; 95% CI 7.02, 187.74), birth via Cesarean section (AOR 5.06; 95% CI 1.62, 15.79) and low birth weight of the newborn (AOR 1.01; 95% CI 1.01, 1.01) were associated with a greater risk of not performing EBF upon discharge.

Conclusions
Mothers with a mild or asymptomatic COVID-19 infection at the time of the delivery were less likely to have exclusively breastfed during their hospital stay than other mothers in these BFHI-accredited hospitals. However, there were no differences in breastfeeding rates between the groups at three and six months postpartum. (Author)

2023-10759

COVID-19 lockdown related to decrease in premature birth rate and increase in birth weight in metropolitan France. Tessier B, Annesi-Maesano I, Cambonie G, et al (2023), Frontiers in Pediatrics 7 September 2023, online
Full URL: https://doi.org/10.3389/fped.2023.1223692

Introduction: The worldwide rate of preterm birth (PTB) has been increasing over the last two decades. COVID-19 lockdowns provide a unique opportunity to assess the effects of socioenvironmental and lifestyle factors on premature birth and birth weight. We explored the effects of COVID-19 lockdowns on the PTB rate and birth weight at a nationwide scale in France until one year after their occurrence.

Material and Methods: This national retrospective observational study evaluated the rate of PTB and birth weight in France from January 2016 to December 2020. Data were obtained from the national Programme Médicalisé des Systèmes d'Information database. The rates of global and sub-categories of PTB were tested. The birth weight was studied before and after lockdown for all live births, for term and premature neonates, and for each category of low birth weight (LBW) by a stratified analysis.

Results: Data from 2,949,372 births from January 2016 to December 2019, including 228,857 PTB, were compared to those of 699,344 births and 51,886 PTB from January to December 2020. The national rate of PTB decreased significantly from 7.7% to 7.3%, when compared with the 2016–2019 period. This decrease was persistent up to 9 months later. It was observed only for moderate PTB, whereas very PTB and extremely PTB remained stable. The national mean birth weight for full-term babies increased after the lockdown and was still observable up to 8 months later (+0.16%, p < 0.0001). The proportion of children with LBW also decreased 2 months after lockdown (−0.15%; p = 0.02). For VLBW, the difference only appeared over the 6-month post-lockdown period (−0.06%; p = 0.006).

Conclusion: This nationwide study shows a significant reduction in prematurity and a significant increase in birth

weight in France after the lockdown for a period of time not limited to the lockdown itself. A more in-depth study of the factors determining these variations may help to drive PTB prevention policies. (Author)

2023-09876

Vlogging Pregnancy and Laboring During the Pandemic on YouTube. Dai Z, Meindl M, Tetteh D (2023), The Journal of Perinatal Education vol 32, no 3, Autumn 2023

Since early 2020, the world has been dealing with the COVID-19 pandemic. The rapid changing situation led to unforeseeable challenges and questions for many people, including pregnant women. Through a textual analysis of personal narratives told via pregnancy and/or laboring vlogs during COVID-19, this present study aims to understand how women from China who live in another country during pregnancy have utilized YouTube vlogs to share their experiences. Through this analysis, we identify various challenges that these women experienced during their pregnancy. The COVID-19 pandemic exaggerated the normal difficulties of these issues and also created additional problems for these women, including regular pregnancy tests, choice of birthing locations, and the support and caring that were normal during this time period. (Author)

2023-09638

Severe Acute Respiratory Syndrome-Coronavirus-2 Antibody Status at the Time of Delivery and the Risk of Preeclampsia. Portmann-Baracco AS, Alcorta-Proaño RG, Nuñez-Mochizaki C, et al (2023), American Journal of Perinatology 26 June 2023, online

Objective Our objective was to evaluate the association between severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) serologic status in immunologically naive patients and the risk of preeclampsia at the time of delivery.

Study Design We conducted a retrospective cohort study of pregnant patients admitted to our institution from August 1 to September 30, 2020. We recorded maternal medical and obstetric characteristics and SARS-CoV-2 serologic status. Our primary outcome was the incidence of preeclampsia. Antibody testing was performed, and patients were classified into seropositive groups: immunoglobulin (Ig)G + , IgM + , or both IgG+ and IgM + . Bivariate and multivariable analyses were performed.

Results We included 275 patients that were negative for SARS-CoV-2 antibodies, and 165 that were positive. Seropositivity was not associated with higher rates of preeclampsia ($p = 0.183$) or with preeclampsia with severe features ($p = 0.916$) even after adjusting for maternal age >35, BMI ≥ 30, nulliparity, and previous history of preeclampsia, and type of serologic status. Previous preeclampsia had the greatest association with the development of preeclampsia (odds ratio [OR] = 13.40; 95% confidence interval [CI]: 4.98–36.09; $p < 0.05$) and with preeclampsia with severe features (OR = 5.46; 95% CI: 1.65–18.02; $p < 0.05$).

Conclusion We found that in an obstetric population, there was no association between SARS-CoV-2 antibody status and the risk of preeclampsia. (Author)

2023-09390

The humbled pivoting voyeur and the shelved and boxed grieving parent - a story of real-time qualitative research in the COVID-19 pandemic. Carruthers K, Hannis D, Robinson J, et al (2023), Journal of Neonatal Nursing 14 July 2023, online

Full URL: https://doi.org/10.1016/j.jnn.2023.07.008

This reflexive piece uniquely discusses the challenges faced by a researcher (PhD Student) conducting real-time longitudinal research during the COVID-19 pandemic. It draws on data gathered from the author's reflexive diary and participant transcripts from an interpretative phenomenological analysis (IPA) study utilising online diaries and semi-structured interviews. Participants were asked about their experiences of shielding their children, who were born preterm, during the COVID-19 pandemic. The note, reflectively and transparently, describes the research experience from the perspective of the PhD student. It explores the complex relationship formed between the researcher and participant, and the impact of this relationship throughout the research process. The piece highlights

unforeseen and unintended psychological consequences of research during a global pandemic. (Author)

2023-09307

Effects of the COVID-19 early pandemic on delivery outcomes among women with and without COVID-19 at birth. Fingar KR, Weiss AJ, Roemer M, et al (2023), Birth 2 August 2023, online

Background

The COVID-19 pandemic may influence delivery outcomes through direct effects of infection or indirect effects of disruptions in prenatal care. We examined early pandemic-related changes in birth outcomes for pregnant women with and without a COVID-19 diagnosis at delivery.

Methods

We compared four delivery outcomes—preterm delivery (PTD), severe maternal morbidity (SMM), stillbirth, and cesarean birth—between 2017 and 2019 (prepandemic) and between April and December 2020 (early-pandemic) using interrupted time series models on 11.8 million deliveries, stratified by COVID-19 infection status at birth with entropy weighting for historical controls, from the Healthcare Cost and Utilization Project across 43 states and the District of Columbia.

Results

Relative to 2017–2019, women without COVID-19 at delivery in 2020 had lower odds of PTD (OR = 0.93; 95% CI = 0.92–0.94) and SMM (OR = 0.88; 95% CI = 0.85–0.91) but increased odds of stillbirth (OR = 1.04; 95% CI = 1.01–1.08). Absolute effects were small across race/ethnicity groups. Deliveries with COVID-19 had an excess of each outcome, by factors of 1.07–1.46 for outcomes except SMM at 4.21. The effect for SMM was more pronounced for Asian/Pacific Islander non-Hispanic (API; OR = 10.51; 95% CI = 5.49–20.14) and Hispanic (OR = 5.09; 95% CI = 4.29–6.03) pregnant women than for White non-Hispanic (OR = 3.28; 95% CI = 2.65–4.06) women.

Discussion

Decreasing rates of PTD and SMM and increasing rates of stillbirth among deliveries without COVID-19 were small but suggest indirect effects of the pandemic on maternal outcomes. Among pregnant women with COVID-19 at delivery, adverse effects, particularly SMM for API and Hispanic women, underscore the importance of addressing health disparities. (Author)

2023-08366

Trends in Characteristics of Births in the United States from 2020 to 2021 during the COVID-19 Pandemic. Simpson KR (2023), MCN - American Journal of Maternal/Child Nursing vol 48, no 5, September/October 2023, pp 287-288

During 2020 and 2021, much attention was devoted to caring for childbearing women in the context of the COVID-19 pandemic. Concerns about minimizing transmission in the inpatient setting during the birth hospitalization, short-staffing, changes in protocols for maternity patients and for support persons and in lengths of stay, and increased stress among the health care team were predominant (George et al., 2021; Iobst et al., 2023). Women who had COVID-19 had worse outcomes compared to women who had not and maternal deaths in the United States due to COVID-19 and other complications were significantly higher than prepandemic rates (Thoma & Declercq, 2022). It is estimated that 102 maternal deaths in 2020 and 401 maternal deaths in 2021 were related to COVID. The overall US maternal mortality rate for 2021 was 32.2 deaths per 100,000 live births compared with a rate of 23.8 in 2020, 20.1 in 2019, and 17.4 in 2018 (United States Government Accountability Office, 2022). Unavailability of vaccines in 2020 followed by vaccine misinformation and mistrust of health care providers and government agencies encouraging vaccines in 2021 likely contributed to less-than-ideal vaccination rates among maternity patients, increasing their risk of adverse outcomes. (Author)

2023-07731

Ethical Considerations for the Delivery of Obstetric and Gynecologic Care During a Pandemic: ACOG Committee

Statement No. 6. ACOG Committee on Ethics (2023), Obstetrics & Gynecology vol 142, no 1, July 2023, pp 225-230

Obstetrician–gynecologists (ob-gyns) are essential to providing high-quality health care, and this duty remains unchanged during pandemics. This Committee Statement discusses ethics related to the provision of obstetric and gynecologic care during a pandemic caused by a highly transmissible pathogen. As health care guidelines related to pandemics are created by institutions, ob-gyns have a responsibility to advocate for obstetric and gynecologic health priorities. Additionally, many clinical practice decisions made to reduce the spread of the infectious agent and maximize physicians' ability to care for those who need help will have ramifications on patient satisfaction, the patient–physician relationship, and equity in health outcomes. Obstetrician–gynecologists are obligated to protect themselves, their patients, and others by using appropriate protective measures (such as personal protective equipment and diagnostic testing) and observing institutional, state, and federal guidelines for the appropriate isolation and care of patients with suspected or confirmed disease. (Author)

2023-07683

Comparatively low rates of COVID-19 in women admitted in labor and their newborns prior to routine vaccination of pregnant women: insights from Denmark. Nielsen SY, Murra M, Pedersen LH, et al (2023), Journal of Maternal-Fetal and Neonatal Medicine vol 36, no 2, 2023, 2229933

Full URL: https://doi.org/10.1080/14767058.2023.2229933

Background: In a country with a high-test frequency, societal lockdown, and pregnancy leave granted from 28 gestational weeks, we investigated SARS-CoV-2 infection in women admitted in labor and their newborn in the pre-vaccine period.

Material and methods: A total of 1042 women admitted for delivery in two Danish hospitals agreed to a plasma sample and nasopharyngeal, vaginal, and rectal swabs and to sampling of umbilical cord blood and a nasopharyngeal swab from their newborn at delivery. Plasma samples from women were examined for SARS-CoV-2 antibodies. If antibodies were detected, or the woman had a positive nasopharyngeal swab upon admission or had a household contact with symptoms consistent with COVID-19, SARS-CoV-2 PCR was performed on plasma and swab samples from mother and child.

Results: Seventeen women (1.6%) were seropositive. Half the newborn (n = 9 (53%)) of seropositive mothers were also seropositive. None of the seropositive women or newborns had clinical signs of COVID-19 and all had SARS-CoV-2 PCR negative plasma and swab samples.

Conclusion: Adherence to specific national guidelines pertaining to testing, self-imposed isolation, and cautious behaviors among pregnant women likely contributed to the exceptionally low prevalence of both prior and current COVID-19 infections detected at the time of childbirth preceding the routine vaccination of pregnant women in Denmark. (Author)

2023-07613

Changes to Birth Plans Due to COVID-19: A Survey of Utah Midwives and Doulas. Ellis J, Ward K, Garrett K, et al (2023), Journal of Midwifery & Women's Health vol 68, no 3, May/June 2023, pp 353-363

Introduction

This study seeks to understand the experiences of Utah midwives and doulas caring for patients during the recent coronavirus disease 2019 (COVID-19) pandemic. Specifically, the goal of the study was to describe the perceived impact on the community birth system and explore differences in the access and use of personal protective equipment (PPE) between in- and out-of-hospital births.

Methods

This study used a cross-sectional, descriptive study design. A 26-item survey developed by the research team was sent via email to Utah birth workers, including nurse-midwives, community midwives, and doulas. Quantitative data were

collected during December 2020 and January 2021. Descriptive statistics were used in the analysis.

Results
Of the 409 birth workers who were sent a link to the survey, 120 (30%) responded: 38 (32%) CNMs, 30 (25%) direct-entry or community midwives, and 52 (43%) doulas. The majority (79%) reported changes to clinical practice during the COVID-19 pandemic. Community midwives (71%) who responded indicated practice volume increased. Survey participants reported an increased patient preference for home births (53%) and birth center births (43%). Among those with one or more patient transfers to the hospital, 61% experienced a change in the process. One participant reported that it took 43 minutes longer to transfer to the hospital. Community midwives and doulas reported poor access to a regular source of PPE.

Discussion
Survey participants reported changes to planned birth locations during the COVID-19 pandemic. When necessary, transfers to hospitals were reported to be slower. Community midwives and doulas reported having insufficient access to PPE and reported limited knowledge about COVID-19 testing resources and resources for educating patients on COVID-19. This study adds an important perspective to the existing literature on COVID-19 by indicating that policymakers should include community birth partners in community planning for natural disasters and future pandemics. (Author)

2023-07112

The SARS-CoV-2 effect: an opportunity to reduce general anaesthesia rates for Caesarean section?. Dixon T, Bhatia K, Columb M (2020), British Journal of Anaesthesia vol 125, no 3, September 2020
Full URL: https://doi.org/10.1016/j.bja.2020.06.021

General anaesthesia rates for Caesarean section have declined markedly in the developed world over the last two decades. We feel COVID-19 has given obstetric anaesthetists in our tertiary unit an opportunity to drive down general anaesthesia rates for Caesarean section further. The significant change in distribution of general anaesthesia rates for Caesarean section possibly suggests greater awareness of risks posed by an aerosol-generating procedure amongst multidisciplinary obstetric team members, or could also be due to staffing changes. This paper recommends that all obstetric units monitor their general anaesthesia rates for Caesarean section as part of quality improvement programmes. (CP)

2023-07109

Evidence of mother-to-newborn infection with COVID-19. Sun M, Xu G, Yang Y, et al (2020), British Journal of Anaesthesia vol 125, no 2, August 2020
Full URL: https://doi.org/10.1016/j.bja.2020.04.066

Some patients with confirmed or suspected coronavirus disease 2019 (COVID-19) need emergency or urgent surgery, including Caesarean delivery. Vertical and perinatal mother-to-newborn transmission of COVID-19 has not yet been confirmed, although there are reports of COVID-19 infections in newborns.
We report three mothers with COVID-19 and the outcomes of their newborns in Henan Province, China. Whilst there is a common belief that general anaesthesia, associated with more aerosol generation during intubation, may increase the risk of transmission of SARS-CoV-2, our case series included a case of potential transmission under regional anaesthesia. The limited case number in this series precludes conclusions about the association between risk of newborn SARS-CoV-2 transmission and type of anaesthesia, such that it is not yet known whether general or neuraxial anaesthesia for Caesarean delivery can lead to different outcomes. (CP)

2023-06956

Three Missed Critical Nursing Care Processes on Labor and Delivery Units During the COVID-19 Pandemic. Edmonds JK, George EK, Iobst SE, et al (2023), JOGNN: Journal of Obstetric, Gynecologic and Neonatal Nursing vol 52, no 4, July 2023, pp 286-295
Full URL: https://doi.org/10.1016/j.jogn.2023.03.002

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Objective
To examine the relationships of three missed critical nursing care processes on labor and delivery units with reduced nursing time at the bedside and adequacy of unit staffing during the COVID-19 pandemic in the United States.
Design
A cross-sectional survey.
Setting
Online distribution from January 14 to February 26, 2021.
Participants
A national convenience sample (N = 836) of registered nurses employed on labor and delivery units.
Methods
We conducted descriptive analyses on respondent characteristics and critical missed care items adapted from the Perinatal Missed Care Survey. We conducted robust logistic regression analyses to assess the relationships of three missed critical nursing care processes (surveillance of fetal well-being, excessive uterine activity, and development of new maternal complications) with reduced nursing time at the bedside and adequacy of unit staffing during the COVID-19 pandemic.
Results
Less nursing time at the bedside was associated with greater odds of missing any of the critical aspects of care, adjusted odds ratio = 1.77, 95% confidence interval [1.12, 2.80]. Adequate staffing greater than or equal to 75% of the time was associated with lower odds of missing any of the critical aspects of care compared to adequate staffing less than or equal to 50% of the time, adjusted odds ratio = 0.54, 95% confidence interval [0.36, 0.79].
Conclusion
Perinatal outcomes are dependent on the timely recognition of and response to abnormal maternal and fetal conditions during childbirth. In times of unexpected complexity in care and resource constraints, a focus on three critical aspects of perinatal nursing care is needed to maintain patient safety. Strategies that enable bedside presence of nurses, including maintaining adequate unit staffing, may help to mitigate missed care. (Author)

2023-06896

Changes in the rate of preterm infants during the COVID-19 pandemic Lockdown Period—data from a large tertiary German University Center. Delius M, Kolben T, Nußbaum C, et al (2023), Archives of Gynecology and Obstetrics 25 May 2023, online

Full URL: https://doi.org/10.1007/s00404-023-07048-y

Purpose
After living with the COVID-19 pandemic for more than 2 years, the impact of lockdown measures on preterm birth rates is inconsistent according to data from different countries. In this study, rates of preterm-born infants during the time of COVID-19-related lockdowns were analyzed in a tertiary perinatal center at Munich University, Germany.

Methods
We analyzed the number of preterm births, infants, and stillbirths before 37 weeks of gestation during the German COVID-19 lockdown period compared to the same time periods in the years 2018 and 2019 combined. Additionally, we expanded the analysis to Pre- and Post-Lockdown Periods in 2020 compared to the respective control periods in the years 2018 and 2019.

Results
Our database shows a reduction in the rate of preterm infants during the COVID-19 lockdown period (18.6%) compared to the combined control periods in 2018 and 2019 (23.2%, p = 0.027). This was mainly based on a reduced rate of preterm multiples during the lockdown period (12.8% vs. 28.9%, p = 0.003) followed by a reversed effect showing a threefold rise in multiple births after the lockdown. In singletons, the rate of preterm births was not reduced during the lockdown. The rate of stillbirths was not affected by the lockdown measures as compared to the control period (0.9% vs. 0.7%, p = 0.750).

Conclusion
During the COVID-19 pandemic lockdown period, we found a reduced rate of preterm-born infants compared to a combined control period in the years 2018 and 2019 in our large tertiary University Center in Germany. Due to the predominant reduction in preterm multiples, we postulate that less physical activity might have led to the protective effect by lockdown measures. (Author)

2023-06708

The Impact of the Pandemic on Home Birth. Pearce R, Todd S, Salt K (2023), The Practising Midwife vol 26, no 5, May 2023, pp 41-44

Over the last decade the trend of home-birth rates in the United Kingdom (UK) has remained consistent, with 2.4% of women giving birth at home in 2020. Throughout the COVID-19 pandemic, maternity services have seen significant changes to visiting policies, delivery of services and the suspension of home-birth services across the UK. This paper will explore the evidence regarding the experiences of those women and birthing people who choose home birth, with the aim to identify women's reasons for choosing a home birth during the pandemic. Some dedicated home-birth teams reported increased referral rates for a home birth and an increase in the amount of home births throughout the initial wave. It is unclear why home-birth rates appeared to have increased in the UK during the pandemic, especially since women's access to home birth may have been limited. (Author)

2023-06633

Performance of a universal prenatal screening program incorporating cell-free fetal DNA analysis in Ontario, Canada. Dougan SD, Okun N, Bellai-Dussault K, et al (2021), Canadian Medical Association Journal (CMAJ) vol 193, no 30, August 2021, E1156-E1163

Full URL: https://doi.org/10.1503/cmaj.202456

BACKGROUND: The emergence of cell-free fetal DNA (cfDNA) testing technology has disrupted the landscape of prenatal screening for trisomies 21 (T21) and 18 (T18). Publicly funded systems around the world are grappling with how to best integrate this more accurate but costly technology, as there is limited evidence about its incremental value in real-world conditions. The objectives of this study were to describe the population-based performance of Ontario's prenatal screening program, which incorporates publicly funded cfDNA screening for specific indications, and the effect of cfDNA testing on the screening and diagnostic choices made by pregnant people.

METHODS: We conducted a retrospective, descriptive cohort study using routinely collected data from Better Outcomes & Registry Network (BORN) Ontario, which captures linked population data for prenatal and neonatal health encounters across Ontario. We included all singleton pregnancies with an estimated due date between Sept. 1, 2016, and Mar. 31, 2019, that underwent publicly funded prenatal screening in Ontario, and a comparison cohort from Apr. 1, 2012, and Mar. 31, 2013. We assessed performance of the screening program for the detection of T21 or T18 by calculating sensitivity, specificity, positive predictive value and negative predictive value against diagnostic cytogenetic results or birth outcomes. We assessed the impact of the program by calculating the proportion of T21 screen-positive pregnancies undergoing subsequent cfDNA screening and invasive prenatal diagnostic testing.

RESULTS: The study cohort included 373 682 pregnancies. The prenatal screening program had an uptake of 69.9%, a screen-positive rate and sensitivity of 1.6% and 89.9% for T21, and 0.2% and 80.5% for T18, respectively. The test failure rate for cfDNA screening was 2.2%. Invasive prenatal diagnostic testing decreased from 4.4% in 2012–2013 to 2.4% over the study period; 65.2% of pregnant people who received a screen-positive result from cfDNA testing went on to have invasive prenatal diagnostic testing. (Author) [Erratum: Canadian Medical Association Journal (CMAJ), vol 193, no 50, December 2021, E1924. https://doi.org/10.1503/cmaj.211995]

2023-06632

Preterm birth and stillbirth rates during the COVID-19 pandemic: a population-based cohort study. Shah PS, Ye XY, Yang J, et al (2021), Canadian Medical Association Journal (CMAJ) vol 193, no 30, August 2021, E1164-E1172

Full URL: https://doi.org/10.1503/cmaj.210081

BACKGROUND: Conflicting reports have emerged for rates of preterm births and stillbirths during the COVID-19 pandemic. Most of these reports did not account for natural variation in these rates. We aimed to evaluate variations in preterm birth and stillbirth rates before and during the COVID-19 pandemic in Ontario, Canada.

METHODS: We conducted a retrospective cohort study using linked population health administrative databases of pregnant people giving birth in any hospital in Ontario between July 2002 and December 2020. We calculated preterm birth and stillbirth rates. We assessed preterm birth at 22–28, 29–32 and 33–36 weeks' gestation, and stillbirths at term and preterm gestation. We used Laney control P' charts for the 18-year study period (6-mo observation periods) and interrupted time-series analyses for monthly rates for the most recent 4 years.

RESULTS: We evaluated 2 465 387 pregnancies, including 13 781 that resulted in stillbirth. The mean preterm birth rate for our cohort was 7.96% (range 7.32%–8.59%). From January to December 2020, we determined that the preterm birth rate in Ontario was 7.87%, with no special cause variation. The mean stillbirth rate for the cohort was 0.56% (range 0.48%–0.70%). From January to December 2020, the stillbirth rate was 0.53%, with no special cause variation. We did not find any special cause variation for preterm birth or stillbirth subgroups. We found no changes in slope or gap between prepandemic and pandemic periods using interrupted time-series analyses.

INTERPRETATION: In Ontario, Canada, we found no special cause variation (unusual change) in preterm birth or stillbirth rates, overall or by subgroups, during the first 12 months of the COVID-19 pandemic compared with the previous 17.5 years.

Preterm birth (birth before 37 weeks' gestation) is a leading cause of mortality and morbidities in the neonatal period, childhood and adulthood. Stillbirth has devastating consequences for families. The causes of both preterm birth and stillbirth are multifactorial. During the pandemic, reports described reductions in preterm birth rates in Denmark,4 the Netherlands, Ireland and the United States. At the same time, increases in stillbirth rates were reported from the United Kingdom, Italy, Nepal and India, with or without changes in rates of preterm births. Meta-analyses have emerged with differing conclusions. Some speculated reasons for reductions in preterm births included reductions in physical activity during pregnancy, reduced stress related to work–life balance, less exposure to infection, fewer medical interventions, reduced travel and pollution, and improved hygiene and rest. Proposed reasons for increases in preterm birth rates include higher stress due to worry about the pandemic, employment or financial challenges, home schooling and reduced maternity services. Less stringent fetal surveillance from reduced attendance at medical appointments for fear of infection, cancellation of face-to-face appointments and reduced staffing for maternity services are possible reasons for increased rates of stillbirths. Thus, it is important to evaluate preterm births and stillbirths simultaneously to understand the true impact.

Some previous reports compared preterm birth and stillbirth rates during the pandemic to similar time periods in the past few years. However, within a jurisdiction, these rates are known to fluctuate between epochs and, thus, it is preferable to evaluate rates over longer periods to establish whether observed variations are usual (common cause variation) or unusual (special cause variation). Our objective was to evaluate whether the COVID-19 pandemic affected preterm birth or stillbirth rates in Ontario by comparing rates for the early COVID-19 pandemic time period with rates from the previous 17.5 years to identify patterns of variation. (Author)

2023-06258

Childbirth experience during the COVID-19 pandemic: A qualitative thematic analysis. Cruz-Ramos MC, Resurrección DM, Hernández-Albújar Y (2023), Midwifery vol 121, June 2023, 103669

Introduction

Pregnancy is a period of special vulnerability for the mental health of women. The arrival of the COVID-19 pandemic altered the routines of pregnant women, its effects on this population are thus far unknown. Therefore, the objective of this study is to understand the impact of the pandemic on the birth experience of women during the state of

emergency in Andalusia, Spain.

Methods
A qualitative study was conducted with 14 women, using semistructured interviews via telematics. These were recorded and later transcribed using the F4transkript software. In order to analyze the data retrieved from the interviews and identify the main patterns of meaning/responses, the thematic analysis method was applied.

Results
The main emerging themes were 'prenatal medical care', 'hospital safety', and 'postpartum with COVID-19 restrictions'. The results indicated that the reorganization of perinatal medical care, the lack of information, and the fear of contagion were the factors that most negatively influenced the participants. Instead, the security during the birth process and the tranquility in postpartum were the positive aspects of the birth experiences during COVID-19.

Conclusion
This is the first qualitative study in Andalusia that identifies the specific aspects of the COVID-19 pandemic that have affected the mental health of pregnant women. The results contribute to a broader perception of the experience of women and the creation of health protocols for emergencies akin to the COVID-19 pandemic. (Author)

2023-06090

Late miscarriage and stillbirth in asymptomatic and symptomatic hospitalised pregnant women in Belgium during the first and second waves of COVID-19: a prospective nationwide population-based study. Vercoutere A, Zina MJ, Benoit K, et al (2023), BMC Pregnancy and Childbirth vol 23, no 356, May 2023

Full URL: https://doi.org/10.1186/s12884-023-05624-3

Background
Stillbirth has been recognized as a possible complication of a SARS-CoV-2 infection during pregnancy, probably due to destructive placental lesions (SARS-CoV-2 placentitis). The aim of this work is to analyse stillbirth and late miscarriage cases in unvaccinated pregnant women infected with SARS-CoV-2 during the first two waves (wild-type period) in Belgium.

Methods
Stillbirths and late miscarriages in our prospective observational nationwide registry of SARS-CoV-2 infected pregnant women (n = 982) were classified by three authors using a modified WHO-UMC classification system for standardized case causality assessment.

Results
Our cohort included 982 hospitalised pregnant women infected with SARS-CoV-2, with 23 fetal demises (10 late miscarriages from 12 to 22 weeks of gestational age and 13 stillbirths). The stillbirth rate was 9.5‰ for singleton pregnancies and 83.3‰ for multiple pregnancies, which seems higher than for the background population (respectively 5.6‰ and 13.8‰). The agreement between assessors about the causal relationship with SARS-Cov-2 infection was fair (global weighted kappa value of 0.66). Among these demises, 17.4% (4/23) were “certainly” attributable to SARS-CoV-2 infection, 13.0% (3/23) “probably” and 30.4% (7/23) “possibly”. Better agreement in the rating was noticed when pathological examination of the placenta and identification of the virus were available, underlining the importance of a thorough investigation in case of intra-uterine fetal demise.

Conclusions
SARS-CoV-2 causality assessment of late miscarriage and stillbirth cases in our Belgian nationwide case series has shown that half of the fetal losses could be attributable to SARS-CoV-2. We must consider in future epidemic emergencies to rigorously investigate cases of intra-uterine fetal demise and to store placental tissue and other material for future analyses. (Author)

2023-05702

The effect of COVID-19 on women's experiences of pregnancy, birth and postpartum in Indonesia: a rapid online survey.
McGowan L, Astuti A, Hafidz F, et al (2023), BMC Pregnancy and Childbirth vol 23, no 304, May 2023

Full URL: https://doi.org/10.1186/s12884-023-05566-w

Background
The interrelationship of psychological and social factors in the current COVID-19 pandemic has been highlighted in research mainly focused on the global north. The impact of lockdowns can exacerbate psychological distress and affect access to services. Less is known about the psychosocial impact on women in the context of lower-middle income countries (LMICs); the aim of this study was to capture the impact of COVID-19 on women's experiences of pregnancy, birth and postpartum in Indonesia.

Methods
We conducted a rapid cross-sectional online survey of women across all 34 provinces in Indonesia to capture participants' experiences. Data were collected between 10th July to 9th August 2020 including demographics, effects on general and mental health and impact on service use. Descriptive statistics and thematic analysis were used to analyse responses, including those women who self-identified with a pre-existing mental health problem.

Results
Responses were obtained from 1137 women, this included pregnant women (n = 842) and postpartum women (n = 295). The majority of women (97%) had accessed antenatal care during their pregnancy, but 84% of women reporting feeling fearful and anxious about attending visits, resulting in some women not attending or changing provider. A small number (13%) were denied the presence of a birth companion, with 28% of women reporting that their babies had been removed at birth due to protocols or baby's health. Feeling anxious was a common experience among women (62%) during their pregnancy, birth or postnatal period, with a small number (9%) feeling depressed. Lockdown measures led to tensions within personal and family relationships.

Conclusions
Women in Indonesia reported that the pandemic added an increased burden in pregnancy, birth and post-partum period: physically, psychologically, spiritually and financially. Maternity services were disrupted and health insurance cover lacked responsiveness, which either directly or indirectly impacted on women's choices, and equal access to care. Given the longevity of the current pandemic there is a need to develop tailored supportive interventions for women and their families and develop bespoke training for midwives and other relevant health professionals. (Author)

2023-05375

Reductions in stillbirths and preterm birth in COVID-19–vaccinated women: a multicenter cohort study of vaccination uptake and perinatal outcomes. Hui L, Marzan MB, Rolnik DL, et al (2023), American Journal of Obstetrics & Gynecology (AJOG) vol 228, no 5, May 2023, pp. 585.E1-585.E16

Background
COVID-19 infection in pregnancy is associated with a higher risk of progression to severe disease, but vaccine uptake by pregnant women is hindered by persistent safety concerns. COVID-19 vaccination in pregnancy has been shown to reduce stillbirth, but its relationship with preterm birth is uncertain.
Objective
This study aimed to measure the rate of COVID-19 vaccine uptake among women giving birth in Melbourne, Australia, and to compare perinatal outcomes by vaccination status.
Study Design
This was a retrospective multicenter cohort study conducted after the June 2021 government recommendations for messenger RNA COVID-19 vaccination during pregnancy. Routinely collected data from all 12 public maternity hospitals in Melbourne were extracted on births at ≥20 weeks' gestation from July 1, 2021 to March 31, 2022. Maternal

sociodemographic characteristics were analyzed from the total birth cohort. Perinatal outcomes were compared between vaccinated and unvaccinated women for whom weeks 20 to 43 of gestation fell entirely within the 9-month data collection period. The primary outcomes were the rates of stillbirth and preterm birth (spontaneous and iatrogenic) in singleton pregnancies of at least 24 weeks' gestation, after exclusion of congenital anomalies. Secondary perinatal outcomes included the rate of congenital anomalies among infants born at ≥20 weeks' gestation and birthweight ≤third centile and newborn intensive care unit admissions among infants born without congenital anomalies at ≥24 weeks' gestation. We calculated the adjusted odds ratio of perinatal outcomes among vaccinated vs unvaccinated women using inverse propensity score-weighting regression adjustment with multiple covariates; P<.05 was considered statistically significant.
Results
Births from 32,536 women were analyzed: 17,365 (53.4%) were vaccinated and 15,171 (47.6%) were unvaccinated. Vaccinated women were more likely to be older, nulliparous, nonsmoking, not requiring an interpreter, of higher socioeconomic status, and vaccinated against pertussis and influenza. Vaccination status also varied by region of birth. Vaccinated women had a significantly lower rate of stillbirth compared with unvaccinated women (0.2% vs 0.8%; adjusted odds ratio, 0.18; 95% confidence interval, 0.09–0.37; P<.001). Vaccination was associated with a significant reduction in total preterm births at <37 weeks (5.1% vs 9.2%; adjusted odds ratio, 0.60; 95% confidence interval, 0.51–0.71; P<.001), spontaneous preterm birth (2.4% vs 4.0%; adjusted odds ratio, 0.73; 95% confidence interval, 0.56–0.96; P=.02), and iatrogenic preterm birth (2.7% vs 5.2%; adjusted odds ratio, 0.52; 95% confidence interval, 0.41–0.65; P<.001). Infants born to vaccinated mothers also had lower rates of admission to the neonatal intensive care unit. There was no significant increase in the rate of congenital anomalies or birthweight ≤3rd centile in vaccinated women. Vaccinated women were significantly less likely to have an infant with a major congenital anomaly compared with the unvaccinated group (2.4% vs 3.0%; adjusted odds ratio, 0.72; 95% confidence interval, 0.56–0.94; P=.02). This finding remained significant even when the analysis was restricted to women vaccinated before 20 weeks' gestation.
Conclusion
COVID-19 vaccination during pregnancy was associated with a reduction in stillbirth and preterm birth, and not associated with any adverse impact on fetal growth or development. Vaccine coverage was substantially influenced by known social determinants of health. (Author)

2023-04801

The influence of being pregnant during the COVID-19 pandemic on birth expectations and antenatal bonding. Schaal NK, Hagenbeck C, Helbig M, et al (2023), Journal of Reproductive and Infant Psychology vol 41, no 1, 2023, pp. 15-25

Purpose
The aim of the present study was to compare birth expectations and antenatal bonding of women pregnant prior to and during the COVID-19 pandemic.

Materials and methods
In total, 74 pregnant women (mean age: 33.9 ± 4.1 years, gestational age: 36 ± 2 weeks) participated in the study, who were pregnant either during the the COVID-19 pandemic (corona group, N = 35, April–July 2020) or before the pandemic (control group, N = 39, October 2017–January 2019). Birth expectations were measured using the Wijma Delivery Expectancy Questionnaire (WDEQ) and Salmon's Item List (SIL) and antenatal bonding with the Maternal Antenatal Attachment Scale (MAAS). Additionally, the corona group indicated their level of worry regarding different pandemic-related aspects using visual analogue scales.

Results
The corona group displayed significantly elevated fear of childbirth measured by the WDEQ and lower antenatal bonding quality compared to the control group. The additional items regarding COVID-19 burdens highlighted that the aspects that the partner may not be present during labour and that no visitors will be allowed in hospital were associated with the highest worries.

Conclusions

Midwives and gynaecologists should be aware of the negative impact of the COVID-19 pandemic on fear of childbirth and antenatal bonding. (Author)

2023-04760

COVID-19 mitigation measures increase preterm birth and low birth weight in the public healthcare system in Uruguay.
Briozzo L, Tomasso G, Trujillo J, et al (2023), International Journal of Gynecology & Obstetrics vol 162, no 2, August 2023, pp 718-724

Objective
To evaluate the impact of the COVID-19 pandemic on preterm birth (PB) and low birth weight (LBW), comparing public and private healthcare systems of the National Integrated Health System in Uruguay, where the mitigation measures for the COVID-19 pandemic generated an immediate socioeconomic and psychological crisis, which caused a sharp widening of existing socioeconomic inequalities.

Methods
A national observational study was conducted comparing perinatal outcomes in the first 6 months of 2020 (period of the pandemic without pregnancy infections), which was the beginning of the pandemic, with the same period of the previous year 2019 (pre-pandemic period with no mitigation measures) among pregnant women from the public and private health systems. Data were retrieved from the national database (Informatic Perinatal System) and analyzed by healthcare system category.

Results
A total of 36 559 deliveries were assessed: 18 563 in the 2019 study period and 17 996 in the 2020 study period. In the public system, there was a significant increase in the risk of LBW (adjusted relative risk [aRR] 1.12, 95% confidence interval [CI] 1.05–1.36) and of the composite outcome (PB or LBW) (aRR 1.15, 95% CI 1.04–1.26). In the private system, by contrast, there was a non-statistically significant decrease of LBW and there were no changes in the incidence of PB and the composite outcome in 2020.

Conclusion
The different evolution of birth outcomes in the public and private systems suggests an unequal impact of mitigation measures on populations of different socioeconomic levels. Given that no COVID-19 infections were identified in pregnant women during the study period, this research offers an opportunity to differentiate the biologic effects of the virus from the psychological and social impacts derived from containment measures. (Author)

2023-04669

Applying Lessons Learned from the COVID-19 Pandemic to Future Threats to the Perinatal Care System. Combellick J, Ibrahim BB, Scharer K, et al (2023), Journal of Midwifery & Women's Health vol 68, no 3, May/June 2023, pp 333-339
Full URL: https://doi.org/10.1111/jmwh.13481

Introduction
Health care systems will continue to face unpredictable challenges related to climate change. The COVID-19 pandemic tested the ability of perinatal care systems to respond to extreme disruption. Many childbearing people in the United States opted out of the mainstream choice of hospital birth during the pandemic, leading to a 19.5% increase in community birth between 2019 and 2020. The aim of the study was to understand the experiences and priorities of childbearing people as they sought to preserve a safe and satisfying birth during the time of extreme health care disruption caused by the pandemic.

Methods
This exploratory qualitative study recruited participants from a sample of respondents to a national-scope web-based survey that explored experiences of pregnancy and birth during the COVID-19 pandemic. Maximal variation sampling was used to invite survey respondents who had considered a variety of birth setting, perinatal care provider, and care

model options to participate in individual interviews. A conventional content analysis approach was used with coding categories derived directly from the transcribed interviews.

Results
Interviews were conducted with 18 individuals. Results were reported around 4 domains: (1) respect and autonomy in decision-making, (2) high-quality care, (3) safety, and (4) risk assessment and informed choice. Respect and autonomy varied by birth setting and perinatal care provider type. Quality of care and safety were described in relational and physical terms. Childbearing people prioritized alignment with their personal philosophies toward birth as they weighed safety. Although levels of stress and fear were elevated, many felt empowered by the sudden opportunity to consider new options.

Discussion
Disaster preparedness and health system strengthening should address the importance childbearing people place on the relational aspects of care, need for options in decision-making, timely and accurate information sharing, and opportunity for a range of safe and supported birth settings. Mechanisms are needed to build system-level changes that respond to the self-expressed needs and priorities of childbearing people. (Author)

2023-04469

The impact of the Covid-19 pandemic on maternal delivery experiences and breastfeeding practices in China: data from a cross-sectional study. Yu J, Gao M, Wei Z, et al (2022), BMC Pediatrics vol 22, no 104, February 2022

Full URL: https://doi.org/10.1186/s12887-022-03155-y

Background
The COVID-2019 pandemic has placed extensive pressure on health systems and posed a severe public health challenge worldwide. Lockdown measures implemented in many countries have delayed virus spread. However, a considerable number of people have faced unprecedented pressure, especially pregnant and breast-feeding women, because face-to-face professional support has been reduced during the lockdown in many countries.

Objectives
To compare the delivery and infant feeding experiences of women who delivered before (BL) versus during (DL) the Covid-19 pandemic in Beijing, China and to investigate predictors of breastfeeding at 6-months.

Methods
Women aged ≥18 years with an infant ≤18 months of age completed an anonymous survey. Information/links were shared online and via local clinics in Beijing. Logistic regression was performed to assess predictors of breastfeeding during the first 6-months.

Results
One thousand eight hundred seven women provided data; BL 1231 (68.1%), DL 576 (31.9%). Significantly more mothers in DL group reported the lockdown had moderate to high impact to their household income ($p = 0.013$) and the convenience of purchasing daily necessities($p = 0.014$). Compared to BL mothers, significantly more mothers in the DL groups thought their birth location and breastfeeding intention had been effected by the COVID-19 ($p < 0.001$, $p = 0.036$ respectively). Mostly breastfeeding (MBF, mainly breastfeeding with few non-formula fluids added) at 6 months was predicted by delivery during the lockdown period (OR1.43, 95% confidence interval (CI) 1.08, 1.90), younger maternal age (OR 0.96, 95%CI 0.93, 0.99), getting support from friends or relatives (OR 1.95, 95%CI 1.06, 3.59), and discussing health issues in online groups > four times a week (OR 1.66, 95%CI 1.09, 2.53).

Conclusion
The COVID-19 pandemic and lockdown measures influenced mothers' planned birth location and breastfeeding intention. However, breastfeeding practice was maintained during the pandemic. Our results highlight the importance of feeding support as well as potential beneficial effects of increased mother-infant contact during the lockdown

period which is relevant even under normal circumstances. (Author)

2023-04459

United States Preterm Birth Rate and COVID-19. Dench D, Joyce T, Minkoff H (2022), Pediatrics vol 149, no 5, May 2022, e2021055495

Full URL: https://doi.org/10.1542/peds.2021-055495

Uses the census of births in the United States from 2010 to 2020 to characterise monthly changes in preterm birth by method of delivery adjusted for seasonality and trend in order to investigate a decline in preterm birth after the COVID-19 lockdown in March 2020. (MB)

2023-03981

COVID-19 and obstetric outcomes: a single-center retrospective experience in a predominantly Black population. Kuriloff M, Patel E, Mueller A, et al (2023), Journal of Maternal-Fetal and Neonatal Medicine vol 36, no 1, 2023, 2196364

Full URL: https://doi.org/10.1080/14767058.2023.2196364

Objective: This retrospective, single-center case series was designed to characterize the effects of perinatal COVID-19 diagnosis on obstetric and neonatal outcomes in a predominantly high-risk, urban Black population.

Study Design: Data were collected via retrospective chart review on all COVID-19-positive obstetric patients and their neonates who presented to the University of Chicago Medical Center between March 2020 and November 2020, before the availability of the COVID-19 vaccine. Patient demographics, delivery outcomes, COVID-19 symptoms, treatment, and outcomes were analyzed.

Results: A total of 56 COVID-19-positive obstetric patients were included in the study, of which four were lost to follow-up before delivery. The median age of patients was 27 years (IQR 23, 32), with 73.2% publicly insured and 66.1% Black. Patients had a median body mass index (BMI) of 31.6 kg/m2 (IQR 25.9, 35.5). 3.6% of patients had chronic hypertension, 12.5% had diabetes, and 16.1% had asthma. Perinatal complications were common. Twenty-six patients (50.0%) had a diagnosis of a hypertensive disorder of pregnancy (HDP). 28.8% had gestational hypertension, and 21.2% had preeclampsia (with and without severe features). The rate of maternal ICU admission was 3.6%. Furthermore, 23.5% of patients delivered preterm (<37 weeks gestation), and 50.9% of infants were admitted to the Neonatal Intensive Care Unit (NICU).

Conclusion: In our study of a predominantly Black, publicly-insured, unvaccinated group of COVID-19-positive pregnant patients, we found high rates of hypertensive disorders of pregnancy, preterm delivery, and NICU admission compared to rates reported in existing literature before widespread vaccine availability. Our findings suggest that SARS-CoV-2 infection during pregnancy, irrespective of maternal disease severity, may exacerbate existing obstetric health disparities by disproportionately impacting Black, publicly insured patients. Larger comparative studies are needed to better characterize possible racial and socioeconomic disparities in obstetric outcomes in the setting of SARS-CoV-2 infection during pregnancy. These studies should examine the pathophysiology of SARS-CoV-2 infection during pregnancy, as well as potential associations between adverse perinatal outcomes and disparities in access to care, COVID-19 vaccination, and other social determinants of health amongst more vulnerable populations infected with SARS-CoV-2 during pregnancy. (Author)

2023-03964

The impact of COVID-19 pandemic on obstetrics and gynecology hospitalization rate and on reasons for seeking emergency care: a systematic review and meta-analysis. Carbone L, Raffone A, Travaglino A, et al (2023), Journal of Maternal-Fetal and Neonatal Medicine vol 36, no 1, 2023, 2187254

Full URL: https://doi.org/10.1080/14767058.2023.2187254

Background

During the lockdown due to COVID-19 pandemic, utilization of emergency care units has been reported to be reduced

for obstetrical and gynaecological reasons. The aim of this systematic review is to assess if this phenomenon reduced the rate of hospitalizations for any reason and to evaluate the main reasons for seeking care in this subset of the population.

Methods
The search was conducted using the main electronic databases from January 2020 to May 2021. The studies were identified with the use of a combination of: “emergency department” OR “A&E” OR “emergency service” OR “emergency unit” OR “maternity service” AND “COVID-19” OR “COVID-19 pandemic” OR “SARS-COV-2” and “admission” OR “hospitalization”. All the studies that evaluated women going to obstetrics & gynecology emergency department (ED) during the COVID-19 pandemic for any reason were included.

Results
The pooled proportion (PP) of hospitalizations increased from 22.7 to 30.6% during the lockdown periods, in particular from 48.0 to 53.9% for delivery. The PP of pregnant women suffering from hypertensive disorders increased (2.6 vs 1.2%), as well as women having contractions (52 vs 43%) and rupture of membranes (12.0 vs 9.1%). Oppositely, the PP of women having pelvic pain (12.4 vs 14.4%), suspected ectopic pregnancy (1.8 vs 2.0), reduced fetal movements (3.0 vs 3.3%), vaginal bleeding both for obstetrical (11.7 vs 12.8%) and gynecological issues (7.4 vs 9.2%) slightly reduced.

Conclusion
During the lockdown, an increase in the proportion of hospitalizations for obstetrical and gynecological reasons has been registered, especially for labor symptoms and hypertensive disorders. (Author)

2023-03448

Declaration of emergency state due to COVID-19 spread in Japan reduced maternal transports without reduction in preterm delivery. Homma C, Hasegawa J, Nishimura Y, et al (2023), International Journal of Gynecology & Obstetrics vol 161, no 3, June 2023, pp 854-860

Introduction
To clarify whether the declaration of an emergency state due to the spread of COVID-19 in Japan affected the number of maternal transports and premature births.

Methods
A questionnaire-based descriptive study was conducted in perinatal centers throughout Japan in 2020. The incidence of maternal transport and preterm delivery rates every month after the COVID-19 spread in 2020 were compared with those in 2019.

Results
Participants were recruited from 52 perinatal centres. The maternal transport rate (maternal transports per number of deliveries) was 10.6% in April and 11.0% in June 2020, compared with 12.5% in 2019 ($P < 0.05$). The maternal transport rate due to preterm labor was 4.8% in April 2020 and 5.8% in 2019 ($P < 0.05$). The maternal transport rate during the declaration of emergency state decreased by 21% in April 2020 in non-emergency-declared prefectures, and decreased by 17% in May 2020 in emergency-declared prefectures. However, there was no significant difference in the preterm delivery rate between 2020 and 2019, regardless of the prefecture and gestational period.

Conclusion
Declaration of the emergency status due to COVID-19 spread in Japan reduced maternal transport due to preterm labor, but did not reduce preterm delivery itself. (Author)

2023-03441

Lessons from digital technology-enabled health interventions implemented during the coronavirus pandemic to

improve maternal and birth outcomes: a global scoping review. Moise IK, Ivanova N, Wilson C, et al (2023), BMC Pregnancy and Childbirth vol 23, no 195, March 2023
Full URL: https://doi.org/10.1186/s12884-023-05454-3

Background
Timely access to essential obstetric and gynecologic healthcare is an effective method for improving maternal and neonatal outcomes; however, the COVID-19 pandemic impacted pregnancy care globally. In this global scoping review, we select and investigate peer-reviewed empirical studies related to mHealth and telehealth implemented during the pandemic to support pregnancy care and to improve birth outcomes.

Methods
We searched MEDLINE and PubMed, Scopus, CINAHL and Web of Science for this Review because they include peer-reviewed literature in the disciplines of behavioral sciences, medicine, clinical sciences, health-care systems, and psychology. Because our investigative searches reviewed that there is considerable 'grey literature' in this area; we did not restrict our review to any study design, methods, or place of publication. In this Review, peer-reviewed preprints were comparable to published peer-reviewed articles, with relevant articles screened accordingly.

Results
The search identified 1851 peer reviewed articles, and after removal of duplicates, using inclusion and exclusion criteria, only 22 studies were eligible for inclusion in the review published from January 2020 to May 2022. mHealth interventions accounted for 72.7% (16 of 22 studies) and only 27.3% (6 of 22 studies) were telehealth studies. There were only 3 example studies that integrated digital technologies into healthcare systems and only 3 studies that developed and evaluated the feasibility of mobile apps. Experimental studies accounted 68.8% of mHealth studies and only 33.3% studies of telehealth studies. Key functionalities of the pregnancy apps and telehealth platforms focused on mental and physical wellness, health promotion, patient tracking, health education, and parenting support. Implemented interventions ranged from breastfeeding and selfcare to behavioral health. Facilitators of uptake included perceived benefits, user satisfaction and convenience. Mobile apps and short messaging services were the primary technologies employed in the implemented mHealth interventions.

Conclusion
Although our Review emphasizes a lack of studies on mHealth interventions and data from pregnant women during the COVID-19 crisis, the review shows that implementation of digital health interventions during emergencies are inevitable given their potential for supporting pregnancy care. There is also a need for more randomized clinical trials and longitudinal studies to better understand the effectiveness and feasibility of implementing such interventions during disease outbreaks and emergencies. (Author)

2023-03417
Examination of cord blood at birth in women with SARS-CoV-2 exposure and/or vaccination during pregnancy and relationship to fetal complete blood count, cortisol, ferritin, vitamin D, and CRP. Mendenhall E, Hogan MB, Nudelman M, et al (2023), Frontiers in Pediatrics 16 March 2023, online
Full URL: https://doi.org/10.3389/fped.2023.1092561

Background: SARS-CoV-2 is known to manifest a robust innate immune response. However, little is known about inflammatory influences from maternal SARS-CoV-2 infection or maternal mRNA vaccination upon the fetus. In addition, it is unknown if Vitamin D deficiency influences fetal homeostasis or if an anti-inflammatory mechanism to the development of possible innate cytokines or acute phase reactants by the maternal/fetal dyad, in the form of cortisol elevations, occur. In addition, effects on Complete Blood Count (CBC) are not known.

Objective: To evaluate the neonatal acute phase reactants and anti-inflammatory responses after maternal SARS-CoV-2 disease or mRNA vaccination.

Methods: Samples and medical records reviews from mother/baby dyads (n = 97) were collected consecutively, and

were categorized into 4 groups; no SARS-CoV-2 or vaccination exposure (Control), Vaccinated mothers, maternal SARS-CoV-2 disease positive/IgG titer positive fetal blood, and maternal SARS-CoV-2 positive/IgG titer negative fetal blood. SARS-CoV-2 IgG/IgM/IgA titers, CBC, CRP, ferritin, cortisol, and Vitamin D were obtained to examine the possible development of an innate immune response and possible anti-inflammatory response. Student's t-test, Wilcoxon rank-sum, and Chi-squared with Bonferroni corrections were used to compare groups. Multiple imputations were performed for missing data.

Results: Cortisol was higher in babies of both mothers who were vaccinated ($p = 0.001$) and SARS-CoV-2 positive/IgG positive ($p = 0.009$) as compared to the control group suggesting an attempt to maintain homeostasis in these groups. Measurements of ferritin, CRP, and vitamin D did not reach statistical significance. CBC showed no variation, except for the mean platelet volume (MPV), which was elevated in babies whose mothers were vaccinated ($p = 0.003$) and SARS-CoV-2 positive/IgG positive ($p = 0.007$) as compared to the control group.

Conclusion: Acute phase reactant elevations were not noted in our neonates. Vitamin D levels were unchanged from homeostatic levels. Cord blood at birth, showed Cortisol and MPV higher in vaccinated and SARS-CoV-2 IgG positive mother/baby dyads as compared to the Control group, indicating that possible anti-inflammatory response was generated. The implication of possible inflammatory events and subsequent cortisol and/or MPV elevation effects upon the fetus after SARS-CoV-2 disease or vaccination is unknown and merits further investigation. (Author)

2023-03346

Did everyone change their childbirth plans due to the COVID-19 pandemic? A web-based cross-sectional survey of Polish pregnant women. Feduniw S, Kajdy A, Sys D, et al (2023), Journal of Advanced Nursing vol 79, no 7, July 2023, pp 2664-2674

Background and Aim
With the worldwide outbreak of coronavirus, a significant impact has been observed on the functioning of healthcare systems and the process of childbirth. Women probably did not even have a choice to adjust their plans accordingly to the current situation. The aim of the study was to examine how the outbreak of the SARS CoV-2 pandemic state affected the decisions of pregnant women about their childbirth plan.

Design
This cross-sectional study was performed using a web-based survey published on social media in Poland.

Methods
The cross-sectional study was performed using web-based questionnaires. The study group included Polish women who changed their childbirth plans, compared to a group of women not sure about delivery plan change and those whose plans had not changed. The data were collected from 4 March 2020 to 2 May 2020, when the first rising count of new infections was observed in Poland and worldwide. Statistical analysis was performed using STATISTICA Software, Inc., 13.3 (2020).

Results
Of 969 women who completed the questionnaire and were enrolled into the study, 57.2% had not changed their childbirth plans (group I), 28.4% had changed their plans (group II), and 14.4% of respondents answered “not sure” to this question (group III). The majority of women changed their birth plans during the pandemic because of the potential absence of their partner during labour (56% of women who had changed their plans and 48% of those whose answer was “I am not sure”, $p < .001$). Another reason was the fear of separation from the child after delivery (33% of women who had changed their plans and 30% of those whose answer was “I am not sure”, $p < .001$).

Conclusion
Restrictions due to the COVID-19 outbreak have influenced the childbirth plans of pregnant women. The changes were independent of women's vision of birth before the pandemic.

Impact
The restriction on births with accompanying person and the risk of separation from their infant after childbirth significantly influenced the decision-making process. As a result, some women were more likely to opt for a home birth with or even without medical assistance.

Patient or Public Contribution
The study participants were women who were pregnant at the time of completing the questionnaire, were over 18 years old and spoke Polish. (Author)

2023-03043

Preterm Birth Rates and Racial Disparities during the COVID-19 Pandemic at a Single Institution in the Southeastern United States. Cate JJM, Craig AM, Hughes BL, et al (2023), American Journal of Perinatology 21 February 2023, online

Objective The COVID pandemic has been associated with varied effects on preterm birth (PTB). We sought to compare rates of PTB during the pre- and post vaccination COVID periods with pre-pandemic PTB rates, stratified by race and ethnicity.

Study Design Retrospective cohort comparing all deliveries over 20 weeks at a single tertiary center during "early" (March 2020–June 2020) versus "late" COVID (March 2021–June 2021), and "late" COVID versus pre-COVID (March to June 2014–2019). PTBs <37, <34, and <28 weeks were compared and stratified by race/ethnicity.

Results A total of 16,483 deliveries occurred including 2,068 "early" COVID, 2,115 "late" COVID, and 12,300 pre-COVID. The PTB rate during "late" COVID was lower compared to "early" COVID (12.1 vs. 14.6%, p = 0.02). Rate of PTB <34 was also lower during "late" COVID (4.4 vs. 5.7%, p = 0.05). PTB <28 did not differ. When controlling for prior PTB, "late" COVID remained associated with a decreased risk of PTB compared to "early" COVID, adjusted odds ratio (aOR) of 0.82 (95% confidence interval [CI]: 0.68, 0.98). Although there was no difference in PTB among Hispanic individuals when comparing "late" COVID versus pre-COVID, when further subdivided, a small number of Hispanic Puerto Rican individuals had higher odds of PTB < 37 during "late" COVID versus pre-COVID (aOR = 4.29 [95% CI: 1.12, 16.4]). Additionally, White individuals had reduced odds of PTB <37 (aOR = 0.80 [95% CI: 0.65, 0.98]) during "late" COVID versus pre-COVID while the PTB rate was unchanged when comparing "late" COVID versus pre-COVID in all other racial and ethnic groups.

Conclusion During 2021, PTB rates decreased from rates observed in 2020 at the height of COVID restrictions. Among White birthing individuals, PTB decreased in 2021 compared to pre-COVID rates. This decrease was not observed in Black and Hispanic birthing individuals. These data highlight the continued racially disparate impact of the COVID-19 pandemic on PTB rates. (Author)

2023-03030

Neuraxial Anesthesia during the COVID-19 Pandemic: Report from a Large Academic Medical Center. Ogunkua OT, Adhikari EH, Gasanova I, et al (2023), American Journal of Perinatology 15 February 2023, online

Objective Three primary neuraxial techniques reduce labor pain: epidural, dural puncture epidural (DPE), and combined spinal-epidural (CSE). This study aims to determine whether neuraxial analgesia techniques changed after the onset of the coronavirus disease 2019 (COVID-19) pandemic. Given that a dural puncture confirms neuraxial placement, we hypothesized that DPE was more frequent in women with concerns for COVID-19.

Study Design A single-center retrospective cohort study comparing neuraxial analgesia techniques for labor and delivery pain management before and after the onset of the COVID-19 pandemic and in patients with and without SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) at a maternity hospital in Dallas, Texas, with a large delivery service. Statistical analyses included the Chi-square test for categorical and Kruskal–Wallis test for

nonparametric ordinal comparisons. The Cochran–Mantel–Haenszel test was used to assess the association between neuraxial technique and accidental dural puncture or postdural puncture headache.

Results Of 10,971 patients who received neuraxial analgesia for labor, 5,528 were delivered in 2019 and 5,443 in 2020. Epidural analgesia was the most common neuraxial technique for labor pain in 2019 and 2020. There was no difference in the frequency of neuraxial analgesia techniques or the rates of accidental dural puncture or postdural puncture headaches comparing all deliveries in 2019 to 2020. Despite a significant increase in DPEs relative to epidurals in the SARS-CoV-2-positive group compared with the SARS-CoV-2-negative group in 2020, there was no significant difference in postdural puncture headaches or accidental dural punctures.

Conclusion The advantages of a DPE, specifically the ability to confirm epidural placement using a small gauge spinal needle, likely led to an increase in the placement of this neuraxial in SARS-CoV-2-positive patients. There was no effect on the frequency of postdural puncture headaches or accidental dural punctures within the same period. (Author)

2023-03000

Patterns of Prenatal Care Delivery and Obstetric Outcomes before and during the COVID-19 Pandemic. Kern-Goldberger AR, Sheils NE, Ventura MEM, et al (2023), American Journal of Perinatology vol 40, no 6, April 2023, pp 582-588

Objective Health care providers and health systems confronted new challenges to deliver timely, high-quality prenatal care during the coronavirus disease 2019 (COVID-19) pandemic as the pandemic raised concerns that care would be delayed or substantively changed. This study describes trends in prenatal care delivery in 2020 compared with 2018 to 2019 in a large, commercially insured population and investigates changes in obstetric care processes and outcomes.

Study Design This retrospective cohort study uses de-identified administrative claims for commercially insured patients. Patients whose entire pregnancy took place from March 1 to December 31 in years 2018, 2019, and 2020 were included. Trends in prenatal care, including in-person, virtual, and emergency department visits, were evaluated, as were prenatal ultrasounds. The primary outcome was severe maternal morbidity (SMM). Secondary outcomes included preterm birth and stillbirth. To determine whether COVID-19 pandemic-related changes in prenatal care had an impact on maternal outcomes, we compared the outcome rates during the pandemic period in 2020 to equivalent periods in 2018 and 2019.

Results In total, 35,112 patients were included in the study. There was a significant increase in the prevalence of telehealth visits, from 1.1 to 1.2% prior to the pandemic to 17.2% in 2020, as well as a significant decrease in patients who had at least one emergency department visit during 2020. Overall prenatal care and ultrasound utilization were unchanged. The rate of SMM across this period was stable (2.3–2.8%) with a statistically significant decrease in the preterm birth rate in 2020 (7.4%) compared with previous years (8.2–8.6%; $p < 0.05$) and an unchanged stillbirth rate was observed.

Conclusion At a time when many fields of health care were reshaped during the pandemic, these observations reveal considerable resiliency in both the processes and outcomes of obstetric care. (Author)

2023-02971

Association of disrespectful care after childbirth and COVID-19 exposure with postpartum depression symptoms- a longitudinal cohort study in Nepal. Kc A, Acharya A, Bhattarai P, et al (2023), BMC Pregnancy and Childbirth vol 23, no 145, March 2023

Full URL: https://doi.org/10.1186/s12884-023-05457-0

Background

The COVID-19 pandemic has led to unprecedented mental stress to women after childbirth. In this study, we assessed

the association of disrespectful care after childbirth and COVID-19 exposure before/during labour with postpartum depression symptoms assessed at 7 and 45 days in Nepal.

Methods
A longitudinal cohort study was conducted in 9 hospitals of Nepal among 898 women. The independent data collection system was established in each hospital to collection information on disrespectful care after birth via observation, exposure to COVID-19 infection before/during labour and other socio-demographic via interview. The information on depressive symptoms at 7 and 45 days was collected using the validated Edinburg Postnatal Depression Scale (EPDS) tool. Multi-level regression was performed to assess the association of disrespectful care after birth and COVID-19 exposure with postpartum depression.

Result
In the study, 16.5% were exposed to COVID-19 before/during labour and 41.8% of them received disrespectful care after childbirth. At 7 and 45 days postpartum, 21.3% and 22.4% of women reported depressive symptoms respectively. In the multi-level analysis, at the 7th postpartum day, women who had disrespectful care and no COVID-19 exposure still had 1.78 higher odds of having depressive symptom (aOR, 1.78; 95% CI; 1.16, 2.72). In the multi-level analysis, at 45th postpartum day, women who had disrespectful care and no COVID-19 exposure had 1.37 higher odds of having depressive symptoms (aOR, 1.37; 95% CI; 0.82, 2.30), but not statistically significant.

Conclusion
Disrespectful care after childbirth was strongly associated with postpartum depression symptoms irrespective of COVID-19 exposure during pregnancy. Caregivers, even during the global pandemic, should continue to focus their attention for immediate breast feeding and skin-to-skin contact, as this might reduce the risk for depressive symptoms postpartum. (Author)

2023-02964

Adopting international recommendations to design a model for maternal health service to cope with pandemic disruption for Indonesian primary care. Ekawati FM, Muchlis M, Tuteja A (2023), BMC Pregnancy and Childbirth vol 23, no 132, March 2023

Full URL: https://doi.org/10.1186/s12884-023-05433-8

Background
Limited evidence is available as the reference for the model of care on providing maternity care in low-and-middle-income countries (LMICs) to cope with pandemic disruption. This study aimed to adopt international recommendations to develop the model of care with the context of Indonesian settings.

Methods
Four codesign workshops and substitute interviews with stakeholders, covering the (i) exploration of service provision during the pandemic, (ii) adoption of international recommendations, (iii) designing and (iv) finalising model of care for maternal health services in primary care under the COVID-19 pandemic. The study took place in Yogyakarta Province Indonesia from July-November 2021. The participants were general practitioners, midwives, nurses, patients, and obstetricians. The data were analysed thematically.

Results
Twenty-three participants were recruited. As many as 23, 16, 14 and 16 participants participated in the first to fourth codesign workshops or substitute interviews. Key recommendations agreed upon in the workshop were health screening, maintaining antenatal-postnatal breastfeeding care, limiting visitors, using telemedicine, and creating a multidisciplinary team to provide the care. A model of care for improving maternal service was also agreed and received suggestions from the participants. Identified barriers to the recommendation implementation, such as the available clinical resources and negotiating providers' authority in practice.

Conclusion
Recommendations and the model of care for improving maternity care in Indonesia are beneficial to be implemented in Indonesian primary care during the COVID-19 pandemic. Further research includes pilot studies to explore the acceptability of the model and recommendation implementation in practice. (Author)

2023-02849

Birth under restrictions: Exploring women's experiences of maternity care in Aotearoa New Zealand during the COVID-19 lockdown of 2020. Dixon L, Jackson T, Tamati-Elliffe J, et al (2023), New Zealand College of Midwives Journal no 59, 2023, pp 5-13

Full URL: https://www.midwife.org.nz/wp-content/uploads/2023/03/Jnl-59-2023-article-1-womens-experiences-in-Covid.pdf

Introduction: In Aotearoa New Zealand the COVID-19 pandemic in 2020 resulted in a four-week lockdown in March and April of 2020 with ongoing restrictions for several weeks.
Aim: To explore the experiences of women who were pregnant, giving birth and/or managing the early weeks of motherhood during the 2020 COVID-19 alert levels 3 and 4 in Aotearoa New Zealand.
Method: This qualitative study used semi-structured interviews to explore childbirth experiences during the COVID-19 alert level restrictions. Reflexive, inductive, thematic analysis was used to identify codes, subthemes and themes.
Findings: Seventeen women participated in the study. Analysis of the qualitative interviews revealed four themes. The first of these was: Relationship with my midwife, in which participants described the importance of the midwifery continuity of care relationship, with midwives often going above and beyond usual care and filling the gaps in service provision. In the Disruption to care theme the participants described feeling anxious and uncertain, with concerns about the hospital restrictions and changing rules. The participants also described their Isolation during postnatal care in a maternity facility due to separation from their partners/whānau; they describe receiving the bare necessities of care, feeling they were on their own, and working towards their release home; all of which took an emotional and mental toll. The final theme, Undisturbed space, describes the positive aspects of the lockdown of being undisturbed by visitors, being better able to bond with the baby and being able to breastfeed in peace.
Conclusion: Midwifery continuity of care appears to have supported these women and their families/ whānau during the service restrictions caused by the COVID-19 lockdown. The partner, or other primary support person, and whānau should be considered essential support and should not be excluded from early postpartum hospital care. (Author)

2023-02571

Influence of the COVID-19 pandemic on labor and childbirth care practices in Brazil: a cross-sectional study. de Menezes FR, da Silva TPR, Felisbino-Mendes MS, et al (2023), BMC Pregnancy and Childbirth vol 23, no 91, February 2023

Full URL: https://doi.org/10.1186/s12884-023-05358-2

Background
It has been hypothesized that the coronavirus disease 2019 (COVID-19) pandemic may have changed the conduct of obstetric practices at the time of labor, delivery, and birth. In Brazil, many practices lacking scientific evidence are implemented in this care, which is charcaterized by excessive use of unnecessary interventions. This scenario may have been worsened by the pandemic. Thus, we analyzed the effects of the pandemic on care during prenatal care and delivery by comparing the results of two surveys (one was administered before the pandemic and the other during the pandemic) in public hospitals in Belo Horizonte - Minas Gerais (MG), Brazil.

Methods
This cross-sectional and comparative study analyzed preliminary data from the study "Childbirth and breastfeeding in children of mothers infected with SARS-CoV-2", which was conducted in three referral maternity hospitals in Belo Horizonte - MG during the pandemic in the first half of 2020 in Brazil. The final sample consisted of 1532 eligible

women. These results were compared with data from 390 puerperae who gave birth in the three public hospitals in the study "Birth in Belo Horizonte: labor and birth survey", conducted before the pandemic to investigate the changes in practices of labor and delivery care for the mother and her newborn, with or without COVID-19 infection, before and during the pandemic. In this research, "Birth in Belo Horizonte: labor and birth survey", data collection was performed between November 2011 and March 2013 by previously trained nurses. Between study comparisons were performed using Pearson's chi-square test, with a confidence level of 95%, and using Stata statistical program.

Results
We found a significant increase in practices recommended by the World Health Organization during the pandemic including the following: diet offering (48.90 to 98.65%), non-pharmacological pain relief (43.84 to 67.57%), and breastfeeding in the newborn´s first hour of life (60.31 to 77.98%) ($p < 0.001$). We found a significant reduction of non-recommended interventions, such as routine use of episiotomy (15.73 to 2.09%), the Kristeller maneuver (16.55 to 0.94%), oxytocin infusion misused (45.55 to 28.07%), amniotomy (30.81 to 15.08%), and lithotomy position during labor (71.23 to 6.54%) ($p < 0.001$).

Conclusion
Our study revealed a statistically significant increase in the proportion of use of recommended practices and a reduction in non-recommended practices during labor and delivery. However, despite advances in the establishment of World Health Organization recommended practices in labor, delivery, and birth, the predominance of interventionist and medicalized practices persists, which is worsened by events, such as the pandemic. (Author)

2023-02567

Pregnancy, childbirth and postpartum experience in pregnant women infected with SARS-CoV-2 in 2020 in Paris: a qualitative phenomenological study. Cadwallader JS, Berlingo L, Rémy V, et al (2023), BMC Pregnancy and Childbirth vol 23, no 83, January 2023

Full URL: https://doi.org/10.1186/s12884-023-05406-x

Background
The COVID-19 pandemic and the resulting lockdowns triggered social discontent on an unprecedented scale. Descriptive phenomenological studies showed that pregnant women were under intense stress during the COVID-19 outbreak, even though they remained uninfected. The purpose of this study was to report on the experiences of pregnant women affected by mild COVID-19 during the first wave of the pandemic.

Methods
In this non- interventional qualitative study, we analyzed pregnant women's experiences using an interpretive phenomenological analysis approach. We conducted semi-structured interviews with women who had had a mild COVID-19 during their pregnancy, and gave birth or planned to give birth in the maternity units of Sorbonne University in Paris, France.

Results
Participants reported that at the time they had COVID-19, they were not afraid of being seriously ill, but of transmitting COVID-19 to their close relatives. Their main concern was being pregnant and becoming a parent in a world where the pandemic deeply altered social environment. This included uncertainty about the future and an acute feeling of isolation related to lockdown. The idea that their partner might not be allowed to attend childbirth was almost unanimously felt as intolerable. In contrast, women had positive feelings regarding the fact that lockdown resulted in a de facto paternity leave leading to a certain degree of equality in the couple regarding baby care and household chores. Unexpectedly, the pandemic social distancing measures helped participants escaping from behavioral constraints, including the unspoken rule that they should welcome greetings from friends and family, despite being exhausted by the recent birth.

Conclusions

Our results suggest that avoiding separation from their partner is a key to benevolent medical care for pregnant women in times of health crises. The unexpected benefits women reported in a world of lockdown cast a new light on their expectation regarding parenthood today. (Author)

2023-02505

Delivery and neonatal outcomes of pregnant women during the Shanghai lockdown: A retrospective analysis. Zhou F-Y, Li C, Qin K-Z, et al (2023), Frontiers in Pediatrics 2 February 2023, online

Full URL: https://doi.org/10.3389/fped.2023.992908

Objectives: Shanghai witnessed an unprecedented outbreak of COVID-19 and experienced a strict lockdown from March 28, 2022 to May 31, 2022. Most studies to date are on the first lockdown after the outbreak in December 2019. This study aimed to examine the impact of lockdown on delivery and neonatal outcomes among uninfected pregnant women in the new phase of the COVID-19 outbreak.

Methods: A retrospective analysis was conducted in the Obstetrics and Gynecology Hospital of Fudan University. Pregnant women without COVID-19 who delivered from March 28, 2022 to May 31, 2022 (lockdown group) and the same period in 2021 (non-lockdown group) were recruited for this study. Logistic regression models and 1 : 1 propensity score matching (PSM) were used to assess the effect of lockdown on delivery outcomes.

Results: A total of 2,962 patients were included in this study, 1,339 of whom were from the lockdown group. Compared with the non-lockdown group, pregnant women giving birth during lockdown had an increased risk of term prelabor rupture of membranes (TPROM) (aOR = 1.253, 95% CI: 1.026–1.530), and decreased risks of postpartum hemorrhage (PPH) (aOR = 0.362, 95% CI: 0.216–0.606) and fetal malformation (aOR = 0.309, 95% CI: 0.164–0.582). The risk of large for gestational age (LGA) (aOR = 0.802, 95% CI: 0.648–0.992) and rate of admission to the neonatal intensive care unit (NICU) (aOR = 0.722, 95% CI: 0.589–0.885) also significantly declined. After 1 : 1 PSM, the impact of lockdown on the risk of TPROM (aOR = 1.501, 95% CI: 1.083–2.080), PPH (aOR = 0.371, 95% CI: 0.211–0.654), fetal malformation (aOR = 0.332, 95% CI: 0.161–0.684), LGA (aOR = 0.749, 95% CI: 0.594–0.945) and rate of admission to the NICU (aOR = 0.700, 95% CI: 0.564–0.869) all remained. There were no other delivery or neonatal outcomes affected by the lockdown after the COVID-19 outbreak.

Conclusion: This study indicated a significant increase in the risk of term PROM, significant decreases in the risk of PPH, fetal malformation and LGA, and a marked decline in the rate of admission to the NICU during Shanghai Lockdown. (Author)

2023-02371

Psychological profile and mood disturbance of women who gave birth during the COVID-19 pandemic in Romania.

Pop-Tudose ME, Popescu-Spineni DM, Manolescu LSC, et al (2023), Midwifery vol 117, February 2023, 103571

Objective

This study aimed to outline the emotional profile and the mood disturbance of women who gave birth during Emergency and Alert states in Covid-19 pandemic.

Methods

A cross-sectional study was carried out to investigate how the emergency and alert states due to Covid-19 affected the emotional profile and the mood disturbance of pregnant women who gave birth during these times. We included 244 postpartum women, divided into two groups: 124 women during the State of Emergency and another 120 women during the State of Alert. After expressing their informed consent, they completed an anonymous questionnaire that collected demographic data and the Profile of Mood States Questionnaire, as well as a follow-up survey. Data analysis was performed using the statistical program SPSS 24.0.

Results

Out of the 300 questionnaires distributed, we collected 244 valid questionnaires. 45.2% of State of Emergency group and 53.3% of State of Alert group experienced Anxiety, 16.9% of State of Emergency group, respectively 18.3% of State of Alert group, Depression, and 25% of State of Emergency group respectively 34.2% of State of Alert group, Distress. Compared to the ideal Iceberg profile, the emotional profile of both groups presented an inverted graph for Anxiety and Depression and much lower values for Vigor. Only 35.5% of State of Emergency group and 16.7% of State of Alert group received information concerning the virus, symptoms, and evolution of the disease from the specialists who monitored their pregnancy and 25.8% of State of Emergency group respectively 11.7% of State of Alert group received information about measures to prevent contamination and infection. Psycho-emotional and mood disturbance was more pronounced among State of Alert group.

Conclusions
There was a significant psycho-emotional alteration of surveyed women during the pandemic, worsened by the radical measures of the State of Emergency and associated with the major deficiency of care services in supplying valid information and counseling for pregnant women's safety in the State of Alert. There is a highlighted need to pay more attention to the psychological profile of pregnant women and to modernize the health services in this field and adapt them to pandemic situations with the use of modern virtual techniques. In addition, the Romanian health care system should round off the team responsible for the care of mother and child with midwives, internationally recognized very skilled in informing, monitoring, counseling, and support in this field. (Author)

2023-02341

Qualitative Study of the Experience of Caring for Women During Labor and Birth During the First Wave of the COVID-19 Pandemic. Simonovich SD, Bush NM, Wiesemann LM, et al (2023), JOGNN: Journal of Obstetric, Gynecologic and Neonatal Nursing vol 52, no 3, May 2023, pp 202-210

Full URL: https://doi.org/10.1016/j.jogn.2022.12.006

Objective
To examine the experiences of labor and delivery (L&D) nurses and certified nurse-midwives who cared for women during labor and birth in the United States during the first wave of the COVID-19 pandemic.
Design
Subgroup analysis of a larger study with a qualitative descriptive design.
Setting
Telephone interviews.
Participants
The parent study included 100 nurses across various specialty areas who provided patient care during the first wave of COVID-19 in the United States. Our subgroup analysis included 19 participants: L&D nurses (n = 11) and certified nurse-midwives (n = 8).
Methods
Semistructured interview guide.
Results
Participants described their experiences providing patient care in L&D settings during the first wave of the COVID-19 pandemic. We identified five major themes: Separation of COVID-19–Positive Mothers and Newborns, Isolation of Women in Active Labor, Disparities in Access to Care, Barriers to Communication, and Effect on the Mental Health of Members of the Care Team.
Conclusion
Our findings captured the experiences of maternity care team members who worked during the COVID-19 pandemic when standards of quality maternity care were compromised. The challenges of caring for COVID-19–positive mothers, including isolation during active labor and infant removal from mothers at birth, affected their psychological well-being and their mental health and must now be addressed to prevent burnout and turnover. (Author)

2023-02286

Are preterm birth and very low birth weight rates altered in the early COVID (2020) SARS-CoV-2 era?. Rodriguez K, Nudelman MJ, Jegatheesan P, et al (2023), Frontiers in Pediatrics 9 January 2023, online

Full URL: https://doi.org/10.3389/fped.2022.1093371

Objective: We evaluated the prevalence of preterm birth (PTB) and very low birth weight (VLBW) during Jan-Dec 2,020 (early COVID era) at 5 hospitals (2 in West Virginia, 3 in California) compared to Jan 2017–Dec 2019 (pre-COVID) inclusive of 2 regional perinatal centers (1 in Huntington, WV and 1 in San Jose, CA) and 3 community hospitals (1 each in Cabell, Los Angeles and Santa Clara counties).

Design/methods: We examined PTB and VLBW rates of live births at 5 US hospitals from Jan 2017–Dec 2020. We compared PTB and VLBW rates in 2020 to 2017–2019 using Poisson regression and rate ratio with a 95% confidence interval. We stratified live births by gestational age (GA) (<37, 33–36, and <33 weeks) and birth weight (≤1,500 g, >1,001 g to ≤1,500 g, ≤1,000 g). We examined PTB rates at 4 of the hospitals during Jan-Dec 2020 and compared them to the prior period of Jan 2017–Dec 2019 using Statistical Process Control (SPC) for quarterly data.

Results: We examined PTB and VLBW rates in 34,599 consecutive live births born Jan 2017–Dec 2019 to rates of 9,691 consecutive live births in 2020. There was no significant change in PTB (<37 weeks GA) rate, 10.6% in 2017–2019 vs. 11.0% in 2020 (p = 0.222). Additionally, there was no significant change when comparing VLBW rates in 2017–2019 to 2020, 1.4% in 2017–2019 vs. 1.5% in 2020 (p = 0.832).

Conclusion: We found no significant change in the rates of PTB or VLBW when combining the live birth data of 5 US hospitals in 3 different counties. (Author)

2023-02172

Virtual Reality Childbirth Education With 360° Videos. Siivola M, Tiainen E, Ekholm E, et al (2023), Journal of Perinatal Education vol 31, no 1, Winter 2023

During the pandemic in Finland, most childbirth education (CBE) programs were canceled or transferred online. We aimed to improve the situation by developing a virtual reality (VR) CBE. This article describes the process of developing a VR CBE pilot program and the results from the preliminary user test. To create the VR experience, we used 360° videos as the main content. The program is usable with VR headsets, a computer, tablet, and smartphone. When using the program with a VR headset, the users felt they were in the birthing room; they did not feel motion sickness, nor did they have usability challenges. The users preferred using the program on their own, studying independently with a tablet or mobile device. (Author)

2023-02128

Exploring women's experiences during childbirth in health facilities during COVID-19 pandemic in occupied palestinian territory: a cross-sectional community survey. Me Abu-Rmeileh N, Wahden Y, Mehrtash H, et al (2022), BMC Pregnancy and Childbirth vol 22, no 957, December 2022

Full URL: https://doi.org/10.1186/s12884-022-05242-5

Introduction

This study aims to assess the prevalence of mistreatment during childbirth in the occupied Palestinian territory and to explore factors associated with mistreatment.

Methods

A cross-sectional study of women who gave birth in the West Bank and Gaza Strip health facilities. The survey was administered over the phone to women up to 8 weeks post-partum. Data collection took place between July 2020 and March 2021.

Results

A total of 745 women participated in the study, 36·25% were from the Gaza Strip and 63·75% from the West Bank. The

prevalence of mistreatment was 18·8% in which women reported any verbal abuse, physical abuse, or stigma or discrimination during childbirth, with verbal abuse as the most common form of mistreatment reported. Physical abuse was more likely to be reported by women with no labour companion with them (OR: 3·11, 95%CI: 1·24 – 7·99). Verbal abuse was more likely to be reported by women with less than three live births (OR: 1·71, 95%CI: 1·06 – 2·76, women with no birth companion (OR: 2·72, 95%CI: 1·36 – 3·80) and more likely to be reported if curtains wre not used (OR: 2·55, 95%CI: 1·33 – 4·88). Women with less education were more likely to report long waiting times or delays in receiving services compared to women with higher education (OR: 1·40, 95%CI: 1·06 – 2·10).

Conclusion
For the first time using the World Health Organisation (WHO) tool in the Eastern Mediterranean region, the study findings, show the occurrence of mistreatment and identify areas to be strengthened to ensure that all women have a respectful childbirth experience within health facilities. (Author)

2023-01880

A Randomized Trial Assessing the Impact of Educational Podcasts on Personal Control and Satisfaction During Childbirth. Cai F, McCabe M, Srinivas SK (2023), American Journal of Obstetrics & Gynecology (AJOG) vol 228, no 5, May 2023, pp 592.e1-592.e10

Background
Childbirth education can help pregnant individuals feel in control, relieve anxiety and fear, and decrease pain perception. However, many barriers exist that impede patients from obtaining adequate childbirth education, especially in the era of the COVID-19 pandemic. New advances in technology, such as podcasts, can allow for asynchronous patient education.
Objective
To assess the effect of a labor education podcast on personal perception of control and patient satisfaction during childbirth.
Study Design
This was a randomized controlled trial that included nulliparous, low-risk women with singleton gestations who reached 36 weeks' gestation at two academic hospitals in Philadelphia, PA. Subjects were randomized at 28w0d to usual education (control) or podcast education (intervention), which included links to 7 labor-related podcast episodes on patient-suggested topics which were available on widely-used podcatchers. Primary outcomes were assessed with a three-question birth satisfaction survey and the Labor Agentry Scale to evaluate personal perception of control during childbirth. Secondary outcomes included Edinburgh Postpartum Depression Scale score. Analyses were performed as intention to treat. Parametric and nonparametric data were compared using student t-test or Wilcoxon-ranked sum test as appropriate.
Results
201 women were randomized and 153 were included in the final analysis (78 podcast and 75 control). There were no significant differences in maternal demographics. Patients in the podcast group had higher median birth satisfaction scores compared to the control group (20 [18-21] vs. 18 [16-21], p=0.002) without a significant difference in median Labor Agentry scores (57 [50-63] vs. 54 [47-62], p=0.12). When restricting analysis to patients who underwent induction, Labor Agentry scores were significantly higher in the podcast group (58 [53-64] vs 54 [47-61], p=0.045), representing an increased perception of control. However, birth satisfaction score was no different between groups (p=0.06). The most downloaded podcasts were induction and labor anesthesia and >95% would recommend the podcasts to family and friends.
Conclusions
An educational podcast of labor topics was well-received and increased patient satisfaction overall and increased labor agentry among those who were induced. Podcasts are a promising educational modality to improve patient experience during childbirth and warrant further exploration. (Author)

2023-01776

Single-center serological surveillance of SARS-CoV-2 in pregnant patients presenting to labor and delivery. Boggess KA, Stringer EM, Robinson WR, et al (2022), International Journal of Gynecology & Obstetrics 23 November 2022, online

Objective
To measure maternal/fetal SARS-CoV-2 antibody levels.

Methods
A prospective observational study of eligible parturients admitted to the hospital for infant delivery was conducted between April and September 2020. SARS-CoV-2 antibody levels were measured in maternal and umbilical cord specimens using an in-house ELISA based on the receptor-binding domain (RBD) of the spike protein. Among SARS-CoV-2 seropositive patients, spike RBD antibody isotypes (IgG, IgM, and IgA) and ACE2 inhibiting antibodies were measured.

Results
In total, 402 mothers were enrolled and spike RBD antibodies in 388 pregnancies were measured (336 maternal and 52 cord specimens). Of them, 19 were positive (15 maternal, 4 cord) resulting in a seroprevalence estimate of 4.8% (95% confidence interval 2.9–7.4). Of the 15 positive maternal specimens, all had cord blood tested. Of the 15 paired specimens, 14 (93.3%) were concordant. Four of the 15 pairs were from symptomatic mothers, and all four showed high spike-ACE2 blocking antibody levels, compared to only 3 of 11 (27.3%) from asymptomatic mothers.

Conclusion
A variable antibody response to SARS-CoV-2 in pregnancy among asymptomatic infections compared to symptomatic infections was found, the significance of which is unknown. Although transfer of transplacental neutralizing antibodies occurred, additional research is needed to determine how long maternal antibodies can protect the infant against SARS-CoV-2 infection. (Author)

2023-01549

Experiences of giving birth during the COVID-19 pandemic: a qualitative analysis of social media comments through the lens of birth integrity. Miani C, Leiße A, Wandschneider L, et al (2023), BMC Pregnancy and Childbirth vol 23, no 32, January 2023

Full URL: https://doi.org/10.1186/s12884-022-05326-2

Background
Social media offer women a space to discuss birth-related fears and experiences. This is particularly the case during the COVID-19 pandemic when measures to contain the spread of the virus and high rates of infection have had an impact on the delivery of care, potentially restricting women's rights and increasing the risk of experiencing different forms of mistreatment or violence. Through the lens of birth integrity, we focused on the experiences of women giving birth in Germany as shared on social media, and on what may have sheltered or violated their integrity during birth.

Methods
Using thematic analysis, we identified key themes in 127 comments and associated reactions (i.e. "likes", emojis) posted on a Facebook public page in response to the dissemination of a research survey on maternity care in the first year of the COVID-19 pandemic.

Results
Women contributing to the dataset gave birth during March and December 2020. They were most negatively affected by own mask-wearing –especially during the active phase of labour, not being allowed a birth companion of choice, lack of supportive care, and exclusion of their partner from the hospital. Those topics generated the most reactions, revealing compassion from other women and mixed feelings about health measures, from acceptation to anger. Many women explicitly formulated how inhumane or disrespectful the care was. While some women felt restricted by the tight visiting rules, those were seen as positive by others, who benefited from the relative quiet of maternity wards

and opportunities for postpartum healing and bonding.

Conclusion
Exceptional pandemic circumstances have introduced new parameters in maternity care, some of which appear acceptable, necessary, or beneficial to women, and some of which can be considered violations of birth integrity. Our research calls for the investigation of the long-term impact of those violations and the reassessment of the optimal conditions of the delivery of respectful maternity during the pandemic and beyond. (Author)

2023-01468

Single-center serological surveillance of SARS-CoV-2 in pregnant patients presenting to labor and delivery. Boggess KA, Stringer EM, Robinson WR, et al (2023), International Journal of Gynecology & Obstetrics vol 160, no 3, March 2023, pp 874-879

Objective
To measure maternal/fetal SARS-CoV-2 antibody levels.

Methods
A prospective observational study of eligible parturients admitted to the hospital for infant delivery was conducted between April and September 2020. SARS-CoV-2 antibody levels were measured in maternal and umbilical cord specimens using an in-house ELISA based on the receptor-binding domain (RBD) of the spike protein. Among SARS-CoV-2 seropositive patients, spike RBD antibody isotypes (IgG, IgM, and IgA) and ACE2 inhibiting antibodies were measured.

Results
In total, 402 mothers were enrolled and spike RBD antibodies in 388 pregnancies were measured (336 maternal and 52 cord specimens). Of them, 19 were positive (15 maternal, 4 cord) resulting in a seroprevalence estimate of 4.8% (95% confidence interval 2.9–7.4). Of the 15 positive maternal specimens, all had cord blood tested. Of the 15 paired specimens, 14 (93.3%) were concordant. Four of the 15 pairs were from symptomatic mothers, and all four showed high spike-ACE2 blocking antibody levels, compared to only 3 of 11 (27.3%) from asymptomatic mothers.

Conclusion
A variable antibody response to SARS-CoV-2 in pregnancy among asymptomatic infections compared to symptomatic infections was found, the significance of which is unknown. Although transfer of transplacental neutralizing antibodies occurred, additional research is needed to determine how long maternal antibodies can protect the infant against SARS-CoV-2 infection. (Author)

2023-01145

Association of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection With Maternal Mortality and Neonatal Birth Outcomes in Botswana by Human Immunodeficiency Virus Status. Jackson-Gibson M, Diseko M, Caniglia EC, et al (2023), Obstetrics & Gynecology vol 141, no 1, pp 135-143, January 2023

Full URL: https://journals.lww.com/greenjournal/Fulltext/2023/01000/Association_of_Severe_Acute_Respiratory_Syndrome.14.aspx

OBJECTIVE:
To evaluate the combined association of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and human immunodeficiency virus (HIV) infection on adverse birth outcomes in an HIV-endemic region.

METHODS:
The Tsepamo Study abstracts data from antenatal and obstetric records in government maternity wards across Botswana. We assessed maternal mortality and adverse birth outcomes for all singleton pregnancies from September 2020 to mid-November 2021 at 13 Tsepamo sites among individuals with documented SARS-CoV-2 screening tests and known HIV status.

RESULTS:
Of 20,410 individuals who gave birth, 11,483 (56.3%) were screened for SARS-CoV-2 infection; 4.7% tested positive. People living with HIV were more likely to test positive (144/2,421, 5.9%) than those without HIV (392/9,030, 4.3%) (P=.001). Maternal deaths occurred in 3.7% of those who had a positive SARS-CoV-2 test result compared with 0.1% of those who tested negative (adjusted relative risk [aRR] 31.6, 95% CI 15.4–64.7). Maternal mortality did not differ by HIV status. The offspring of individuals with SARS-CoV-2 infection experienced more overall adverse birth outcomes (34.5% vs 26.6%; aRR 1.2, 95% CI 1.1–1.4), severe adverse birth outcomes (13.6% vs 9.8%; aRR 1.2, 95% CI 1.0–1.5), preterm delivery (21.4% vs 13.4%; aRR 1.4, 95% CI 1.2–1.7), and stillbirth (5.6% vs 2.7%; aRR 1.7 95% CI 1.2–2.5). Neonates exposed to SARS-CoV-2 and HIV infection had the highest prevalence of adverse birth outcomes (43.1% vs 22.6%; aRR 1.7, 95% CI 1.4–2.0).

CONCLUSION:
Infection with SARS-CoV-2 at the time of delivery was associated with 3.7% maternal mortality and 5.6% stillbirth in Botswana. Most adverse birth outcomes were worse among neonates exposed to both SARS-CoV-2 and HIV infection. (Author)

2023-01142

Association Between Giving Birth During the Early Coronavirus Disease 2019 (COVID-19) Pandemic and Serious Maternal Morbidity. Metz TD, Clifton RG, Hughes BL, et al (2023), Obstetrics & Gynecology vol 141, no 1, pp 109-118, January 2023

Full URL: https://journals.lww.com/greenjournal/Fulltext/2023/01000/Association_Between_Giving_Birth_During_the_Early.11.aspx

OBJECTIVE:
To evaluate whether delivering during the early the coronavirus disease 2019 (COVID-19) pandemic was associated with increased risk of maternal death or serious morbidity from common obstetric complications compared with a historical control period.

METHODS:
This was a multicenter retrospective cohort study with manual medical-record abstraction performed by centrally trained and certified research personnel at 17 U.S. hospitals. Individuals who gave birth on randomly selected dates in 2019 (before the pandemic) and 2020 (during the pandemic) were compared. Hospital, health care system, and community risk-mitigation strategies for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in response to the early COVID-19 pandemic are described. The primary outcome was a composite of maternal death or serious morbidity from common obstetric complications, including hypertensive disorders of pregnancy (eclampsia, end organ dysfunction, or need for acute antihypertensive therapy), postpartum hemorrhage (operative intervention or receipt of 4 or more units blood products), and infections other than SARS-CoV-2 (sepsis, pelvic abscess, prolonged intravenous antibiotics, bacteremia, deep surgical site infection). The major secondary outcome was cesarean birth.

RESULTS:
Overall, 12,133 patients giving birth during and 9,709 before the pandemic were included. Hospital, health care system, and community SARS-CoV-2 mitigation strategies were employed at all sites for a portion of 2020, with a peak in modifications from March to June 2020. Of patients delivering during the pandemic, 3% had a positive SARS-CoV-2 test result during pregnancy through 42 days postpartum. Giving birth during the pandemic was not associated with a change in the frequency of the primary composite outcome (9.3% vs 8.9%, adjusted relative risk [aRR] 1.02, 95% CI 0.93–1.11) or cesarean birth (32.4% vs 31.3%, aRR 1.02, 95% CI 0.97–1.07). No maternal deaths were observed.

CONCLUSION:
Despite substantial hospital, health care, and community modifications, giving birth during the early COVID-19 pandemic was not associated with higher rates of serious maternal morbidity from common obstetric complications. (Author)

2023-00761

Parent organizations' experiences of the pandemic response in maternity care in thirteen European countries. Drandić D, Hartmann K, Barata C, et al (2022), European Journal of Midwifery vol 6, December 2022, p 71

Full URL: https://doi.org/10.18332/ejm/156902

We surveyed changes to maternity care services in the first 17 months of the COVID-19 pandemic in 13 different European countries, from the perspective of national maternity service (parent) organizations advocating for a human rights approach to maternity services. A qualitative study was conducted in November 2020. An open-question survey was sent to national maternity service (parent) organizations and members of COST Action 18211 in Europe, asking about COVID-19 measures in maternity services (antenatally, intrapartum, postnatally, and overall satisfaction). From the open answers, 16 core issues were extracted. Between February and August 2021, semi-structured interviews with the national representatives of 14 parent member organizations in Europe were conducted, collecting details on overall national situations and changes due to COVID-19 measures. The reported experiences of parent organizations from 13 European countries show wide variations in epidemiological containment measures during the first 17 months of the COVID-19 pandemic. Practices differed between facilities, resulting in emotional disquiet and confusion for parent-patients. Most countries maintained antenatal and postnatal care but restricted psychosocial support (antenatal and birth companions, visitors). Organizations from nine countries reported that women had to wear masks during labor, and all but two countries saw separations of mothers and babies. Most parent organizations described a need for more reliable information for new parents. During the pandemic, non-evidence-based practices were (re-) established in many settings, depriving women and families of many factors which evidence has shown to be essential for a positive birthing experience. Based on the findings, we consider the challenges in maternity services and propose a strategy for future crises. (Author)

2023-00396

The experience of women who delivered during the first wave of COVID-19 pandemic in Belgium: a retrospective study. Wafi A, Rosetti J, De Brucker M, et al (2023), AJOG Global Reports vol 3, no 1, February 2023, 100146

Full URL: https://doi.org/10.1016/j.xagr.2022.100146

BACKGROUND

The lockdown caused by the COVID-19 pandemic has imposed some restrictions on hospital activities, requiring medical staff to find efficient alternatives to ensure adequate medical care for patients.

OBJECTIVE

This study aimed to investigate the experience of pregnant women who delivered during the first wave of COVID-19, and to evaluate the impact of COVID-19–related restrictions.

STUDY DESIGN

This was a retrospective multicenter study. All pregnant women who delivered a live infant between March 20, 2020 and June 20, 2020 were evaluated using a 35-item survey at 1 year following delivery. Each patient was contacted via 3 modalities. Patients who reported that their prenatal follow-up was interrupted were compared with those who reported that their prenatal follow-up was unchanged. Among 1096 patients who delivered a live infant across the 3 participating centers during the study period, 389 responses were needed for an estimated margin of error of 4%.

RESULTS

A total of 469 of 1096 (42.8%) patients answered the survey, of whom 151 (32.2%) reported that the follow-up of their pregnancy was interrupted (exposed group) and 318 (67.8%) reported that their follow-up was maintained as normal (unexposed group). The rate of presentation to the emergency department was higher in the exposed group than in the unexposed group (P=.001). The level of dissatisfaction was also higher in the exposed group, and patients in this group would have postponed their pregnancy if they had known about the pandemic in advance (P<.001 and P=.001, respectively).

CONCLUSION

Interruption and modification of antenatal follow-up in pregnant women is associated with patient dissatisfaction and increased presentation to the emergency department. (Author)

2023-00053

Pregnancy outcomes in Italy during COVID-19 pandemic: A population-based cohort study. Rusconi F, Puglia M, Pacifici M, et al (2023), BJOG: An International Journal of Obstetrics and Gynaecology vol 130, no 3, February 2023, pp 276-284

Full URL: https://doi.org/10.1111/1471-0528.17315

Objective

To compare the estimates of preterm birth (PTB; 22–36 weeks' gestational age, GA) and stillbirth rates during COVID-19 pandemic in Italy with those recorded in the three previous years.

Design

A population-based cohort study of live- and stillborn infants was conducted using data from Regional Health Systems and comparing the pandemic period (1 March 2020–31 March 2021, n = 362 129) to an historical period (January 2017–February 2020, n = 1 117 172). The cohort covered 84.3% of the births in Italy.

Methods

Poisson regressions were run in each Region and meta-analyses were performed centrally. We used an interrupted time series regression analysis to study the trend of preterm births from 2017 to 2021.

Main outcome measures

The primary outcomes were PTB and stillbirths. Secondary outcomes were late PTB (32–36 weeks' GA), very PTB (<32 weeks' GA), and extremely PTB (<28 weeks' GA), overall and stratified into singleton and multiples.

Results

The pandemic period compared with the historical one was associated with a reduced risk for PTB (risk ratio [RR] 0.91, 95% confidence interval [CI] 0.88–0.93), late PTB (RR 0.91, 95% CI 0.88–0.94), very PTB (RR 0.88, 95% CI 0.84–0.91) and extremely PTB (RR 0.88, 95% CI 0.82–0.95). In multiples, point estimates were not very different, but had wider CIs. No association was found for stillbirths (RR 1.01, 95% CI 0.90–1.13). A linear decreasing trend in PTB rate was present in the historical period, with a further reduction after the lockdown.

Conclusions

We demonstrated a decrease in PTB rate after the introduction of COVID-19 restriction measures, without an increase in stillbirths. (Author)

2022-11111

Fetal monitoring in labour. National Institute of Health and Care Excellence (2022), 14 December 2022

Full URL: https://www.nice.org.uk/guidance/ng229

This guideline covers methods for monitoring the wellbeing of the baby during labour. It includes risk assessment to determine the appropriate level of fetal monitoring, using clinical assessment in addition to fetal monitoring, and interpreting and acting on monitoring findings. (Author)

2022-10609

Association Between Giving Birth During the Early Coronavirus Disease 2019 (COVID-19) Pandemic and Serious Maternal Morbidity. Metz TD, Clifton RG, Hughes BL, et al (2022), Obstetrics & Gynecology 27 October 2022, online

Full URL: https://doi.org/10.1097/AOG.0000000000004982

OBJECTIVE:

We aimed to evaluate whether delivering during the early the coronavirus disease 2019 (COVID-19) pandemic was associated with increased risk of maternal death or serious morbidity from common obstetric complications compared

with a historical control period.

METHODS:
This was a multicenter retrospective cohort study with manual medical-record abstraction performed by centrally trained and certified research personnel at 17 U.S. hospitals. Individuals who gave birth on randomly selected dates in 2019 (before the pandemic) and 2020 (during the pandemic) were compared. Hospital, health care system, and community risk-mitigation strategies for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in response to the early COVID-19 pandemic are described. The primary outcome was a composite of maternal death or serious morbidity from common obstetric complications, including hypertensive disorders of pregnancy (eclampsia, end organ dysfunction, or need for acute antihypertensive therapy), postpartum hemorrhage (operative intervention or receipt of 4 or more units blood products), and infections other than SARS-CoV-2 (sepsis, pelvic abscess, prolonged intravenous antibiotics, bacteremia, deep surgical site infection). The major secondary outcome was cesarean birth.

RESULTS:
Overall, 12,133 patients giving birth during and 9,709 before the pandemic were included. Hospital, health care system, and community SARS-CoV-2 mitigation strategies were employed at all sites for a portion of 2020, with a peak in modifications from March to June 2020. Of patients delivering during the pandemic, 3% had a positive SARS-CoV-2 test result during pregnancy through 42 days postpartum. Giving birth during the pandemic was not associated with a change in the frequency of the primary composite outcome (9.3% vs 8.9%, adjusted relative risk [aRR] 1.02, 95% CI 0.93–1.11) or cesarean birth (32.4% vs 31.3%, aRR 1.02, 95% CI 0.97–1.07). No maternal deaths were observed.

CONCLUSION:
Despite substantial hospital, health care, and community modifications, giving birth during the early COVID-19 pandemic was not associated with higher rates of serious maternal morbidity from common obstetric complications.

CLINICAL TRIALS REGISTRATION:
ClinicalTrials.gov, NCT04519502. (Author)

2022-10072

COVID-19 transmissibility during labor and vaginal delivery. Hawks RJM, Ades V, Roman AS, et al (2023), American Journal of Obstetrics & Gynecology MFM vol 5, no 1, January 2023, 100770

OBJECTIVE
The COVID-19 pandemic raised uncertainty about the appropriate personal protective equipment (PPE) required for healthcare personnel (HCP) in the labor and delivery unit (L&D).1,2 Given the mechanism of SARS-CoV-2 transmission, providers involved in procedures that produce respiratory aerosols (eg, intubations) are instructed to wear N95 respirators.3,4 The Centers for Disease Control and Prevention and the American College for Obstetricians and Gynecologists speculate that labor and vaginal delivery, which often involve heavy breathing and expulsive effort, may produce aerosols, however, limited data are available to inform PPE recommendations.5 This study aimed to assess the prevalence of SARS-CoV-2 RNA in L&D during routine obstetrical care to better characterize the exposure risk.
STUDY DESIGN
We performed a cross-sectional examination of SARS-CoV-2 RNA presence during routine care of SARS-CoV-2 positive patients in L&D. All admitted patients were screened for COVID-19 per hospital protocol; positive patients admitted for labor met the inclusion criteria. We collected the following samples during both the first and second stage of labor: (1) near air sample <6 feet from patient's face, (2) far air sample >6 feet from patient's face, and (3) PPE surface swab from the outermost facemask or face shield of the primary nurse. Two specimens were collected during the second stage only, namely (4) provider air sample from the delivering provider's lapel and (5) agar plate placed on the delivery table. The presence of SARS-CoV-2 RNA was determined using reverse transcriptase–polymerase chain reactions. The presence or absence of a face mask on the patient was recorded.
RESULTS

Samples from the air, PPE, and agar plates were collected during 5 vaginal deliveries of COVID-19 positive patients (Table). Throughout collection, 1 patient wore a face mask continuously, 3 wore their face masks inconsistently, and 1 did not wear a face mask. Each patient had a missing specimen owing to logistical or clinical limitations. One specimen tested positive for SARS-CoV-2 RNA, which was the agar plate from the vaginal delivery of the patient not wearing a face mask. All other samples yielded negative tests. CONCLUSION
SARS-CoV-2 RNA was not detected in any air or PPE specimens collected during delivery of COVID-19 positive patients in the L&D regardless of patient masking. However, the detection of RNA on a delivery table of an unmasked patient indicates that viral spread occurs in a radius >6 ft from the patient during routine obstetrical care, which poses a risk of exposure to SARS-CoV-2 for HCP and supports the use of N95 respirators while providing patient care in the L&D. This study is limited by the small sample size and, because it was performed early in the pandemic, limited information on the positive test results such as cycle threshold or viral strain. Additional information from patients, including symptoms, presence of face mask, and viral strain data, is needed to more precisely inform PPE guidelines during the ongoing COVID-19 pandemic.(Author)

2022-09514

Characteristics and Outcomes of Pregnant Women with Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) in New York City: A Matched Cohort Study. Khoury RS, Fazzari M, Lambert C, et al (2022), American Journal of Perinatology vol 39, no 12, September 2022, pp 1261-1268

Objective The aim of this study was to examine the association between severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and preterm birth, cesarean birth, and composite severe maternal morbidity by studying women with and without SARS-CoV-2 infection at the time of delivery hospitalization from similar residential catchment areas in New York City.

Study Design This was a retrospective cohort study of pregnant women with laboratory-confirmed or laboratory-denied SARS-CoV-2 on nasopharyngeal swab under universal testing policies at the time of admission who gave birth between March 13 and May 15, 2020, at two New York City medical centers. Demographic and clinical data were collected and follow-up was completed on May 30, 2020. Groups were compared for the primary outcome and preterm birth, in adjusted (for age, race/ethnicity, nulliparity, body mass index) and unadjusted analyses.

Results Among this age-matched cohort, 164 women were positive and 247 were negative for SARS-CoV-2. Of the positive group, 52.4% were asymptomatic and 1.2% had critical coronavirus disease 2019 (COVID-19). The groups did not differ by race and ethnicity, body mass index, or acute or chronic comorbidities. Women with SARS-CoV-2 were more likely to be publicly insured. Preterm birth, cesarean birth, and severe maternal morbidity did not differ between groups. Babies born to women with SARS-CoV-2 were more likely to have complications of prematurity or low birth weight (7.7 vs. 2%, p = 0.01).

Conclusion Preterm and cesarean birth did not differ between women with and without SARS-CoV-2 across disease severity in adjusted and unadjusted analysis among this cohort during the pandemic peak in New York City. (Author)

2022-09250

Improving access to and use of maternal health services during COVID-19: Experience from a health system strengthening project in Guinea. Kouyate M, Barry L, Sow A, et al (2022), Frontiers in Public Health 13 October 2022, online

Full URL: https://doi.org/10.3389/fpubh.2022.1004134

The purpose of this study was to document the experience of health providers' capacity strengthening during health crises and the contribution of such to the health system and the population resilience in the face of the COVID-19 pandemic in Guinea. We conducted a cross-sectional study using routine data collected from 41 health facilities in the project intervention areas, including associative health centers, community health centers, and district hospitals,. These data covered the period between 2019 and 2021. Results showed that all the community health centers (CMCs) had a clean internal and external environment, compared to health centers (95.2%) and district hospitals (33.3%).

Hand washing was systematic among visitors attending CMCs and district hospitals (HPs). However, 28.6% of visitors attending associative health centers (AHCs) did not wash their hands. Temperature taking for visitors was not carried out in all CMCs and in 90.5% of the AHCs; unlike in the HC and HP where the temperature of each patient was taken before entering the consultation room. The obligation to wear masks was higher in the HP and in the HC, compared to the CMC and AHC where the order of non-compliance with the wearing of masks was, respectively 36.4 and 19%. Non-compliance with social distancing in the waiting rooms and between users was observed in all facilities. The project's interventions mainly contributed to improving the utilization of prenatal consultation and institutional delivery services; the beginning of the interventions was marked by an increase of an average of 17 ANC1 per month in CMCs and 116 ANC1 in health centers. Ongoing training on capacity strengthening for providers in infection prevention and control, followed by the offering of delivery kits and materials during epidemics, would contribute to the improvement and utilization of health facilities by the population. (Author)

2022-09246

Determinants of neonatal near-miss among neonates delivered in public hospitals of Ilu Abba Bor Zone, Southwest Ethiopia: An unmatched case–control study during the COVID-19 pandemic. Debele GR, Siraj SZ, Tsegaye D, et al (2022), Frontiers in Public Health 20 September 2022, online

Full URL: https://doi.org/10.3389/fpubh.2022.923408

Background: The neonatal period is the time with the highest risk of neonatal and infant mortality. The COVID-19 pandemic diverted resources from routine maternal health services, which raises the possibility of neonatal near misses (NNMs). To implement prompt treatments that could improve the standard of infant care and lower neonatal mortality, it has been theorized that pinpointing the determinants of NNM during this outbreak is crucial. In light of this, the current study identified the determinants of NNM in neonates delivered in public hospitals of Ilu Abba Bor Zone, South West Ethiopia.

Methods: An institution-based unmatched case–control study was conducted among randomly selected 303 (101 cases and 202 controls) neonates admitted to Mettu Karl Comprehensive Specialized Hospital (MKCSH) and Darimu Primary Hospital (DPH) from 1 November to 28 December 2020. Data were collected using interviewer-administered structured questionnaire and checklist. The collected data were coded and entered into Epi-Data version 4.6 and then exported to SPSS version 20 for analysis. Adjusted odds ratios (AOR) along with a 95% confidence interval was used to assess the strength of the association, and a p-value < 0.05 was considered to declare the statistical significance in the multivariable logistic regression analysis.

Result: A total of 303 (101 cases and 202 controls) neonates admitted to MKCSH and DPH were included in the study making a 97.4% response rate. In the multivariable logistic regression analysis, no formal maternal education [AOR = 3.534, 95% CI: (1.194–10.455)], Breech presentation during birth [AOR = 3.088, 95% CI: (1.029–9.268)], < 4 antenatal care (ANC) visits [AOR = 1.920, 95% CI: (1.065–3.461], cesarean section delivery [AOR = 4.347, 95% CI: (1.718–10.996)], antepartum hemorrhage (APH) [AOR = 3.37, 95% CI: (1.23–9.24)], and hypertensive disorders of pregnancy (HDP) [AOR = 4.05, 95% CI: (2.36–11.05)] were independent determinants of NNM.

Conclusion: The study's result revealed that factors such as education level, birth presentation, ANC visit, mode of delivery, APH, and HDP continued to be important determinants of the NNM in Ethiopia during this pandemic. Therefore, much work is needed to improve neonatal health by providing adequate ANC services and other identified potential determinant factors that predispose the newborn to life-threatening (near-miss) conditions especially during this pandemic. (Author)

2022-09004

Healthcare utilization and maternal and child mortality during the COVID-19 pandemic in 18 low- and middle-income countries: An interrupted time-series analysis with mathematical modeling of administrative data. Ahmed T, Roberton T, Vergeer P, et al (2022), PLoS Medicine vol 19, no 8, August 2022, e1004070

Full URL: https://doi.org/10.1371/journal.pmed.1004070

Background
The Coronavirus Disease 2019 (COVID-19) pandemic has had wide-reaching direct and indirect impacts on population health. In low- and middle-income countries, these impacts can halt progress toward reducing maternal and child mortality. This study estimates changes in health services utilization during the pandemic and the associated consequences for maternal, neonatal, and child mortality.

Methods and findings
Data on service utilization from January 2018 to June 2021 were extracted from health management information systems of 18 low- and lower-middle-income countries (Afghanistan, Bangladesh, Cameroon, Democratic Republic of the Congo (DRC), Ethiopia, Ghana, Guinea, Haiti, Kenya, Liberia, Madagascar, Malawi, Mali, Nigeria, Senegal, Sierra Leone, Somalia, and Uganda). An interrupted time-series design was used to estimate the percent change in the volumes of outpatient consultations and maternal and child health services delivered during the pandemic compared to projected volumes based on prepandemic trends. The Lives Saved Tool mathematical model was used to project the impact of the service utilization disruptions on child and maternal mortality. In addition, the estimated monthly disruptions were also correlated to the monthly number of COVID-19 deaths officially reported, time since the start of the pandemic, and relative severity of mobility restrictions. Across the 18 countries, we estimate an average decline in OPD volume of 13.1% and average declines of 2.6% to 4.6% for maternal and child services. We projected that decreases in essential health service utilization between March 2020 and June 2021 were associated with 113,962 excess deaths (110,686 children under 5, and 3,276 mothers), representing 3.6% and 1.5% increases in child and maternal mortality, respectively. This excess mortality is associated with the decline in utilization of the essential health services included in the analysis, but the utilization shortfalls vary substantially between countries, health services, and over time. The largest disruptions, associated with 27.5% of the excess deaths, occurred during the second quarter of 2020, regardless of whether countries reported the highest rate of COVID-19-related mortality during the same months. There is a significant relationship between the magnitude of service disruptions and the stringency of mobility restrictions. The study is limited by the extent to which administrative data, which varies in quality across countries, can accurately capture the changes in service coverage in the population.

Conclusions
Declines in healthcare utilization during the COVID-19 pandemic amplified the pandemic's harmful impacts on health outcomes and threaten to reverse gains in reducing maternal and child mortality. As efforts and resource allocation toward prevention and treatment of COVID-19 continue, essential health services must be maintained, particularly in low- and middle-income countries. (Author)

2022-08861

Preterm birth rates in a deprived American community only differed before and during COVID-19 when maternal risks were factored in. Jeyamurugan K, Jung MK, Ericksen K (2023), Acta Paediatrica vol 112, no 1, January 2023, pp 151-153

No abstract available.

2022-08725

Hemodynamic changes associated with neuraxial anesthesia in pregnant women with covid 19 disease: a retrospective case-control study. Sangroula D, Maggard B, Abdelhaleem A, et al (2022), BMC Anesthesiology vol 22, no 179, 9 June 2022

Full URL: https://doi.org/10.1186/s12871-022-01719-0

Background
Neuraxial blocks is the recommended mode of analgesia and anesthesia in parturients with Coronavirus 19 (COVID-19). There is limited data on the hemodynamic responses to neuraxial blocks in COVID-19 patients. We aim to compare the hemodynamic responses to neuraxial blocks in COVID-19 positive and propensity-matched COVID-19 negative parturients.

Methods
We conducted retrospective, cross-sectional case–control study of hemodynamic changes associated with neuraxial blocks in COVID-19 positive parturients in a Tertiary care academic medical center. Fifty-one COVID-19 positive women confirmed by nasopharyngeal reverse transcription–polymerase chain reaction (RT-PCR), were compared with propensity-matched COVID negative controls (n = 51). Hemodynamic changes after neuraxial block were recorded by electronic medical recording system and analyzed using paired and unpaired T- test and Wilcoxon-Mann–Whitney Rank Sum tests. The primary outcome was ≥ 20% change in MAP and HR after neuraxial block placement.

Results
In the epidural group, 7% COVID-19 positive parturients had > 20% decrease in mean arterial pressure (MAP) from baseline compared to 15% COVID-19 negative parturients (P = 0.66). In the spinal group, 83% of COVID-19 positive parturients had a decrease in MAP more than 20% from baseline compared to 71% in control (P = 0.49). MAP drop of more than 40% occurred in 29% COVID positive parturients in the spinal group versus 17% in COVID-19 negative parturients (P = 0.5465). In COVID-19 positive spinal group, 54% required vasopressors whereas 38% in COVID-19 negative spinal group required vasopressors (P = 0.387). We found a significant correlation between body mass index (BMI) > 30 and hypotension in COVID (+) parturient with odds ratio (8.63; 95% CI-1.93 – 37.21) (P = 0.007).

Conclusion
Incidence and severity of hypotension after neuraxial blocks were similar between COVID-19 positive and COVID-19 negative parturients. BMI > 30 was a significant risk factor for hypotension as described in preexisting literature, this correlation was seen in COVID-19 positive parturients. The likely reason for parturients with BMI > 30 in COVID negative patients not showing similar correlation, is that the sample size was small. (Author)

2022-08485

Changes in preterm birth during the COVID-19 pandemic by duration of exposure and race and ethnicity. Mullin AM, Handley SC, Lundsberg L, et al (2022), Journal of Perinatology vol 42, no 10, October 2022, pp 1346–1352
Full URL: https://doi.org/10.1038/s41372-022-01488-1

Objective
We aimed to determine whether coronavirus-disease-2019 (COVID-19) pandemic exposure duration was associated with PTB and if the pandemic modified racial disparities.

Study design
We analyzed Philadelphia births and replicated in New Haven. Compared to matched months in two prior years, we analyzed overall PTB, specific PTB phenotypes, and stillbirth.

Results
Overall, PTB was similar between periods with the following exceptions. Compared to pre-pandemic, early pregnancy (<14 weeks') pandemic exposure was associated with lower risk of PTB < 28 weeks' (aRR 0.60 [0.30–1.10]) and later exposure with higher risk (aRR 1.77 [0.78–3.97]) (interaction p = 0.04). PTB < 32 weeks' among White patients decreased during the pandemic, resulting in non-significant widening of the Black-White disparity from aRR 2.51 (95%CI: 1.53–4.16) to aRR 4.07 (95%CI: 1.56–12.01) (interaction P = 0.41). No findings replicated in New Haven.

Conclusion
We detected no overall pandemic effects on PTB, but potential indirect benefits for some patients which could widen disparities remains possible. (Author)

2022-08482

Low Covid-19 infection rate period is associated with a rebound increase in preterm birth rate. Meyer R, Friedrich L,

Levin G (2023), Journal of Perinatology vol 43, no 5, May 2023, pp 670–672

Objective

Several studies have reported lower rates of preterm births (PTB) during the Covid-19 pandemic, while others have not shown this association [1]. These publications have studied the pandemic period in comparison to pre-pandemic periods. In Israel, following a significant reduction in new Covid-19 infections, averaging a weekly 4.3:100,000 new cases, the last lockdown was concluded on April 20, 2021 [2]. This remarkably low infection rate lasted through June 30, 2021. Considering the contradicting reports on PTB rates during the Covid-19 pandemic, and to evaluate the effect of infection burden on obstetrical outcomes, we aimed to study preterm births (PTB)s rate during this low Covid-19 infection rate period (LIRP) and compare it to the pre-pandemic period and a high infection rate period (HIRP).

Study design

A retrospective cohort study from a tertiary medical center, including all deliveries at ≥ 24 weeks gestation. We compared outcomes between three periods: 19/03/2019-19/03/2020 (pre-pandemic period which parallels the following HIRP), 20/03/2020-19/04/2021 (HIRP, first lockdown to end of last lockdown), and 20/04/2021-03/06/2021 (LIRP). Among multiple gestations, we analyzed only the first newborn. Outcomes included PTB rate, delivery mode and neonatal outcomes. We further analyzed PTB rate in the following population subsets: terminations of pregnancy (TOP) excluded, singleton gestations and nulliparous. Periods comparisons were performed using one-way ANOVA test and Kruskal-Wallis test, as appropriate. A two-sided $p < 0.05$ defined statistical significance. The institutional review board approved this study and informed consent was waived (7068-20-SMC, 03/30/2020).

Results

There were 10,707, 11,494, and 1330 deliveries in the pre-pandemic, HIRP and LIRP, respectively. Maternal and pregnancy characteristics were similar between groups (Table 1). Delivery rate at <37, <34, and <32 weeks of gestation was lower in the HIRP compared with the pre-pandemic and the LIRP ($p = 0.036$, $p = 0.015$, and $p = 0.004$, respectively, Table 1). Delivery mode and composite neonatal outcome were comparable between groups. Birthweight was lower in the pre-pandemic period compared with the HIRP ($p = 0.023$). In an analysis of the population subset of TOP excluded, there was a lower PTB rate (<37, <34 and <32) in the HIRP as compared to pre-pandemic and LIRP ($p = 0.041$, $p = 0.013$ and $p = 0.003$, respectively). The lower PTB rate in the HIRP as compared to the two other periods was demonstrated in an analysis of the subsets of nulliparous women (<34 and <32 weeks, $p = 0.009$ and $p = 0.007$, respectively) and singletons (<37, <34 and <32 weeks, $p = 0.010$, 0.014, $p = 0.012$, respectively) as well. (Author)

2022-07907

Changes in obstetrical practices during the 2020 COVID-19 pandemic. Gilroy LC, Al-Kouatly HB, Minkoff HL, et al (2022), American Journal of Obstetrics & Gynecology MFM vol 4, no 6, November 2022, 100717

Full URL: https://doi.org/10.1016/j.ajogmf.2022.100717

Research letter aiming to determine whether the COVID-19 pandemic was associated with an upward trend in labour inductions among low-risk patients at 39 weeks' gestation. Results show there was a further increase in labour inductions at 39 weeks but there was a noticeable dip in deliveries at this gestation, possibly due to spontaneous births declining. (LDO)

2022-07611

COVID-19 and decision-making for pregnant women: taking or relinquishing control in response to a pandemic. Kaselitz E, Finkbeiner C, Javaid S, et al (2022), Journal of Pregnancy vol 2022, no 6436200, May 2022

Full URL: https://doi.org/10.1155/2022/6436200

COVID-19 has uniquely impacted pregnant women. From the initial unknowns about its virulence during pregnancy, to frequent and rapidly changing hospital guidelines for prenatal care and delivery, pregnant women have felt intense uncertainty and, based on recent research, increased anxiety. This study sought to determine the impact COVID-19 had on women's birth plans. Open-ended qualitative responses from an anonymous, online survey of pregnant women in the United States, conducted on April 3-24, 2020, were analyzed using the Attride-Stirling qualitative

framework. A conceptual framework for understanding the impact of COVID-19 on women's birth plans was generated. 2,320 pregnant women (mean age 32.7 years, mean weeks pregnant 24.6 weeks) responded to the open-ended prompts, reflecting the following themes: the impact(s) of COVID-19 on pregnant women (including unanticipated changes and uncertainty), the effect of COVID-19 on decision-making (including emotional reactions and subsequent questioning of the healthcare system), and how both of those things led women to either exercise or relinquish their agency related to their birth plan. These findings indicate that the changes and uncertainty surrounding COVID-19 are causing significant challenges for pregnant women, and absent more clarity and more provider-driven support, women seeking to cope are considering changes to their birth plans. Health systems and providers should heed this warning and work to provide pregnant women and their families with more information, support, and collaborative planning to ensure a positive, healthy birth experience, even during a pandemic. (Author)

2022-07342

SHEA Pediatric Leadership Council commentary: Ambulatory management of neonates born to mothers infected with severe acute respiratory coronavirus 2 (SARS-CoV-2). Rubin LG, Kociolek LK, Schaffzin JK, et al for the Pediatric Leadership Council (2021), Infection Control and Hospital Epidemiology vol 42, no 9, September 2021, pp 1105-1107

Guidelines offered during the COVID-19 pandemic to help primary care and other ambulatory staff decide on the appropriate infection control measures for patient visits. Advises discussion between clinics, providers and local health authorities as local practices are subject to variation. (JSM)

2022-07032

Covid pandemic births: Mothers 'pitted against midwives'. McKiernan J (2022), BBC News 26 July 2022

Full URL: https://www.bbc.co.uk/news/uk-england-london-62001781?at_medium=RSS&at_campaign=KARANGA

Women have spoken to the BBC about the "nightmare" of giving birth during the restrictions imposed because of Covid. (Author)

2022-06260

The impact of withholding nitrous oxide in labour during the COVID-19 pandemic on maternal and neonatal outcomes. Froessler B, Malek M, Jila M, et al (2022), Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG) vol 62, no 6, December 2022, pp 910-914

Full URL: https://doi.org/10.1111/ajo.13577

Nitrous oxide is commonly used in Australia for labour analgesia. Its use in labour is potentially associated with aerosol generation. During the first wave of the COVID-19 pandemic of 2020, nitrous oxide was suspended on many birthing units to reduce the risk of transmission. We aimed to determine the impact of withholding nitrous oxide for labour analgesia, during the COVID-19 pandemic, on epidural rates, opioid analgesia use, and maternal and neonatal outcomes. Withholding nitrous oxide for labour analgesia did not alter epidural rates but did significantly increase opioid analgesia use. Caesarean section rates, post-partum blood loss and neonatal APGAR scores did not change. (Author)

2022-06181

Obstetric and perinatal outcomes in parturients with active SARS-CoV-2 infection during labor and delivery: a retrospective cohort study. Zlatkin R, Dollinger S, Jacoby C, et al (2022), BMC Pregnancy and Childbirth vol 22, no 511, 23 June 2022

Full URL: https://doi.org/10.1186/s12884-022-04825-6

Background

The COVID-19 pandemic is an ongoing global healthcare crisis that negatively affects pregnant women. Although patients with an acute infection during pregnancy have been widely studied, information regarding labor and delivery while infected is sparse. The aim of the study was to ascertain maternal, obstetrical, and perinatal outcomes of women who gave birth while infected with SARS-CoV-2.

Methods
Patients diagnosed with COVID-19 during pregnancy at a tertiary medical center in 4/20–2/21 were identified by a retrospective database search. Those with an active intrapartum SARS-CoV-2 infection were compared with those who recovered at least 10 days before labor and delivery.

Results
Of the 176 women included in the study, 84 had a SARS-CoV-2 infection at the time of delivery and 92 had recovered from the infection. There was no statistically significant between-group difference in mean gestational age at delivery (39 weeks for both, p = 0.71) and overall rate of cesarean delivery (26.2% vs 17.4%, respectively, p = 0.35) or non-elective cesarean delivery (10.71% vs 4.34%, respectively, p = 0.48). In the active-infection group, the rate of severe disease was 2.4%, and of critical disease (with intensive care unit admission, mechanical ventilation, and ECMO), 3.6%, compared to zero for both in the recovered group. No differences were found between the groups in adverse perinatal outcomes.

Conclusion
Delivery is safe and feasible in women with active SARS-CoV-2 infection. Nevertheless, we found a non-significant trend for more severe disease and for cesarean delivery and urgent cesarean delivery (for COVID-19-related indications) in women with an intrapartum SARS-CoV-2 infection. (Author)

2022-05913

Accessing Maternal Health Care in the Midst of the COVID-19 Pandemic: A Study in Two Districts of Assam, India. Padhye R, Purushotham A, Paul M, et al (2022), 31 March 2022, online

Full URL: https://doi.org/10.3389/fgwh.2022.750520

Background: COVID-19 pandemic and the subsequent national lockdown in India compelled the health system to focus on COVID-19 management. Information from the field indicated the impact of COVID- 19 on the provision of maternal health services. This research presents users' and providers' perspectives about the effect of the pandemic on maternal health services in select districts of Assam.

Methods: The study was undertaken to understand the status of maternal health service provision and challenges faced by 110 pregnant and recently delivered women, 38 health care providers and 18 Village Health Sanitation and Nutrition Committee members during COVID-19 pandemic. Telephonic interviews were conducted with the users identified through simple random sampling. Healthcare providers and the community members were identified purposively.

Results: Most of the interviewed women reported that they could access the health services, but had to spend out-of-pocket (for certain services) despite accessing the services from government health facilities. Healthcare providers highlighted the lack of transportation facilities and medicine unavailability as challenges in providing routine services. The study revealed high proportion of Caesarian section deliveries (42.6%, n = 32) and stillbirths (10.6%, n = 8).

Discussion: This research hypothesizes the supply-side (health system) factors and demand-side (community-level) factors converged to affect the access to maternal health services. Health system preparedness by ensuring availability of all services at the last mile and strengthening existing community-reliant health services is recommended for uninterrupted good quality and affordable maternal health service provision. (Author)

2022-04718

Maternity services: visiting restrictions [written answer]. Northern Ireland Assembly (2022), Hansard Written question AQW 214/22-27, 19 May 2022

Full URL: http://aims.niassembly.gov.uk/questions/printquestionsummary.aspx?docid=373642

The Minister of Health responds to a written question asked by Mr Pádraig Delargy, regarding whether all COVID-19 restrictions have been relaxed in maternity services and settings. (LDO)

2022-04570

Perspectives of Women Giving Birth during the COVID-19 Pandemic and Their Nurses. Callister LC (2022), MCN - American Journal of Maternal/Child Nursing vol 47, no 3, May/June 2022, p 171

Full URL: https://doi.org/10.1097/NMC.0000000000000819

The prolonged COVID-19 global pandemic has had a profound effect on the lived experiences of birthing women and their nurses. Our global health and nursing expert, Dr. Callister, reviews some of the recent data on how women giving birth and maternity nurses are coping with the changes in care conditions due to the pandemic. (Author)

2022-04318

More home births during the COVID-19 pandemic in the Netherlands. Verhoeven CJM, Boer J, Kok M, et al (2022), Birth vol 49, no 4, December 2022, pp 792-804

Full URL: https://doi.org/10.1111/birt.12646

Background

The aim of this observational study was to examine whether the course of pregnancy and birth and accompanying outcomes among low-risk pregnant women changed in the COVID-19 pandemic compared to the prepandemic period.

Methods

We analyzed data from the Dutch Midwifery Case Registration System (VeCaS). Differences in the course of pregnancy and birth, and accompanying maternal and neonatal outcomes, were calculated between women pregnant during the initial months of the COVID-19 pandemic (March 1 to August 3, 2020) and the prepandemic period (March 1–August 3, 2019). We also conducted a stratified analysis by parity.

Results

We included 5913 low-risk pregnant women of whom 2963 (50.1%) were pregnant during the first surge of the COVID-19 pandemic, and 2950 (49.9%) in the prepandemic period. During the COVID-19 pandemic, more women desired and had a home birth. More women used pain medication and fewer had an episiotomy in the COVID-19 period than prior. Multiparous women had a higher suspected rate of fetal growth restriction during COVID; however, the actual rate of small for gestational age infants was not significantly increased. We observed no differences for onset and augmentation of labor or for mode of birth, though the rate of vaginal births increased.

Conclusions

During the COVID-19 pandemic, there was a higher rate of planned and actual home birth, and suspected growth restriction and a lower rate of episiotomy among low-risk pregnant women in the Netherlands. (Author)

2022-04250

The Society for Obstetric Anesthesia and Perinatology Coronavirus Disease 2019 Registry: An Analysis of Outcomes Among Pregnant Women Delivering During the Initial Severe Acute Respiratory Syndrome Coronavirus-2 Outbreak in the United States. Katz D, Bateman BT, Kjaer K, et al (2021), Anesthesia & Analgesia vol 133, no 2, August 2021, pp 462-473

BACKGROUND:

Early reports associating severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection with adverse pregnancy outcomes were biased by including only women with severe disease without controls. The Society for Obstetric Anesthesia and Perinatology (SOAP) coronavirus disease 2019 (COVID-19) registry was created to compare peripartum outcomes and anesthetic utilization in women with and without SARS-CoV-2 infection delivering at institutions with widespread testing.

METHODS:
Deliveries from 14 US medical centers, from March 19 to May 31, 2020, were included. Peripartum infection was defined as a positive SARS-CoV-2 polymerase chain reaction test within 14 days of delivery. Consecutive SARS-CoV-2–infected patients with randomly selected control patients were sampled (1:2 ratio) with controls delivering during the same day without a positive test. Outcomes were obstetric (eg, delivery mode, hypertensive disorders of pregnancy, and delivery <37 weeks), an adverse neonatal outcome composite measure (primary), and anesthetic utilization (eg, neuraxial labor analgesia and anesthesia). Outcomes were analyzed using generalized estimating equations to account for clustering within centers. Sensitivity analyses compared symptomatic and asymptomatic patients to controls.

RESULTS:
One thousand four hundred fifty four peripartum women were included: 490 with SARS-CoV-2 infection (176 [35.9%] symptomatic) and 964 were controls. SARS-CoV-2 patients were slightly younger, more likely nonnulliparous, nonwhite, and Hispanic than controls. They were more likely to have diabetes, obesity, or cardiac disease and less likely to have autoimmune disease. After adjustment for confounders, individuals experiencing SARS-CoV-2 infection exhibited an increased risk for delivery <37 weeks of gestation compared to controls, 73 (14.8%) vs 98 (10.2%) (adjusted odds ratio [aOR], 1.47; 95% confidence interval [CI], 1.03–2.09). Effect estimates for other obstetric outcomes and the neonatal composite outcome measure were not meaningfully different between SARS-CoV-2 patients versus controls. In sensitivity analyses, compared to controls, symptomatic SARS-CoV-2 patients exhibited increases in cesarean delivery (aOR, 1.57; 95% CI, 1.09–2.27), postpartum length of stay (aOR, 1.89; 95% CI, 1.18–2.60), and delivery <37 weeks of gestation (aOR, 2.08; 95% CI, 1.29–3.36). These adverse outcomes were not found in asymptomatic women versus controls. SARS-CoV-2 patients (asymptomatic and symptomatic) were less likely to receive neuraxial labor analgesia (aOR, 0.52; 95% CI, 0.35–0.75) and more likely to receive general anesthesia for cesarean delivery (aOR, 3.69; 95% CI, 1.40–9.74) due to maternal respiratory failure.

CONCLUSIONS:
In this large, multicenter US cohort study of women with and without peripartum SARS-CoV-2 infection, differences in obstetric and neonatal outcomes seem to be mostly driven by symptomatic patients. Lower utilization of neuraxial analgesia in laboring patients with asymptomatic or symptomatic infection compared to patients without infection requires further investigation. (Author)

2022-04236

Adaptation of an Obstetric Anesthesia Service for the Severe Acute Respiratory Syndrome Coronavirus-2 Pandemic: Description of Checklists, Workflows, and Development Tools. Li Y, Ciampa EJ, Zucco L, et al (2021), Anesthesia & Analgesia vol 132, no 1, January 2021, pp 31-37

Full URL: https://doi.org/10.1213/ANE.0000000000005256

Background:
Care of the pregnant patient during the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) pandemic presents many challenges, including creating parallel workflows for infected and noninfected patients, minimizing waste of materials, and ensuring that clinicians can seamlessly transition between types of anesthesia. The exponential community spread of disease limited the time for development and training.

METHODS:
The goals of our workflow and process development were to maximize safety for staff and patients, minimize the risk of contamination, and reduce the waste of unused supplies and materials. We used a cyclical improvement system and the plus/delta debriefing method to rapidly develop workflows consisting of sequential checklists and procedure-specific packs.

RESULTS:
We designed independent workflows for labor analgesia, neuraxial anesthesia for cesarean delivery, conversion of

labor analgesia to cesarean anesthesia, and general anesthesia. In addition, we created procedure-specific material packs to optimize supplies and prevent wastage. Finally, we generated sequential checklists to allow staff to perform standard operating procedures without extensive training.

CONCLUSIONS:
Collectively, these workflows and tools allowed our staff to urgently care for patients in high-risk situations without prior experience. Over time, we refined the workflows using a cyclical improvement system. We present our checklists and workflows as well as the system we used for their development, so that others may use them to their benefit. (Author)

2022-03987

Preparation and consideration for establishment of an isolation maternity unit in a tertiary hospital during COVID-19 pandemic. He Y, Wong YWY, Ngeow AJH, et al (2022), BMC Pregnancy and Childbirth vol 22, no 317, 13 April 2022

Full URL: https://doi.org/10.1186/s12884-022-04643-w

The SARS-CoV-2 pandemic is rapidly evolving and remains a major health challenge worldwide. With an increase in pregnant women with COVID-19 infection, we recognized an urgent need to set up a multidisciplinary taskforce to provide safe and holistic care for this group of women. In this review of practice in a tertiary hospital in Singapore, we discuss the key considerations in setting up an isolation maternity unit and our strategies for peripartum and postpartum care. Through teleconsultation, we involve these women and their families in the discussion of timing and mode of birth, disposition of babies after birth and safety of breastfeeding to enable them to make informed decisions and individualize their care. (Author)

2022-03819

Early indirect impact of COVID-19 pandemic on utilisation and outcomes of reproductive, maternal, newborn, child and adolescent health services in Kenya: A cross-sectional study. Shikuku DN, Nyaoke IK, Nyaga LN, et al (2021), African Journal of Reproductive Health vol 25, no 6, December 2021, pp 76-87

The paper determined the initial impact of COVID-19 pandemic on reproductive, maternal, newborn, child and adolescent health (RMNCAH) services in Kenya. Hospital data for the first four months (March-June 2020) of the pandemic and the equivalent period in 2019 were compared using two-sample test of proportions. Despite the global projections for worse indicators, there were no differences in monthly mean (±SD) attendance between March-June 2019 vs 2020 for antenatal care (400,191.2±12,700.0 vs 384,697.3±20,838.6), hospital births (98,713.0±4,117.0 vs 99,634.5±3,215.5), family planning attendance (431,930.5±19,059.9 vs 448,168.3±31,559.8), post-abortion care (3,206.5±111.7 vs 448,168.3±31,559.8) and pentavalent 1 immunisation (114,701.0±3,701.1 vs 110,915.8±7,209.4), $p>0.05$. However, there were significant increases in FP utilisation among young people (25.7% to 27.0%), injectable (short-term) FP method uptake (58.2% to 62.3%), caesarean section rate (14.6% to 15.8%), adolescent maternal deaths (6.2% to 10.9%) and fresh stillbirths (0.9% to 1.0%) with a reduction in implants (long-term) uptake (16.5% to 13.0%) ($p<0.05$). With uncertainty around the duration of the pandemic, strategies to mitigate against catastrophic indirect maternal health outcomes are urgently needed. (Author)

2022-03604

Decision-to-delivery interval and neonatal outcomes for category-1 caesarean sections during the COVID-19 pandemic. Bhatia K, Columb M, Bewlay A, et al (2021), Anaesthesia vol 76, no 8, August 2021, pp 1051-1059

Full URL: https://doi.org/10.1111/anae.15489

General anaesthesia is known to achieve the shortest decision-to-delivery interval for category-1 caesarean section. We investigated whether the COVID-19 pandemic affected the decision-to delivery interval and influenced neonatal outcomes in patients who underwent category-1 caesarean section. Records of 562 patients who underwent emergency caesarean section between 1 April 2019 and 1 July 2019 in seven UK hospitals (pre-COVID-19 group) were compared with 577 emergency caesarean sections performed during the same period during the COVID-19 pandemic

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(1 April 2020–1 July 2020) (post-COVID-19 group). Primary outcome measures were: decision-to-delivery interval; number of caesarean sections achieving decision-to-delivery interval < 30 min; and a composite of adverse neonatal outcomes (Apgar 5-min score < 7, umbilical arterial pH < 7.10, neonatal intensive care unit admission and stillbirth). The use of general anaesthesia decreased significantly between the pre- and post-COVID-19 groups (risk ratio 0.48 (95%CI 0.37–0.62); p < 0.0001). Compared with the pre-COVID-19 group, the post-COVID-19 group had an increase in median (IQR [range]) decision-to-delivery interval (26 (18–32 [4–124]) min vs. 27 (20–33 [3–102]) min; p = 0.043) and a decrease in the number of caesarean sections meeting the decision-to-delivery interval target of < 30 min (374/562 (66.5%) vs. 349/577 (60.5%); p = 0.02). The incidence of adverse neonatal outcomes was similar in the pre- and post-COVID-19 groups (140/568 (24.6%) vs. 140/583 (24.0%), respectively; p = 0.85). The small increase in decision-to-delivery interval observed during the COVID-19 pandemic did not adversely affect neonatal outcomes. (Author)

2022-03591

The effect of COVID-19 on general anaesthesia rates for caesarean section. A cross-sectional analysis of six hospitals in the north-west of England. Bhatia K, Columb M, Bewlay A, et al (2021), Anaesthesia vol 76, no 3, March 2021, pp 312-319

Full URL: https://doi.org/10.1111/anae.15313

At the onset of the global pandemic of COVID-19 (SARS-CoV-2), guidelines recommended using regional anaesthesia for caesarean section in preference to general anaesthesia. National figures from the UK suggest that 8.75% of over 170,000 caesarean sections are performed under general anaesthetic. We explored whether general anaesthesia rates for caesarean section changed during the peak of the pandemic across six maternity units in the north-west of England. We analysed anaesthetic information for 2480 caesarean sections across six maternity units from 1 April to 1 July 2020 (during the pandemic) and compared this information with data from 2555 caesarean sections performed at the same hospitals over a similar period in 2019. Primary outcome was change in general anaesthesia rate for caesarean section. Secondary outcomes included overall caesarean section rates, obstetric indications for caesarean section and regional to general anaesthesia conversion rates. A significant reduction (7.7 to 3.7%, p < 0.0001) in general anaesthetic rates, risk ratio (95%CI) 0.50 (0.39–0.93), was noted across hospitals during the pandemic. Regional to general anaesthesia conversion rates reduced (1.7 to 0.8%, p = 0.012), risk ratio (95%CI) 0.50 (0.29–0.86). Obstetric indications for caesarean sections did not change (p = 0.17) while the overall caesarean section rate increased (28.3 to 29.7%), risk ratio (95%CI) 1.02 (1.00–1.04), p = 0.052. Our analysis shows that general anaesthesia rates for caesarean section declined during the peak of the pandemic. Anaesthetic decision-making, recommendations from anaesthetic guidelines and presence of an on-site anaesthetic consultant in the delivery suite seem to be the key factors that influenced this decline. (Author)

2022-03581

"Never let a good crisis go to waste": Positives from disrupted maternity care in Australia during COVID-19. Kluwgant D, Homer C, Dahlen H (2022), Midwifery vol 110, July 2022, 103340

Full URL: https://doi.org/10.1016/j.midw.2022.103340

Objective

Due to the COVID-19 pandemic, a number of changes to maternity care were rapidly introduced in all countries, including Australia, to reduce the risk of infection for pregnant women and their care providers. While many studies have reported on the negative effects of these changes, there is a paucity of evidence on factors which women and their providers perceived as positive and useful for future maternity care.

Design

Data was analysed from the Birth in the time of COVID-19 (BITTOC 2020) study survey. Conventional content analysis and descriptive statistics were used to analyse the data and examine which aspects of COVID-amended care women experienced as positive. Data from women were compared to data from midwives.

Setting

This project took place in Australia in 2020-2021.

Participants
The survey was distributed to women who gave birth and midwives who worked in Australia during the COVID-19 pandemic (March 2020 onwards).

Measurements and findings
Women reported a variety of positives from their maternity care during COVID-19. These included both care-related factors as well as contextual factors. The most commonly mentioned positives for pregnant and postnatal women were care-related, namely fewer visitors in hospital, having increased access to telehealth services. These were also the most commonly reported positives by midwives. Having midwifery continuity of care models, giving birth at home and having their partner work from home were also highlighted by women as positives.

Key conclusions
Despite the negative effect of COVID-19-related restrictions on maternity care, a variety of changes were viewed as positive by both women and midwives, with strong agreement between the two groups.

Implications for practice
These findings provide evidence to support the inclusion of these positive elements of care and ensure that the lessons learned from the pandemic are utilised to improve maternity care in Australia going forward. (Author)

2022-03175

The impact of the Covid-19 pandemic on maternal delivery experiences and breastfeeding practices in China: data from a cross-sectional study. Yu J, Gao M, Wei Z, et al (2022), BMC Pediatrics vol 22, no 104, 24 February 2022

Full URL: https://doi.org/10.1186/s12887-022-03155-y

Background
The COVID-2019 pandemic has placed extensive pressure on health systems and posed a severe public health challenge worldwide. Lockdown measures implemented in many countries have delayed virus spread. However, a considerable number of people have faced unprecedented pressure, especially pregnant and breast-feeding women, because face-to-face professional support has been reduced during the lockdown in many countries.

Objectives
To compare the delivery and infant feeding experiences of women who delivered before (BL) versus during (DL) the Covid-19 pandemic in Beijing, China and to investigate predictors of breastfeeding at 6-months.

Methods
Women aged ≥18 years with an infant ≤18 months of age completed an anonymous survey. Information/links were shared online and via local clinics in Beijing. Logistic regression was performed to assess predictors of breastfeeding during the first 6-months.

Results
One thousand eight hundred seven women provided data; BL 1231 (68.1%), DL 576 (31.9%). Significantly more mothers in DL group reported the lockdown had moderate to high impact to their household income ($p = 0.013$) and the convenience of purchasing daily necessities($p = 0.014$). Compared to BL mothers, significantly more mothers in the DL groups thought their birth location and breastfeeding intention had been effected by the COVID-19 ($p < 0.001$, $p = 0.036$ respectively). Mostly breastfeeding (MBF, mainly breastfeeding with few non-formula fluids added) at 6 months was predicted by delivery during the lockdown period (OR1.43, 95% confidence interval (CI) 1.08, 1.90), younger maternal age (OR 0.96, 95%CI 0.93, 0.99), getting support from friends or relatives (OR 1.95, 95%CI 1.06, 3.59), and discussing health issues in online groups > four times a week (OR 1.66, 95%CI 1.09, 2.53).

Conclusion
The COVID-19 pandemic and lockdown measures influenced mothers' planned birth location and breastfeeding intention. However, breastfeeding practice was maintained during the pandemic. Our results highlight the importance of feeding support as well as potential beneficial effects of increased mother-infant contact during the lockdown period which is relevant even under normal circumstances. (Author)

2022-03130

Experience of a tertiary pandemic centre on the labour and delivery of 337 pregnant women with COVID-19: a prospective cohort study from Turkey. Sahin D, Tanacan A, Erol SA, et al (2022), Journal of Obstetrics and Gynaecology vol 42, no 6, 2022, pp 1803-1810

The aim of the present study is to share the experience of a tertiary reference pandemic centre on the labour and delivery of pregnant women with coronavirus disease 2019 (COVID-19). This prospective cohort study was conducted on pregnant women with COVID-19 (n = 337). Patients were divided into two groups based on their severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) polymerase chain reaction (PCR) positivity (n = 103 positive and n = 234 negative) during the delivery. Thereafter, clinical characteristics and perinatal outcomes were compared between the groups. Moreover, delivery characteristics and clinical features were compared between primary caesarean section (n = 117) and normal spontaneous vaginal delivery cases (n = 100). Labour induction was performed in 16% of cases with a failure rate of 35%. Caesarean rate was 70% and the most common indication was worsening in maternal condition. Significant, positive and moderate correlations were observed between COVID-19 severity at admission (r = 0.422, p<.001), radiologic findings consistent with COVID-19 (r = 0.400, p<.001), the necessity for oxygen support during the delivery (r = 0.406, p<.001) and postpartum worsening in maternal condition. A significant, positive weak correlation was found between caesarean delivery and postpartum worsening in maternal condition (r = 0.176, p<.001). COVID-19 seems to be associated with increased rates of obstetric complications and caesarean delivery.

Impact Statement
What is already known on this subject? Increased rates of foetal distress and caesarean section were reported in pregnant women with COVID-19. Appropriate management of labour and delivery in infected pregnant women is crucial to obtain favourable perinatal outcomes.

What do the results of this study add? COVID-19 seems to be associated with increased rates of obstetric complications and caesarean delivery. PCR positive group had significantly higher primary and prelabor caesarean delivery rates. Severe/critic COVID-19 infection rate was significantly higher in the primary caesarean group. Significant, positive and moderate correlations were observed between COVID-19 severity at admission, radiologic findings consistent with COVID-19, the necessity for oxygen support during the delivery and postpartum worsening in maternal condition. A significant, positive weak correlation was found between caesarean delivery and postpartum worsening in maternal condition.

What are the implications of these findings for clinical practice and/or further research? Management and delivery of pregnant women with COVID-19 should be individualised. The findings of the present study may lead to the establishment of future obstetric protocols in this special population. (Author)

2022-03071

Childbirths at home and in birthing centers rose during COVID-19: Oregon 2020 vs prior years. Smith AJS, Zhou RA, Sites E, et al (2022), American Journal of Obstetrics & Gynecology (AJOG) vol 227, no 1, July 2022, pp 108-111
Full URL: https://doi.org/10.1016/j.ajog.2022.03.027

Research letter exploring differences in place of birth before and during the COVID-19 pandemic in Oregon, United States. Results show that hospital births declined significantly during the first year of the pandemic. (LDO)

2022-02982

Giving birth in a pandemic: women's birth experiences in England during COVID-19. Aydin E, Glasgow KA, Weiss SM, et al (2022), BMC Pregnancy and Childbirth vol 22, no 304, 10 April 2022

Full URL: https://doi.org/10.1186/s12884-022-04637-8

Background

Expectant parents worldwide have experienced changes in the way they give birth as a result of COVID-19, including restrictions relating to access to birthing units and the presence of birthing partners during the birth, and changes to birth plans. This paper reports the experiences of women in England.

Methods

Data were obtained from both closed- and open-ended responses collected as part of the national COVID in Context of Pregnancy, Infancy and Parenting (CoCoPIP) Study online survey (n = 477 families) between 15th July 2020 – 29th March 2021. Frequency data are presented alongside the results of a sentiment analysis; the open-ended data was analysed thematically.

Results

Two-thirds of expectant women reported giving birth via spontaneous vaginal delivery (SVD) (66.1%) and a third via caesarean section (CS) (32.6%) or 'other' (1.3%). Just under half (49.7%) of the CS were reported to have been elective/planned, with 47.7% being emergencies. A third (37.4%) of participants reported having no changes to their birth (as set out in their birthing plan), with a further 25% reporting COVID-related changes, and 37.4% reporting non-COVID related changes (e.g., changes as a result of birthing complications). One quarter of the sample reported COVID-related changes to their birth plan, including limited birthing options and reduced feelings of control; difficulties accessing pain-relief and assistance, and feelings of distress and anxiety. Under half of the respondents reported not knowing whether there could be someone present at the birth (44.8%), with 2.3% of respondents reporting no birthing partner being present due to COVID-related restrictions. Parental experiences of communication and advice provided by the hospital prior to delivery were mixed, with significant stress and anxiety being reported in relation to both the fluctuating guidance and lack of certainty regarding the presence of birthing partners at the birth. The sentiment analysis revealed that participant experiences of giving birth during the pandemic were predominately negative (46.9%) particularly in relation to the first national lockdown, with a smaller proportion of positive (33.2%) and neutral responses (19.9%).

Conclusion

The proportion of parents reporting birthing interventions (i.e., emergency CS) was higher than previously reported, as were uncertainties related to the birth, and poor communication, leading to increased feelings of anxiety and high levels of negative emotions. The implications of these findings are discussed. (Author)

2022-02945

Simulation-guided preparations for the management of suspected or confirmed COVID-19 cases in the obstetric emergency theater. Muhsen WS, Marshall-Roberts R (2022), Journal of Maternal-Fetal and Neonatal Medicine vol 35, no 9, 2022, pp 1801-1804

Full URL: https://doi.org/10.1080/14767058.2020.1765333

Aims

The coronavirus 2019 infection (COVID-19) global outbreak has resulted in unprecedented pressures on health services, the need to prepare for the worst-case scenario, and the need for health experts to utilize their knowledge and expertise to fight this virus. The simulation training objective of this study was to enhance the neonatal, maternity, and anesthetics teams' preparedness for the management of the emergency delivery of pregnant women with suspected or confirmed COVID-19 infection.

Methods

Three clinical simulation training sessions were conducted in March 2020 at the University Hospital Plymouth, Plymouth, UK. The neonatal, maternity, and anesthetics clinical teams participated in these joint training sessions in

the obstetric emergency theater.

Results
Each session lasted for around an hour. Suggestions were discussed and recommendations made. The key changes were: first, floor plan adjustment, increase of the clinical area by converting some offices to clinical spaces, and standard operating procedures for transporting patients; second, enhancement of the efficiency of the communication and coordination between the clinical teams; third, availability of extra support for the staff in the Central Delivery Suite (CDS); and fourth, introduction of a neonatal care pathway to manage neonatal resuscitation in such an emergency.

Conclusions
Collaboration and joint training between the different clinical teams involved in the care of suspected or confirmed COVID-19 patients was proven to be one of the most effective ways of improving performance. (Author)

2022-02924

Impact of the COVID-19 pandemic and multiple community lockdowns on total live birth rates and preterm births in Melbourne, Australia. Stansfield S, Rattan A, Mol BW, et al (2022), Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG) vol 62, no 5, October 2022, pp786-789
Full URL: https://doi.org/10.1111/ajo.13527

We evaluated the impact of the COVID-19 pandemic and Melbourne's multiple community lockdowns (between 2020–21) on total live birth rates and preterm births in a large health network. Analysis revealed a decrease in total live birth rates following easing of initial lockdowns, and a sharp increase in births at one stage in between lockdowns. The proportion and number of preterm births (<37 weeks gestation) decreased at the start of initial lockdowns with the strongest decrease after the end of the second lockdown period. Births <34 weeks gestation also decreased during lockdowns, but no significant change was identified for births <28 weeks gestation. (Author)

2022-02733

Socioeconomic Disparity in Birth Rates During the COVID-19 Pandemic in New York City. Silverman ME, Sami TJ, Kangwa TS, et al (2022), Journal of Women's Health 9 April 2022, online
Full URL: https://doi.org/10.1089/jwh.2021.0571

Introduction: The differential impact of the coronavirus disease 2019 (COVID-19) pandemic across race, ethnicity, and socioeconomic status remains poorly understood. While recent explorations into birthrates during the pandemic have revealed significant declines, how birthrates may have differed between racial and socioeconomic subgroups during the pandemic remains to be detailed.

Methods: Using electronic health records from a large hospital network in New York serving a racially and socioeconomically diverse population, we explored birthrates associated with conceptions that occurred during the COVID-19 pandemic lockdown for demographic and obstetric differences.

Results: Two thousand five hundred twenty-three unique patient deliveries corresponded with conceptions that occurred during the COVID-19 pandemic lockdown in New York. Compared to the same period the previous year, there was a 22.85% decrease in births. Explorations into differences in birthrates by socioeconomic status revealed that much of the decline could be explained by fewer births among individuals living in higher socioeconomic status as opposed to individuals living in urban economic poverty [$\chi 2(n = 5588) = 18.35$, $p < 0.01$].

Conclusion: On March 22, 2020, New York instituted a prohibition of all nonessential social gatherings and the closure of all nonessential businesses. Although the full impact of the COVID-19 pandemic on reproductive health and outcomes remains largely unknown, the decreased birthrate associated with the initial COVID-19 wave in New York was not entirely unexpected. While the mechanisms that drive health disparities are complex and multifactorial, most

of the decrease occurred among those living in higher socioeconomic status. This finding has important implications for understanding health behaviors and disparities among minorities living in low socioeconomic status. (Author)

2022-02675

Interest in Home Birth During the COVID-19 Pandemic: Analysis of Google Trends Data. Cheng RJ, Fisher AC, Nicholson SC (2022), Journal of Midwifery & Women's Health vol 67, no 4, July/August 2022, pp 427-434

Full URL: https://doi.org/10.1111/jmwh.13341

Introduction

Nearly all (94%-99%) pregnant persons in developed countries search for pregnancy-related information online. The advent of the novel coronavirus disease 2019 (COVID-19) and the associated restrictions in hospital policies may have pushed pregnant persons in the United States to consider giving birth at home to achieve their desired birth experience.

Methods

Google Trends is an open, rich source of real-time, anonymized, relative data on disease patterns and population behavior that provides data in the form of search volume index (SVI): the search volume for a queried term relative to overall search volume for a given time frame and geographic location. The SVI is normalized to a scale of 0 to 100. After the World Health Organization declared COVID-19 a pandemic on March 11, 2020, Google Trends was queried on February 21, 2021, for the search term home birth with location set to the United States and the time frame March 11, 2019 to February 21, 2021.

Results

The median SVI for home birth during nominally pre-COVID-19 baseline (weeks of March 17, 2019 to March 8, 2020) was relatively constant at 43 (range, 25-56) and increased sharply to 77 during the week of March 15, to 86 during the week of March 22, and peaked at 100 during the week of March 29, 2020. The SVI declined substantially in the following weeks but remained significantly elevated compared with baseline levels. During the approximate 2-year period of query, the states with the highest SVI values (≥80) were Arkansas, Washington, Montana, and Georgia.

Discussion

Interest in home birth spiked in the United States immediately after COVID-19 was declared a pandemic and remained significantly elevated thereafter. These results have implications for caregivers and health systems to ensure safe pregnancies and childbirths through the resolution of the ongoing pandemic. (Author)

2022-02305

Maternity Services: Coronavirus [written answer]. House of Commons (2020), Hansard Written question 114319, 11 November 2020

Full URL: https://questions-statements.parliament.uk/written-questions/detail/2020-11-11/114319

Ms Nadine Dorries responds to a written question asked by Luke Pollard to the Secretary of State for Health and Social Care, regarding the resources he has made available to support fathers or birthing partners unable to support mothers through the maternity process as a result of the new national COVID-19 lockdown restrictions. (LDO)

2022-02284

South East NHS trusts suspend births at home and in midwife-led units. Anon (2021), BBC News 5 January 2021

Full URL: https://www.bbc.co.uk/news/uk-england-sussex-55545882

Births at home and at midwife-led units have been suspended in some areas due to the 'significant pressure' the ambulance service is facing. (Author)

2022-02124

Giving birth and becoming a parent during the COVID-19 pandemic: A qualitative analysis of 806 women's responses to three open-ended questions in an online survey. Eri TS, Blix E, Downe S, et al (2022), Midwifery vol 109, June 2022, 103321

Full URL: https://doi.org/10.1016/j.midw.2022.103321

Background
When Europe was hit by the COVID-19 pandemic, changes were made in maternity care to reduce infections. In Norway, hospital maternity wards, postnatal wards, and neonatal units' companions and visitors were restricted. We aimed to explore the experiences of being pregnant, giving birth and becoming a parent in Norway during the COVID-19 pandemic.

Methods
The study is based on the responses from women who provided in-depth qualitative accounts to the ongoing Babies Born Better survey version 3 during the first year of the COVID-19 pandemic. The responses were analysed with inductive thematic analysis.

Results
In all, 806 women were included, regardless of parity and mode of birth. They gave birth in 42 of 45 available birthing units across Norway. The analysis resulted in four themes: 1) Pregnancy as a stressful waiting period; 2) Feeling lonely, isolated, and disempowered without their partner; 3) Sharing experiences and becoming a family; and 4) Busy postnatal care without compassion.

Conclusion
The COVID-19 pandemic seems to have affected women's experiences of giving birth and becoming a parent in Norway. The restrictions placed on companionship by the healthcare facilities varied between hospitals. However, the restrictions seem to have affected a range of aspects related to women's experiences of late pregnancy, early labour and birth and the early postpartum period. Postnatal care was already poor, and the pandemic has highlighted the shortcomings, especially where companionship was banned. (Author)

2022-02096

Quality of care at childbirth: Findings of IMAgiNE EURO in Italy during the first year of the COVID-19 pandemic. Lazzerini M, Covi B, Mariani I, et al (2022), International Journal of Gynecology & Obstetrics vol 157, no 2, May 2022, pp 405-417

Full URL: https://doi.org/10.1002/ijgo.14119

Objective
Investigate the quality of maternal and newborn care (QMNC) during childbirth in the first year of COVID-19 pandemic in Italy, from the mothers' perspective, as key service users.

Methods
Women who gave birth in an Italian facility from March 1, 2020 to February 29, 2021 answered an online questionnaire including 40 WHO Standard-based Quality Measures. Descriptive and multivariate quantile regression analyses were performed.

Results
In total, 4824 women were included, reporting heterogeneity of practices across regions: among 3981 women who underwent labour 78.4% (63.0%–92.0%) were not allowed a companion of choice, 44.6% (28.9%–53.3%) had difficulties in attending routine antenatal visits, 36.3% (24.9%–61.1%) reported inadequate breastfeeding support, 39.2% (23.3%–62.2%) felt not involved in medical choices, 33.0% (23.9%–49.3%) experienced unclear communication from staff, 24.8% (15.9%–39.4%) were not always treated with dignity and 12.7% (10.1%–29.3%) reported abuses. Findings in the group of women who did not experience labour were substantially similar. Multivariate analyses confirmed a significant lower QMNC index for regions in southern Italy compared to North and Central regions.

Conclusion

Mothers reported substantial inequities in the QMNC across Italian regions. Future studies should monitor QMNC over time. Meanwhile, actions to ensure high QMNC for all mothers and newborns across Italy are urgently required. (Author)

2022-01825

Disruptions in maternal and child health service utilization during COVID-19: analysis from eight sub-Saharan African countries. Shapira G, Ahmed T, Drouard SHP, et al (2021), Health Policy and Planning vol 36, no 7, August 2021, pp 1140-1151

Full URL: https://doi.org/10.1093/heapol/czab064

The coronavirus-19 pandemic and its secondary effects threaten the continuity of essential health services delivery, which may lead to worsened population health and a protracted public health crisis. We quantify such disruptions, focusing on maternal and child health, in eight sub-Saharan countries. Service volumes are extracted from administrative systems for 63 954 facilities in eight countries: Cameroon, Democratic Republic of Congo, Liberia, Malawi, Mali, Nigeria, Sierra Leone and Somalia. Using an interrupted time series design and an ordinary least squares regression model with facility-level fixed effects, we analyze data from January 2018 to February 2020 to predict what service utilization levels would have been in March–July 2020 in the absence of the pandemic, accounting for both secular trends and seasonality. Estimates of disruption are derived by comparing the predicted and observed service utilization levels during the pandemic period. All countries experienced service disruptions for at least 1 month, but the magnitude and duration of the disruptions vary. Outpatient consultations and child vaccinations were the most commonly affected services and fell by the largest margins. We estimate a cumulative shortfall of 5 149 491 outpatient consultations and 328 961 third-dose pentavalent vaccinations during the 5 months in these eight countries. Decreases in maternal health service utilization are less generalized, although significant declines in institutional deliveries, antenatal care and postnatal care were detected in some countries. There is a need to better understand the factors determining the magnitude and duration of such disruptions in order to design interventions that would respond to the shortfall in care. Service delivery modifications need to be both highly contextualized and integrated as a core component of future epidemic response and planning. (Author)

2022-01820

'COVID affected us all:' the birth and postnatal health experiences of resettled Syrian refugee women during COVID-19 in Canada. Cameron ES, Ramos H, Aston M, et al (2021), Reproductive Health vol 18, no 256, 24 December 2021

Full URL: https://doi.org/10.1186/s12978-021-01309-2

Background
Prior to COVID-19, postnatal resettled refugee women in Canada reported barriers to healthcare and low levels of social support, contributing to maternal health morbidities. The COVID-19 pandemic appears to be further exacerbating health inequities for marginalized populations. The experiences of resettled refugee women are not fully known.

Aim
To understand Syrian refugee women's experiences accessing postnatal healthcare services and supports during the COVID-19 pandemic.

Methods
Semi-structured, virtual interviews were conducted with eight resettled Syrian refugee women living in Nova Scotia (Canada) who were postnatal between March and August 2020. Data analysis was informed by constructivist grounded theory.

Findings
Three themes emerged: "the impacts of COVID-19 on postnatal healthcare;" "loss of informal support;" and "grief and anxiety." Women experienced difficult healthcare interactions, including socially and physically isolated deliveries, challenges accessing in-person interpreters, and cancelled or unavailable in-home services (e.g., public health nurse

and doula visits). Increased childcare responsibilities and limited informal supports due to pandemic restrictions left women feeling overwhelmed and exhausted. Stay-at-home orders resulted in some women reporting feelings of isolation and loss, as they were unable to share in person postnatal moments with friends and family, ultimately impacting their mental wellness.

Conclusions
COVID-19 and associated public health restrictions had significant impacts on postnatal Syrian refugee women. Data presented in this study demonstrated the ways in which the pandemic environment and related restrictions amplified pre-existing barriers to care and postnatal health inequalities for resettled refugee women—particularly a lack of postnatal informal supports and systemic barriers to care. (Author)

2022-01709

Comparative evaluation of the impact of the COVID-19 lockdown on perinatal experience: A prospective multicentre study.
Bertholdt C, Epstein J, Alleyrat C, et al (2022), BJOG: An International Journal of Obstetrics and Gynaecology vol 129, no 8, July 2022, pp 1333-1341

Full URL: https://doi.org/10.1111/1471-0528.17082

Objectives
To compare in the early postpartum the perinatal experience during a COVID-19 related lockdown ('lockdown' group) and a pandemic control group subject to looser restrictions.

Design and setting
This national multicentre prospective cohort study took place in four French maternity units.

Population
Women were recruited during the postpartum stay for the lockdown and pandemic control groups, according to their enrolment period. Both faced the same labour and delivery restrictions but only the pandemic control group could have a postpartum visitor.

Main outcome measures
The primary outcome was the perinatal experience during childbirth, assessed by the Labour Agentry Scale (LAS) self-administered questionnaire, completed before discharge.

Results
The study included 596 women and analysed 571 of them: 260 in the lockdown group and 311 in the pandemic control group. The mean LAS score was lower in the lockdown group (161.1 ± 26.8, 95% confidence interval [CI] 157.8–164.3 versus 163.3 ± 24.0, 95% CI 160.6–166.0; P = 0.289). In multivariable analysis, the LAS score was lower in the lockdown group (−6.2 points, P = 0.009), in women with caesarean (−21.6 points, P < 0.001) versus spontaneous deliveries, and among women financially impacted by the lockdown (−6.4 points, P = 0.007) or who experienced restrictions during childbirth (−8.1 points, P < 0.001). The LAS score rose with the prenatal care quality score (P < 0.001).

Conclusions
The perinatal experience was more negatively affected by lockdown restrictions than by the looser pandemic restrictions for controls, but mode of delivery remained the main factor influencing this experience. (Author)

2022-01372

My Drug-Free VBAC During Covid. Treyster L (2022), The Journal of Perinatal Education vol 31, no 1, Winter 2022, pp 6-7

In 2016, I had a complicated cesarean. My daughter was breech and I ended up with a crash cesarean resulting in internal organ damage; furthermore, she was born with a complete cleft lip and palate, so breastfeeding was not possible. In spring 2020, as the world was locking down for Covid, I found out I was having a baby boy, due in

September. I wanted to try for a VBAC (vaginal birth after cesarean) to reduce my risk of complications and to heal emotionally from the complicated cesarean. My OB-GYN advised me to stay home as long as possible, as my designated hospital was not known for encouraging VBACs. I woke up on August 29 at 4:30am, 2 weeks before my due date, having mild contractions. I ate, read a book, and timed my contractions and tried to be quiet so as not to wake anyone up. By 6:30am, the contractions were strong so I woke up my husband and we dropped our two girls off with a family friend. We dropped them off at 7:20 and raced to the hospital. Luckily the hospital was only 2 miles away. I showed up fully dilated and ready to push. I would have had my son in the parking lot if a bystander hadn't brought a wheelchair. I had to sign a consent paper and do the rapid Covid test after delivering my son. It was an incredibly healing birth. (Author)

2022-01370

Measures against COVID-19 pandemic – a single tertiary center experience. Ilgen O, Saatli B, Timur Tahan S, et al (2022), Journal of Obstetrics and Gynaecology 10 February 2022, online

This paper reports the measures taken to manage the impact of the COVID-19 pandemic on O&G services in a tertiary referal centre and their outcomes. All the patients included in this study received inpatient treatment and underwent surgery between March 10 2020 and end of June 2020, including obstetric or gynaecologic cases combined. Data including age, diagnosis, operation, duration of preoperative and postoperative hospital stay, COVID-19 status were recorded. COVID-19 status of the patients was diagnosed with a nasopharyngeal swab test. Thirty-seven (20%) of 177 operations were performed because of gynaecologic reasons. The rest of them were caesarean sections (C/S). In gynaecologic cases, 22 (59%) of 37 were emergent operations, nine (24%) cases were oncologic and six (16%) cases were elective gynaecological surgeries. On the other hand, 43 (30%) of 140 patients, who underwent caesarean sections, were urgent surgeries. The rest were elective and planned caesarean sections. Only five patients (2.8%) who had undergone caesarean sections were tested positive for COVID-19. No COVID-19 transmission to staff was recorded in this period. Measures against the COVID-19 pandemic must be multidisciplinary and is crucial to prevent the spread of the disease to staff in close contact.

Impact Statement

What is already known on this subject? COVID-19 pandemic has been a crucial health problem worldwide. Healthcare workers work intensely to protect people from the pandemic. It is especially important to protect healthcare professionals and hospitalized patients from virus transmission. Therefore, utilization of personal protective equipment such as masks, gloves and goggles is obligatory, and hygiene rules such as sanitization of hands are strictly followed.

What the results of this study add? This study adds the experience and success of a tertiary centre regarding the measure against COVID-19 to the literature. No viral transmission was detected to healthcare workers and other patients from COVID-19 patients. Hence, measures that mentioned in the present study should be an example to other centres for protection against pandemic.

What the implications are of these findings for clinical practice and/or further research? As mentioned above, measures that are explained in the present study should be an example to other centres for protection against the pandemic. Further larger size clinical studies are needed to prove the beneficial effect of the measures that still used against pandemic. (Author)

2022-01047

Birth during the Covid-19 pandemic: What childbearing people in the United States needed to achieve a positive birth experience. Combellick JL, Ibrahim BB, Julien T, et al (2022), Birth vol 49, no 2, June 2022, pp 341-351

Full URL: https://doi.org/10.1111/birt.12616

Background

The COVID pandemic exposed many inadequacies in the maternity care system in the United States. Maternity care

protocols put in place during this crisis often did not include input from childbearing people or follow prepandemic guidelines for high-quality care. Departure from standard maternity care practices led to unfavorable and traumatic experiences for childbearing people. This study aimed to identify what childbearing people needed to achieve a positive birth experience during the pandemic.

Methods
This mixed-methods, cross-sectional study was conducted among individuals who gave birth during the COVID pandemic from 3/1/2020 to 11/1/2020. Participants were sampled via a Web-based questionnaire that was distributed nationally. Descriptive and bivariate statistics were analyzed. Thematic and content analyses of qualitative data were based on narrative information provided by participants. Qualitative and convergent quantitative data were reported.

Results
Participants (n = 707) from 46 states and the District of Columbia completed the questionnaire with 394 contributing qualitative data about their experiences. Qualitative findings reflected women's priorities for (a) the option of community birth, (b) access to midwives, (c) the right to an advocate at birth, and (d) the need for transparent and affirming communication. Quantitative data reinforced these findings. Participants with a midwife provider felt significantly better informed. Those who gave birth in a community setting (at home or in a freestanding birth center) also reported significantly higher satisfaction and felt better informed. Participants of color (BIPOC) were significantly less satisfied and more stressed while pregnant and giving birth during the pandemic.

Conclusions
High-quality maternity care places childbearing people at the center of care. Prioritizing the needs of childbearing people, in COVID times or otherwise, is critical for improving their experiences and delivering efficacious and safe care. (Author) [Erratum: Birth, 13 July 2022, online. https://doi.org/10.1111/birt.12670]

2022-01044

The effects of not having continuous companion support during labour on pregnancy and neonatal outcomes during the COVID-19 pandemic. Mok YK, Cheung KW, Wang W, et al (2022), Midwifery vol 108, May 2022, 103293

Full URL: https://doi.org/10.1016/j.midw.2022.103293

Objective
With the surge of confirmed cases of coronavirus disease 2019 (COVID-19) and its associated morbidities and mortalities, continuous companion support during labour was halted in all public hospitals in Hong Kong to prevent the spread of the virus in hospitals. The purpose of this retrospective study was to evaluate the effect of not having continuous companion support during labour on pregnancy and neonatal outcomes during the COVID-19 pandemic period in a regional hospital.

Study design
We retrieved information on women without continuous companion support during the COVID-19 pandemic period from February 1, 2020 to May 15, 2020 and those with continuous companion support within the same period in 2019 in Queen Mary Hospital, Hong Kong. The pregnancy and neonatal outcomes were compared between the two groups.

Results
A total of 446 women with continuous companion support in 2019 and 340 women without continuous companion support in 2020 were included in the analysis. The rate of labour augmentation was significantly lower in women with continuous companion support than in those without continuous companion support (3.1% vs. 6.5%, respectively, p = 0.027). Babies born to women with continuous companion support were less likely to have Apgar scores <7 at 1 min than those born to women without continuous companion support (2.5% vs. 5.3%, respectively, p = 0.036). More women with continuous companion support had breastfeeding at the first hour of delivery than those without (86.3% vs. 80.6%, respectively, p = 0.030). There were no differences in other pregnancy and neonatal outcomes. The subgroup analysis with only Chinese women showed that the pregnancy and neonatal outcomes were not

significantly different between the two groups.

Conclusion
Women without continuous companion support during labour had an increased chance of labour augmentation and babies with an Apgar score <7 at 1 min, and a reduced immediate breastfeeding rate when compared with those with continuous companion support. (Author)

2022-00726

Impact of suspending labour companionship during the COVID-19 pandemic on intrapartum care and delivery outcomes. Eu K-S, Chung CD (2022), Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG) vol 62, no 3, June 2022, pp 413-419

Full URL: https://doi.org/10.1111/ajo.13490

Background
As part of infection control measures during the COVID-19 pandemic, labour companionship was suspended intermittently at public hospitals across Hong Kong.

Aims
The aim was to assess the impact of restricting labour companionship on intrapartum care and maternal and neonatal outcomes.

Materials and methods
This is a retrospective cohort study comparing patients admitted for vaginal delivery with and without a labour companion. Deliveries during 1 February to 20 May and 17 July to 11 September 2020 ('alone group') were compared to deliveries during the same periods one year earlier when companionship was unrestricted ('accompanied group'). Outcomes were controlled for age, parity, body mass index, birth weight, education level and induction of labour.

Results
There were 651 and 491 deliveries in the accompanied and alone groups, respectively. Overall, physiological maternal and neonatal outcomes were not significantly different. Neonates in the alone group were more likely to have skin-to-skin contact delayed beyond 60 min after delivery (odds ratio 1.48, 95% confidence interval 1.45–1.51). None of these infants were exclusively breastfed at the time of discharge.

Conclusions
The presence of a labour companion may encourage earlier initiation of skin-to-skin contact, which has been shown to improve bonding experience. However, families that have already been affected by previous restrictions can be provided some reassurance that physiological outcomes do not appear to be significantly different. In addition, interventions that encourage companion involvement, such as breathing exercises and massages, were not hindered, as midwives took on a greater role in supporting the parturient. (Author)

2022-00488

Impact of COVID-19 on maternity and neonatal services– Three year-on-year review data from the North East of England. Athiraman NK, Patience A, Onwuneme C, et al (2022), Acta Paediatrica vol 111, no 5, May 2022, pp 1039-1041

Full URL: https://doi.org/10.1111/apa.16264

The objective of this study was to assess whether the COVID-19 pandemic impacted on pregnancy outcomes including rates of caesarean sections, induction of labour (IOL), intra-uterine death (IUD), term and preterm admissions to the neonatal unit. (Author, edited)

2022-00274

Close to me. Gutteridge K (2022), The Practising Midwife vol 25, no 1, January 2022, p 15

Over the past 18 months, maternity services have experienced a raft of issues never before encountered. The COVID-19 pandemic has not only triggered serious public health concerns but also has the potential to cause psychological harm to mothers and families in the longer term. Women and birthing people have faced life-changing experiences alone, even in some tragic cases, being told that their unborn baby has died. The impact of this is emerging. (Author)

2022-00117

The relationship between delivery and the PaO2/FiO2 ratio in COVID-19: a cohort study. Pineles BL, Stephens A, Narendran LM, et al (2022), BJOG: An International Journal of Obstetrics and Gynaecology vol 129, no 3, February 2022, pp 493-499
Full URL: https://doi.org/10.1111/1471-0528.16858

Objective
To study the effect of delivery on the pO2/FiO2 ratio (P/F ratio) in patients with COVID-19-related acute respiratory distress syndrome (ARDS) and to compare characteristics between delivered and undelivered pregnant patients with COVID-19.

Design
Retrospective cohort.

Setting
Four hospitals in Houston, Texas.

Population
Pregnant patients admitted to the hospital for COVID-19.

Methods
Among patients with ARDS who were delivered during their hospitalisation for COVID-19, linear mixed models were used to investigate time trends before and after delivery of the P/F ratio. Patient characteristics were compared between patients delivered during their hospitalisation for COVID-19 and those discharged undelivered.

Main outcome measures
The P/F ratio, age, gestational age, length of stay and severity of illness,

Results
Between 4 May 2020 and 26 July 2020, a total of 61 pregnant patients were admitted for COVID-19. Baseline characteristics were similar between the study groups. Delivery occurred in 21 (34%) of patients during their hospitalisation for COVID-19. Delivered patients had more severe disease and were admitted at a later gestational age than patients not delivered. Ten of these 21 patients (48%) were delivered preterm; of these, six were delivered due to complications of COVID-19 and four were delivered for obstetric indications. In patients with ARDS who were delivered (n = 17), the P/F ratio had a negative slope that improved after delivery.

Conclusions
COVID-19-related ARDS in pregnancy requires multidisciplinary care and individualised decision-making, but delivery slows the deterioration of the P/F ratio in these patients. (Author)

2021-14489

Mothers' Experiences of Pregnancy, Labor and Birth, and Postpartum During COVID-19 in the United States: Preliminary Results of a Mixed-Methods Study. Saleh L, Canclini S, Greer K, et al (2022), The Journal of Perinatal and Neonatal Nursing vol 36, no 1, January/March 2022, pp 55-67
Full URL: https://doi.org/10.1097/JPN.0000000000000624

The purpose of this study was to gain insight into the experiences of women who gave birth in the United States during coronavirus disease-2019 (COVID-19). A mixed-methods study was performed using online surveys and interviews. Data were analyzed using descriptive statistics and interview transcripts were analyzed by thematic analysis resulting in major themes. Participants (n = 32) were women who had given birth on or after March 13, 2020. Of the participants, 34% experienced depression, 46% experienced mild to moderate anxiety, and 28% experienced severe anxiety symptoms. Four major themes emerged: expectations versus reality, early versus late COVID-19 experience, mental distress versus mental health, and healthcare policy versus COVID-19 confusion. Experiences varied based upon geographical location, parity, and proximity to support. Short and long-term effects of COVID-19 on participants and their families were recognized. It is important to acknowledge the confusion experienced in many aspects of the birthing experience due to developing or conflicting pandemic or popular media information. Aligning expectations through providing clear, up-to-date information is helpful in decreasing mental distress. Finally, the impact of COVID-19 highlighted the critical need for professional and focused familial support and follow-up for women experiencing pregnancy-related mental health symptoms. (Author)

2021-14235

Response to SARS-Covid-19-related visitor restrictions on labor and delivery wards in New York City. Hermann A, Deligiannidis KM, Bergink V, et al (2020), Archives of Women's Mental Health vol 23, no 6, December 2020, pp 793-794

Full URL: https://doi.org/10.1007/s00737-020-01030-2

Discusses visitor restriction policies introduced on labour and delivery wards in New York City due to the COVID-19 pandemic. The authors urge health care workers to start planning restrictions in their own areas. (LDO)

2021-13857

Companionship for women/birthing people using antenatal and intrapartum care in England during COVID-19: a mixed-methods analysis of national and organisational responses and perspectives. Thomson G, Balaam M-C, Harris RN, et al (2022), BMJ Open vol 12, no 1, January 2022, e051965

Full URL: http://dx.doi.org/10.1136/bmjopen-2021-051965

Objectives To explore stakeholders' and national organisational perspectives on companionship for women/birthing people using antenatal and intrapartum care in England during COVID-19, as part of the Achieving Safe and Personalised maternity care In Response to Epidemics (ASPIRE) COVID-19 UK study.

Setting Maternity care provision in England.

Participants Interviews were held with 26 national governmental, professional and service-user organisation leads (July–December 2020). Other data included public-facing outputs logged from 25 maternity Trusts (September/October 2020) and data extracted from 78 documents from eight key governmental, professional and service-user organisations that informed national maternity care guidance and policy (February–December 2020).

Results Six themes emerged: 'Postcode lottery of care' highlights variations in companionship and visiting practices between trusts/locations, 'Confusion and stress around 'rules'' relates to a lack of and variable information concerning companionship/visiting, 'Unintended consequences' concerns the negative impacts of restricted companionship or visiting on women/birthing people and staff, 'Need for flexibility' highlights concerns about applying companionship and visiting policies irrespective of need, ''Acceptable' time for support' highlights variations in when and if companionship was 'allowed' antenatally and intrapartum and 'Loss of human rights for gain in infection control' emphasises how a predominant focus on infection control was at a cost to psychological safety and human rights.

Conclusions Policies concerning companionship and visiting have been inconsistently applied within English maternity services during the COVID-19 pandemic. In some cases, policies were not justified by the level of risk, and were applied indiscriminately regardless of need. There is an urgent need to determine how to sensitively and flexibly balance risks and benefits and optimise outcomes during the current and future crisis situations. (Author)

2021-13809

Maternal-Newborn Health System Changes and Outcomes in Ontario, Canada, During Wave 1 of the COVID-19 Pandemic—A Retrospective Study. Roberts NF, Sprague AE, Taljaard M, et al (2022), JOGC [Journal of Obstetrics and Gynaecology Canada] vol 44, no 6, June 2022, pp 664-674

Full URL: https://doi.org/10.1016/j.jogc.2021.12.006

Objective

To determine the population-level impact of COVID-19 pandemic–related obstetric practice changes on maternal and newborn outcomes.

Methods

Segmented regression analysis examined changes that occurred 240 weeks pre-pandemic through the first 32 weeks of the pandemic using data from Ontario's Better Outcomes Registry & Network. Outcomes included birth location, length of stay, labour analgesia, mode of delivery, preterm birth, and stillbirth. Immediate and gradual effects were modelled with terms representing changes in intercepts and slopes, corresponding to the start of the pandemic.

Results

There were 799 893 eligible pregnant individuals included in the analysis; 705 767 delivered in the pre-pandemic period and 94,126 during the pandemic wave 1 period. Significant immediate decreases were observed for hospital births (relative risk [RR] 0.99; 95% CI 0.98–0.99), length of stay (median change –3.29 h; 95% CI –3.81 to –2.77), use of nitrous oxide (RR 0.11; 95% CI 0.09–0.13) and general anesthesia (RR 0.69; 95% CI 0.58– 0.81), and trial of labour after cesarean (RR 0.89; 95% CI 0.83–0.96). Conversely, there were significant immediate increases in home births (RR 1.35; 95% CI 1.21–1.51), and use of epidural (RR 1.02; 95% CI 1.01–1.04) and regional anesthesia (RR 1.01; 95% CI 1.01–1.02). There were no significant immediate changes for any other outcomes, including preterm birth (RR 0.99; 95% CI 0.93–1.05) and stillbirth (RR 1.11; 95% CI 0.87–1.42).

Conclusion

Provincial health system changes implemented at the start of the pandemic resulted in immediate clinical practice changes but no significant increases in adverse outcomes. (Author)

2021-13753

Large gaps in the quality of healthcare experienced by Swedish mothers during the COVID-19 pandemic: a cross-sectional study based on WHO standards. Zaigham M, Linden K, Sengpiel V, et al (2022), Women and Birth: Journal of the Australian College of Midwives vol 35, no 6, November 2022, pp 619-627

Full URL: https://doi.org/10.1016/j.wombi.2022.01.007

Background and Problem

Existing healthcare systems have been put under immense pressure during the COVID-19 pandemic. Disruptions in essential maternal and newborn services have come from even high-income countries within the World Health Organization (WHO) European Region.

Aim

To describe the quality of care during pregnancy and childbirth, as reported by the women themselves, during the COVID-19 pandemic in Sweden, using the WHO 'Standards for improving quality of maternal and newborn care in health facilities'.

Methods

Using an anonymous, online questionnaire, women ≥18 years were invited to participate if they had given birth in Sweden from March 1, 2020 to June 30, 2021. The quality of maternal and newborn care was measured using 40 questions across four domains: provision of care, experience of care, availability of human/physical resources, and organisational changes due to COVID-19.

Findings

Of the 5003 women included, n = 4528 experienced labour. Of these, 46.7% perceived a poorer quality of maternal and newborn care due to the COVID-19. Fundal pressure was applied in 22.2% of instrumental vaginal births, 36.8% received inadequate breastfeeding support and 6.9% reported some form of abuse. Findings were worse in women

undergoing prelabour Caesarean section (CS) (n = 475). Multivariate analysis showed significant associations of the quality of maternal and newborn care to year of birth (P < 0.001), parity (P < 0.001), no pharmacological pain relief (P < 0.001), prelabour CS (P < 0.001), emergency CS (P < 0.001) and overall satisfaction (P < 0.001).
Conclusion
Considerable gaps over many key quality measures and deviations from women-centred care were noted. Findings were worse in women with prelabour CS. Actions to promote high-quality, evidence-based and respectful care during childbirth for all mothers are urgently needed. (Author)

2021-13545

Vaginal birth after caesarean section before and during COVID-19 pandemic. Factors associated with successful vaginal birth. Hidalgo-Lopezosa P, Cubero-Luna AM, Huertas-Marin J, et al (2021), Women and Birth: Journal of the Australian College of Midwives vol 35, no 6, November 2022, pp 570-575

Full URL: https://doi.org/10.1016/j.wombi.2021.12.008

Background
The ratio of caesarean has been increasing considerably in many countries. Planning a vaginal birth after a previous caesarean is considered an important option for women in a subsequent pregnancy.
Aims
To analyse obstetric and neonatal outcomes in women in labour after caesarean section before and during the COVID-19 pandemic, and to determine factors associated with successful vaginal birth after caesarean (VBAC).
Methods
Observational cohort study of women in labour with history of caesarean section who gave birth between March 2019 and December 2020 in a tertiary hospital in southern Spain. Consecutive sampling was performed using the maternal birth database and a descriptive and inferential analysis of the study variables was carried out. Socio-demographic, obstetric and neonatal variables were compared between the pre-pandemic and pandemic periods. Multiple logistic regression analysis was performed to determine variables associated with VBAC success.
Findings
The VBAC success rate was 67.4%. The caesarean section rate was significantly higher during the COVID-19 pandemic period. Factors associated with VBAC success were: birth before the pandemic (OR 0.32) and at night (OR 0.45), use of epidural analgesia (OR 2.14), and having had a previous vaginal birth (OR 1.98).
Conclusions
The success rate of VBAC was lower during the pandemic. Knowledge of the factors related to VBAC success is critical for practitioners when supporting women in decision-making about mode of birth after a previous caesarean section. (Author)

2021-13501

Initial findings of universal screening for SARS-CoV-2 in women admitted for delivery in North Wales: a prospective multicentre cohort study. Maraj H, Bhattacharjee D, Jinsiwale N (2022), Journal of Obstetrics and Gynaecology vol 42, no 5, 2022, pp 1122-1125

We describe the prevalence of overall and asymptomatic SARS-CoV-2 infection in pregnant women admitted for delivery at three maternity units in North Wales. This was a prospective, multicentre cohort study of universal testing for SARS-CoV-2 infection offered to all pregnant women admitted for delivery. Four hundred and seventy-five women were tested by reverse transcription-polymerase chain reaction of nasopharyngeal swabs with concurrent universal screening for signs and symptoms of COVID-19 infection. The overall prevalence of SARS-CoV-2 infection in pregnant women in North Wales was 2.74% with an asymptomatic prevalence of 1.89%. Sixty-nine percent of infected women were asymptomatic. Pregnant women with SARS-CoV-2 infection are not reliably identified using symptom and temperature screening. The prevalence of maternal infection and asymptomatic carrier rates vary within small geographical regions. It is suggested that a trial period of universal testing may help determine whether such an approach is appropriate for an individual maternity unit. (Author)

2021-13445

Excess of cesarean births in pregnant women with COVID-19: A meta-analysis. Omar M, Youssef MR, Trinh LN, et al (2022), Birth vol 49, no 2, June 2022, pp 179-193

Full URL: https://doi.org/10.1111/birt.12609

Background
Studies have suggested that cesarean birth in pregnant women with COVID-19 may decrease maternal adverse events and perinatal transmission. This systematic review aimed to evaluate variations in clinical presentation, laboratory findings, and maternal/neonatal outcomes in COVID-19 patients who delivered vaginally versus via cesarean.

Methods
A comprehensive search following PRISMA guidelines was performed for studies published up to May 23, 2020, using PubMed, Web of Science, Scopus, Embase, Cochrane, Science Direct, and clinicaltrials.gov. Original retrospective and prospective studies, case reports, or case series with sufficient data for estimating the association of COVID-19 with different pregnancy outcomes with no language restriction and published in peer-reviewed journals were included. Pooled mean and arcsine transformation proportions were applied. Next, a two-arm meta-analysis was performed comparing the perinatal outcomes between the study groups.

Results
Forty-two studies with a total of 602 pregnant women with COVID-19 were included. The mean age was 31.8 years. Subgroup analysis showed that Americans had the lowest gestational age (mean = 32.7, 95%CI = 27.0-38.4, P < 0.001) and the highest incidence of maternal ICU admission (95%CI = 0.45%-2.20, P < 0.001) of all nationalities in the study. There was no significant difference in perinatal complications, premature rupture of membrane, placenta previa/accreta, or gestational hypertension/pre-eclampsia between women who delivered vaginally versus by cesarean. Importantly, there were also no significant differences in maternal or neonatal outcomes.

Conclusion
Vaginal delivery was not associated with worse maternal or neonatal outcomes when compared with cesarean. The decision to pursue a cesarean birth should be based on standard indications, not COVID-19 status. (Author)

2021-13127

Impact of the COVID-19 pandemic on perinatal care and outcomes in the United States: An interrupted time series analysis. Riley T, Nethery E, Chung EK, et al (2022), Birth vol 49, no 2, June 2022, pp 298-309

Full URL: https://doi.org/10.1111/birt.12606

Background
Hospitals quickly adapted perinatal care to mitigate SARS-CoV-2 transmission at the onset of the COVID-19 pandemic. The objective of this study was to estimate the impact of pandemic-related hospital policy changes on perinatal care and outcomes in one region of the United States.

Methods
This interrupted time series analysis used retrospective data from consecutive singleton births at 15 hospitals in the Pacific Northwest from 2017 to 2020. The primary outcomes were those hypothesized to be affected by pandemic-related hospital policies and included labor induction, epidural use, oxytocin augmentation, mode of delivery, and early discharge (<48 hours after cesarean and <24 hours after vaginal births). Secondary outcomes included preterm birth, severe maternal morbidity, low 5-minute Apgar score, neonatal intensive care unit (NICU) admission, and 30-day readmission. Segmented Poisson regression models estimated the outcome level shift changes after the pandemic onset, controlling for underlying trends, seasonality, and stratifying by parity.

Results
No statistically significant changes were detected in intrapartum interventions or mode of delivery after onset of the pandemic. Early discharge increased for all births following cesarean and vaginal birth. Newborn readmission rates

increased but only among nulliparas (aRR: 1.49, 95%CI: 1.17, 1.91). Among multiparas, decreases were observed in preterm birth (aRR: 0.90, 95%CI: 0.84, 0.96), low 5-minute Apgar score (aRR: 0.75, 95%CI: 0.68, 0.81), and term NICU admission rates (aRR: 0.85, 95%CI: 0.80, 0.91).

Conclusions
Increases in early discharge and newborn readmission rates among nulliparas suggest a need for more postpartum support during the pandemic. Decreases in preterm birth and term NICU admission among multiparas may have implications beyond the pandemic and deserve further study. (Author)

2021-13100

Worsening risk profiles of out-of-hospital births during the COVID-19 pandemic. Grünebaum A, Bornstein E, Katz A, et al (2022), American Journal of Obstetrics & Gynecology (AJOG) vol 226, no 1, January 2022, pp 137-138
Full URL: https://doi.org/10.1016/j.ajog.2021.11.1346

Research letter aiming to evaluate changes in place of birth and risk profiles before and during the COVID-19 pandemic. Results show that community births increased by 20.2%, preterm births increased by 39.3% and Apgar scores of 0-3 increased by 35.9% during the pandemic. (LDO)

2021-12948

Utilization of Health Facility for Childbirth During Covid-19 in Wacha District South West Ethiopia: A Community-Based Mixed Qualitative and Quantitative Cross-Sectional Study. Wassie ST, Tegegne AW, Alamneh KN, et al (2021), International Journal of Childbirth vol 11, no 4, December 2021, pp 201-212

BACKGROUND
Giving birth at the health facility is a solitary way of decreasing maternal and neonatal mortality and morbidity, especially in developing countries. Despite a prodigious public health effort, many women are still giving birth at home in Ethiopia either by traditional birth attendants or relatives. The Covid-19 pandemic exerted tragic consequences worldwide almost in all aspects of human life. As a result, the pandemic could affect the use of health facilities for childbirth. The effect of Covid-19 on childbirth is not spoken to the study area yet.

MATERIALS
Community-based mixed quantitative and qualitative cross-sectional study was conducted among mothers with the experience of childbirth during Covid-19. The data were collected using a structured pre-tested questionnaire with systematic random sampling through fac-eto-face interviews and focused group discussion from September 1–30, 2020. The edited and coded data were entered into EpiData version 3.1 and transformed into SPSS version 21 for further analysis. Descriptive analyses like frequency and percentages were used to describe the study result. Tables were used to present the data, and the qualitative study narration was applied to interpret the output.

RESULTS
From the total of 232 study participants who experienced childbirth during Covid-19, 69.4% of them gave birth at a health institution, 204 (87.9%) of them had a positive attitude, 210 (90.5%) had awareness, and 186 (80%) have good practice of giving birth at a health facility. Fear of Covid-19 (50.7%), cultural ceremonies, low level of the economy, distance to the health facility, challenging roads for transportation, and fear of episiotomy were factors stated for nonutilization of health facility for childbirth.

CONCLUSION
From mothers who gave birth at home, more than half of the mothers desist from using a health facility for childbirth care due to the frustration of Covid-19. As a result, awareness creation regarding Covid-19 shall be considered. Besides, the socio-cultural features shall be taken into contemplation, and mediations must be endorsed in health institution setups to make them feel at home. (Author)

2021-12682

Perinatal Experiences of Asian American Women During COVID-19. Goyal D, Han M, Feldman-Schwartz T, et al (2022), MCN - American Journal of Maternal/Child Nursing vol 47, no 2, March/April 2022, pp 71-76

Purpose: To explore the wellbeing and pregnancy, childbirth, and postpartum experiences of Asian American women who gave birth during the COVID-19 pandemic.

Study Design: Qualitative exploratory design.

Methods: Using convenience and snowball sampling, we recruited Asian American women who gave birth during the COVID-19 pandemic via social media. Participants completed sociodemographic and depressive symptom questionnaires and took part in a virtual semistructured interview where they were asked to describe their pregnancy, birth, and postpartum experiences in the midst of the COVID-19 pandemic. Qualitative content analysis methods were used to identify themes from participant narratives.

Results: Thirty-eight Asian American women representing several racial ethnic subgroups (Asian Indian, Chinese, Filipino, Hmong, Laotian, Vietnamese) participated in our study. Participants were on average 34 (SD = 3.5) years of age; the majority were married and lived in California. At the time of data collection, participants were 3.7 (SD = 2.07) months postpartum and 5.3 to 10.5 months into the COVID-19 pandemic. Qualitative content analysis revealed two main themes: 1) unexpected perinatal journey, and 2) the emotional and psychological consequences of COVID-19.

Clinical Implications: Our findings are not unique to Asian American women, but they offer insight for nurses taking care of all childbearing women. Nurses can provide individually tailored anticipatory guidance to help women navigate perinatal changes to help them manage expectations during future public health crises. Nurses can also encourage and help perinatal women find ways to increase their own social support networks during the pregnancy and postpartum period. (Author)

2021-12600

You and your baby: a national survey of health and care during the 2020 Covid-19 pandemic. Harrison S, Alderdice F, Mcleish J, et al (2021), Oxford: National Perinatal Epidemiology Unit, University of Oxford December 2021, 97 pages

Full URL: https://www.npeu.ox.ac.uk/assets/downloads/maternity-surveys/reports/You_and_Your_Baby_2020_Survey_Report.pdf

You and Your Baby 2020 explored the health and experiences of maternity care for women who gave birth during the first wave of the Covid-19 pandemic. The study included a survey of 4,611 women recruited through the register of all births in England (the 2020 National Maternity Survey (NMS)). The women in the 2020 NMS gave birth in England during May 2020.

The study also included a parallel survey of 1,622 women recruited through social media. The women in the social media survey gave birth in the UK between March and August 2020.

The findings indicate that some aspects of women's health and maternity care remained consistent or even improved during Covid-19, compared with findings from before the pandemic. Overall levels of satisfaction with care during pregnancy and birth remained high. The findings also indicate, however, that other aspects of women's health and care were negatively impacted by Covid-19, particularly after giving birth. Overall levels of satisfaction with care during the postnatal period fell considerably compared with findings from before the pandemic.

Taken together the survey findings suggest that giving birth during the Covid-19 pandemic may have brought additional stresses for women and families at what can already be a challenging time. Covid-19 may have introduced new challenges to maternity services and also amplified some of the existing problems in parts of the system. (Author)

2021-12511

Cesarean Birth Morbidity among Women with SARS-CoV-2. McLaren Jr R, London V, Narayanamoorthy S, et al (2023), American Journal of Perinatology vol 40, no 12, September 2023, pp 1367-1372

Objective The objective of this study was to compare maternal outcomes of women with and without severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infections who underwent cesarean births.

Study Design This was a matched cohort study of pregnant women who had a cesarean birth between March 15, 2020, and May 20, 2020. Cases included women who tested positive for SARS-CoV-2. For every case, two patients who tested negative for SARS-CoV-2 were matched by maternal age, gestational age, body mass index, primary or repeat cesarean birth, and whether the procedure was scheduled or unscheduled. We compared rates of adverse postcesarean complications (intraoperative bladder or bowel injury, estimated blood loss more than or equal to 1,000 mL, hemoglobin drop more than 3 g/dL, hematocrit drop more than 10%, need for blood transfusion, need for hysterectomy, maternal intensive care unit admission, postoperative fever, and development of surgical site infection), with the primary outcome being a composite of those outcomes. We also assessed duration of postoperative stay. Fisher's exact tests were performed to compare the primary outcome between both groups.

Results Between March and May 2020, 202 women who subsequently underwent cesarean birth were tested for SARS-CoV-2. Of those 202, 43 (21.3%) patients were positive. They were matched to 86 patients who tested negative. There was no significant difference in the rate of composite adverse surgical outcomes between the groups (SARS-CoV-2 infected 27.9%, SARS-CoV-2 uninfected 25.6%; p = 0.833). There was a higher rate of postoperative fevers (20.9 vs. 5.8%; p = 0.015), but that did not result in a longer length of stay (p = 0.302).

Conclusion Pregnant women with SARS-CoV-2 who underwent a cesarean birth did not have an increased risk of adverse surgical outcomes, other than fever, compared with pregnant women without SARS-CoV-2. (Author)

2021-11895

Coronavirus: Premature Birth [written answer]. Scottish Parliament (2021), Official Report Written question S6W-04227, 8 November 2021

Full URL: https://archive2021.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S6W-04227

Humza Yousaf responds to a written question from Sandesh Gulhane to the Scottish Government, regarding how many pregnant women who have been hospitalised as a result of having contracted COVID-19 have delivered their baby early. (JSM)

2021-11695

Indirect impact of SARS-CoV-2 pandemic on pregnancy and childbirth outcomes: A nine-month long experience from a university center in Lombardy. Ornaghi S, Fumagalli S, Montalvo CKG, et al (2022), International Journal of Gynecology & Obstetrics vol 156, no 3, March 2022, pp 466-474

Full URL: https://doi.org/10.1002/ijgo.13990

Objective

To determine the impact on perinatal health of changes in social policies and obstetric care implemented to curb SARS-CoV-2 transmission. However, robust data on the topic are lacking since most of the studies has examined only the first few months of the outbreak.

Methods

A retrospective analysis of prospectively collected data on uninfected and asymptomatically infected women giving birth between March and November 2020 and in the same time frame of 2019 at our tertiary care center in Lombardy, northern Italy. Perinatal outcomes were compared according to the year (2019 versus 2020) and to the trimester (March–May, June–August, September–November) of childbirth, corresponding to the three phases of the pandemic (first wave, deceleration, second wave) and covering a 9-month period.

Results
We identified increased rates of gestational diabetes mellitus, spontaneous preterm birth, and neuraxial analgesia in 2020 versus 2019, with different temporal distributions: gestational diabetes mellitus and spontaneous preterm birth were more prevalent during the deceleration and the second wave phase, whereas epidural analgesia was more prevalent during the first wave.

Conclusion
By assessing a prolonged time frame of the pandemic, we show that pandemic-related control measures, as applied in Lombardy, impacted relevant perinatal outcomes of women giving birth at our center.

Synopsis
Assessing a 9-month long time frame, we identified substantial indirect effects of the control measures implemented to control SARS-CoV-2 spread on pregnancy and childbirth outcomes. (Author)

2021-11641

Rapid Cycle Implementation and Retrospective Evaluation of a SARS-CoV-2 Checklist in Labor and Delivery. Zucco L, Levy N, Li Y, et al (2021), BMC Health Services Research vol 21, no 775, 6 August 2021

Full URL: https://doi.org/10.1186/s12913-021-06787-5

Background
Preparedness efforts for a COVID-19 outbreak required redesign and implementation of a perioperative workflow for the management of obstetric patients. In this report we describe factors which influenced rapid cycle implementation of a novel comprehensive checklist for the perioperative care of the COVID-19 parturient.

Methods
Within our labour and delivery unit, implementation of a novel checklist for the COVID-19 parturient requiring perioperative care was accomplished through rapid cycling, debriefing and on-site walkthroughs. Post-implementation, consistent use of the checklist was reported for all obstetric COVID-19 perioperative cases (100% workflow checklist utilization). Retrospective analysis of the factors influencing implementation was performed using a group deliberation approach, mapped against the Consolidated Framework for Implementation Research (CFIR).

Results
Analysis of factors influencing implementation using CFIR revealed domains of process implementation and innovation characteristics as overwhelming facilitators for success. Constructs within the outer setting, inner setting, and characteristic of individuals (external pressures, baseline culture, and personal attributes) were perceived to act as early barriers. Constructs such as communication culture and learning climate, shifted in influence over time.

Conclusion
We describe the influential factors of implementing a novel comprehensive obstetric workflow for care of the COVID-19 perioperative parturient during the first surge of the pandemic using the CFIR framework. Early workflow adoption was facilitated primarily by two domains, namely thoughtful innovation design and careful implementation planning in the setting of a long-standing culture of improvement. Factors initially assessed as barriers such as communication, culture and learning climate, transitioned into facilitators once a perceived benefit was experienced by healthcare teams. These results provide important information for the implementation of rapid change during a time of crisis. (Author)

2021-11566

Unexpected changes in birth experiences during the COVID-19 pandemic: Implications for maternal mental health.

Liu CH, Koire A, Erdei C (2022), Archives of Gynecology and Obstetrics vol 306, no 3 September 2022, pp 687–697
Full URL: https://doi.org/10.1007/s00404-021-06310-5

Purpose
This study examined the rates of unexpected birth experiences due to the COVID-19 pandemic and its association with women's postpartum mental health symptoms (depression, generalized anxiety, and PTSD).

Methods
Our cross-sectional analysis included postpartum women (N = 506) who reported on birth plan changes attributed to the COVID-19 pandemic through the PEACE (Perinatal Experiences and COVID-19 Effects) Study, an online survey that took place between May 2020 and May 2021. Covariates included sociodemographic variables, number of days since the pandemic, pre-pregnancy mental health history, and protective factors such as social support, distress tolerance, and resilience.

Results
Prevalent COVID-19 pandemic changes in the birth experience included not having support people (e.g., partners and friends) permitted to participate in the baby's delivery (33.5%), reduced access to preferred medications before or after delivery (9.7%), unavailable health care providers for the baby's birth as planned (9.6%), and other changes (13.8%). The reduced access to medications was associated with those reporting higher levels of depressive ($\beta = .10$, $p < .01$) and PTSD symptoms ($\beta = .07$, $p < .05$). Separation from their baby for a long period after delivery ($\beta = .10$, $p < .05$) and other changes ($\beta = .10$, $p < .01$) were associated with higher levels of PTSD symptoms.

Conclusion
Unexpected changes to the birth experience due to the COVID-19 pandemic may have small but persistent effects on depressive and PTSD symptoms. Given increased vigilance and its association with subsequent PTSD, acknowledging any fear of viral contagion within the hospital setting but informing women the plans for ensuring safety may be preventive for later mental health symptomatology. (Author)

2021-11374

COVID-19 and clinical outcomes of pregnancy: a comparative study. Smith V, Panda S, O'Malley D, et al (2021), British Journal of Midwifery vol 29, no 11, November 2021, pp 642-647

Background
A series of changes in maternity care provision were implemented internationally in response to the COVID-19 pandemic. This study aimed to assess the impact of COVID-19 on maternal clinical outcomes, resulting from these changes to care provision.

Methods
A before and during comparative study of maternal pregnancy, childbirth, and postpartum clinical outcomes was conducted at a maternity hospital in Ireland. Inferential statistics were used to compare datasets with significance set at $P<0.05$.

Results
Overall, no difference in caesarean section rates between the two study periods was observed, although more caesarean sections were observed in multiparous women during the pandemic (30% vs 35%, P=0.01). The rate of elective compared to emergency caesarean section was also higher during the pandemic, from a proportionate difference of 3.6% pre-pandemic to 13.6% during the pandemic. Rates of induction of labour for post-dates (post-maturity induction) were also increased during the pandemic.

Conclusions
The changes to maternity care because of the COVID-19 pandemic appear to have affected some maternal clinical outcomes, and thus, potentially, women's overall intrapartum and postnatal health and wellbeing. (Author)

2021-11308

Can pregnancy aggravate the criticality of COVID-19 infection in obese asthmatic peripartum woman? A peripartum COVID-19 mortality case report. Selim MF, Mohamed SAA, Abdou MMA, et al (2022), Journal of Obstetrics and Gynaecology vol 42, no 4, 2022, pp 707-709

As coronavirus disease 2019 (COVID-19) sweeps all over the world, Information about COVID-19 is evolving rapidly and interim guidance by multiple organisations is constantly being updated and expanded. Early with discovery of COVID 19, it was reported that pregnancy did affect the progress of the disease severity. Recently, Centres for Disease Control and Prevention (CDC) reported that pregnancy is a risk factors for COVID-19 severity. The current case report is presenting a peripartum COVID-19 positive mortality case. (Author)

2021-11143

Narrative Analysis of Childbearing Experiences During the COVID-19 Pandemic. Ajayi KV, Harvey IS, Panjwani S, et al (2021), MCN - American Journal of Maternal/Child Nursing vol 46, no 5, September/October 2021, pp 284-292

Purpose:
The COVID-19 pandemic has disrupted health care delivery and services around the world causing rapid changes to maternity care protocols and pregnant women to give birth with tight restrictions and significant uncertainties. There is a gap in evidence about expectant and new mothers' experiences with birthing during the pandemic. We sought to describe and understand pregnant and new mothers' lived experiences during the COVID-19 pandemic using authentic birth stories.

Study Design and Methods:
Using a narrative analysis framework, we extracted relevant YouTube birth stories using predetermined search terms and inclusion criteria. Mothers' birth stories were narrated in their second or third trimester or those who had recently given birth during the pandemic. Birth stories were analyzed using an inductive and deductive approach to capture different and salient aspects of the birthing experience.

Results:
N = 83 birth stories were analyzed. Within these birth stories, four broad themes and 13 subthemes were identified. Key themes included a sense of loss, hospital experiences, experiences with health care providers, and unique experiences during birth and postpartum. The birth stories revealed that the COVID-19 pandemic brought unexpected circumstances, both positive and negative, that had an impact on mothers' overall birthing experience.

Clinical Implications:
Results provided a detailed description of women's lived experience with giving birth during the COVID-19 pandemic. Maternity nurses should try to provide clear communication and compassionate patient-centered care to relieve women's anxieties about uncertain and unpredictable policy changes on COVID-19 as the pandemic continues to evolve. (Author)

2021-11121

Birth Satisfaction During the Early Months of the COVID-19 Pandemic in the United States. Mollard E, Kupzyk K (2022), MCN - American Journal of Maternal/Child Nursing vol 47, no 1, January/February 2022, pp 6-12

Purpose: The purpose of this study was to describe birth satisfaction in women who gave birth in U.S. hospitals during the earliest months of the COVID-19 pandemic (March–July 2020).

Study Design and Methods: A cross-sectional survey of 747 postpartum women who gave birth in the United States during the early COVID-19 pandemic was conducted. Participants in the United were recruited via social media. They completed a questionnaire that included demographic, health, and obstetric experience questions, and the Birth Satisfaction Scale-Revised. Descriptive statistics, t-tests, analysis of variance (ANOVA) models, and nonparametric

correlations were performed.

Results: Higher birth satisfaction scores were associated with higher income, marriage, white race, vaginal birth, having a birth partner present, and sufficient support during birth. Factors negatively associated with birth satisfaction were separation from infant, unplanned cesarean birth, neonatal intensive care unit admission, hypertension, preeclampsia, hemorrhage, depression, and anxiety.

Clinical Implications: Presence of birth partners, sufficient birth support, and minimizing separation of mother and infant improve birth satisfaction. Obstetric complications, including unplanned cesarean birth, negatively affect birth satisfaction. There are racial disparities in birth satisfaction. It is critical to develop further interventions to end racism in maternal health care. (Author)

2021-10809

Labour and birth. Ross-Davie M, Brodrick A, Randall W, et al (2021), Best Practice & Research: Clinical Obstetrics and Gynaecology vol 73, June 2021, pp 91-103

Full URL: https://doi.org/10.1016/j.bpobgyn.2021.03.011

This chapter describes the national guidance for care during labour and childbirth in the United Kingdom during the COVID-19 pandemic. The content largely draws attention on the guidance developed by the Royal College of Obstetricians (RCOG) and the Royal College of Midwives (RCM), and specific guidance on infection prevention and control measures from Public Health England.

The key areas addressed are as follows:

- Testing of pregnant women before and on admission for labour and birth
- Overall approach to intrapartum care for women with and without symptoms of COVID-19
- Timing, place, and type of birth considerations
- Personal Protective Equipment (PPE) during labour and birth – for staff, women, and birth supporters
- Use of birthing pools and waterbirth
- Foetal monitoring
- Immediate care of the newborn and support for breastfeeding.

The chapter refers to some of the ways in which the guidance was translated in practice.

The guidance was developed using a rapid analysis approach to emerging research and evidence, along with evidence from previous experiences of coronavirus combined with consensus expert opinion from all key professionals providing maternity care in the UK.

What is known
The UK RCOG/RCM COVID-19 guidance was widely accepted across the UK maternity services and also worldwide as a reliable and credible source of information to shape care during the pandemic.

What is not known
The full impact of the pandemic on the experiences and outcomes for babies and women of pregnancy, childbirth, and early parenting in the UK.

The impact of the new approaches to intrapartum care on experiences and outcomes for women, babies, and families.

The impact of the changes required to intrapartum care as a result of the pandemic on the professional care provided; in terms of pressure created by rapidly changing approaches to care and restrictions on the ability to provide normal levels of care. (Author)

2021-10011

Birth satisfaction during the COVID-19 pandemic on birth in a prospective cohort of 2,341 U.S. women. Preis H, Mahaffey B, Heiselman C, et al (2021), Women and Birth: Journal of the Australian College of Midwives 9 October 2021, online
Full URL: https://doi.org/10.1016/j.wombi.2021.10.004

Problem
Birth satisfaction is an important health outcome that is related to postpartum mood, infant caretaking, and future pregnancy intention.
Background
The COVID-19 pandemic profoundly affected antenatal care and intrapartum practices that may reduce birth satisfaction.
Aim
To investigate the extent to which pandemic-related factors predicted lower birth satisfaction.
Methods
2,341 women who were recruited prenatally in April-May 2020 and reported a live birth between April-October 2020 were included in the current analysis. Hierarchical linear regression to predict birth satisfaction from well-established predictors of birth satisfaction (step 1) and from pandemic-related factors (step 2) was conducted. Additionally, the indirect associations of pandemic-related stress with birth satisfaction were investigated.
Findings
The first step of the regression explained 35% of variance in birth satisfaction. In the second step, pandemic-related factors explained an additional 3% of variance in birth satisfaction. Maternal stress about feeling unprepared for birth due to the pandemic and restrictions on companions during birth independently predicted lower birth satisfaction beyond the non-pandemic variables. Pandemic-related unpreparedness stress was associated with more medicalized birth and greater incongruence with birth preference, thus also indirectly influencing birth satisfaction through a mediation process.
Discussion
Well-established contributors to birth satisfaction remained potent during the pandemic. In addition, maternal stress and restriction on accompaniment to birth were associated with a small but significant reduction in birth satisfaction.
Conclusion
Study findings suggest that helping women set flexible and reasonable expectations for birth and allowing at least one intrapartum support person can improve birth satisfaction. (Author)

2021-09923

Outcomes of cesarean delivery in obstetric patients with SARS-CoV-2 infection. Lankford A, Berger J, Benjenk I, et al (2021), International Journal of Gynecology & Obstetrics vol 155, no 3, December 2021, pp 547-548

SARS-CoV-2 infection was not associated with increased mortality, but was associated with a modest increase in

morbidity, including stillbirth, in cesarean delivery patients in Maryland, USA. (Author)

2021-09904

Concerns of Women Choosing Community Birth During the COVID-19 Pandemic: A Qualitative Study. Bernecki DeJoy S, Mandel D, McFadden N, et al (2021), Journal of Midwifery & Women's Health vol 66, no 5, September/October 2021, pp 624-630
Full URL: https://doi.org/10.1111/jmwh.13290

Introduction
During the coronavirus disease 2019 (COVID-19) pandemic, midwives have reported increased demand for community birth services. The purpose of this qualitative study was to understand childbearing persons' decision-making during the pandemic and to illuminate their experiences giving birth in community settings.

Methods
The study was framed by the interpretive phenomenological approach. Eligible participants were recruited from midwives providing out-of-hospital birth services. Of the 26 women who agreed to an interview, 17 were able to be reached and interviewed. Interviews followed a semistructured guide. Early paradigm cases were coded by all researchers, and then the first author coded the remaining transcripts. The final thematic structure was developed by the research team through an iterative process and validated through member checking.

Results
Four themes were identified: prior desire for a community birth, perceived susceptibility, barriers to choice, and isolation.

Discussion
Many participants had a preexisting desire for community birth and used the pandemic to justify their choice. However, birth options were often limited by finances and geography. Attitude toward COVID-19 varied by knowledge and experience. Many participants experienced stress and isolation. (Author)

2021-09785

COVID-19 changes to the pregnancy and birth assistance: Catalan midwives' experience. Coll PR, Martínez EG, Falip DR, et al (2021), European Journal of Midwifery vol 5, July 2021, p 27
Full URL: https://doi.org/10.18332/ejm/138705

Letter to the editor providing an overview of changes to maternal health services during the COVID-19 pandemic in Catalonia, Spain. Highlights the increase in workload in maternity hospitals, restrictions on partner support in labour, the reduction of face-to-face consultations and an increase in hospital breastfeeding rates. (LDO)

2021-09580

Nosocomial COVID-19 infection in women undergoing elective cesarean delivery: a prospective cohort study. Nizam A, Nimaroff ML, Menzin AW, et al (2022), American Journal of Obstetrics & Gynecology MFM vol 4, no 1, January 2022, 100490
Full URL: https://doi.org/10.1016/j.ajogmf.2021.100490

Background
The Covid-19 pandemic placed Obstetricians in the difficult position of continuing to perform elective cesarean sections without knowledge of the risk of nosocomial spread of the Covid-19 virus.

Objectives
To determine the nosocomial infection rate in women undergoing elective cesarean section at two academic institutions.

Design
This non-randomized prospective cohort trial evaluated patients undergoing elective cesarean section during the

reopening phase of the Covid-19 pandemic in New York State at two large volume Labor and Delivery Units. Eligible patients with negative pre-operative Covid-19 reverse transcriptase-polymerase chain reaction test and IgG antibody test were re-tested 6-9 days after discharge. The primary objective was the Covid-19 test conversion rate defined as a positive PCR test after discharge with a negative pre-operative test. This was used as a proxy for the nosocomial infection rate.

Results
136 patients were screened for participation. Two patients tested positive for Covid-19 on preoperative testing and 25 declined to participate. 111 patients consented to participate and 96 underwent both preoperative and postoperative testing. No patients with a negative PCR test pre-operatively had a positive PCR test for the Covid-19 virus postoperatively.

Conclusions
With a strict and methodical perioperative and postpartum protocol, we can limit nosocomial Covid-19 infections in women undergoing elective cesarean section. (Author)

2021-09361

Lockdown babies: Birth and new parenting experiences during the 2020 Covid-19 lockdown in South Africa, a cross-sectional study. Farley E, Edwards A, Numanoglu E, et al (2022), Women and Birth: Journal of the Australian College of Midwives vol 35, no 4, July 2022, pp 394-402

Full URL: https://doi.org/10.1016/j.wombi.2021.09.001

Background
Perceived birth experiences of parents can have a lasting impact on children. We explored the birth and new parenting experiences of South African parents in 2020 during the Covid-19 lockdown.
Methods
We conducted a cross-sectional online survey with consenting parents of babies born in South Africa during 2020. Factors associated with negative birth emotions and probable depression were estimated using logistic regression.
Results
Most of the 520 respondents were females (n = 496, 95%) who gave birth at private hospitals (n = 426, 86%). Mothers reported having overall positive birth emotions (n = 399, 80%). Multivariable analysis showed that having a preterm baby (aOR 2.89; CI 1.51–5.53) and the mother self-reporting that Covid-19 affected her birth experience (aOR 4.25; CI 2.08–8.68) increased the odds of mothers reporting predominantly negative emotions about their birth. The mother having her preferred delivery method reduced the odds of having negative birth emotions (aOR 0.41; CI 0.25–0.66). Multivariable analysis showed that having predominantly negative emotions about the birth increased the odds of probable minor depression (aOR 3.60; CI 1.93–6.70). Being older reduced the odds of having probable minor depression (25−34 years aOR 0.36; CI 0.10–1.32; 35 years or older aOR 0.25; CI 0.06−0.91).
Conclusions
Lockdown exacerbated many birth and parenting challenges including mental health and health care access. However, overall experiences were positive and there was a strong sense of resilience amongst parents. (Author)

2021-09226

Evaluation of Respiratory Emissions During Labor and Delivery: Potential Implications for Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). Mok T, Harris E, Vargas A, et al (2021), Obstetrics & Gynecology vol 138, no 4, October 2021, pp 616-621

Full URL: https://doi.org/10.1097/AOG.0000000000004533

OBJECTIVE:
To characterize respiratory emissions produced during labor and vaginal delivery vis-à-vis the potential for transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

METHODS:
Observational study of three women who tested negative for SARS-CoV-2 and had uncomplicated vaginal deliveries. Using background-oriented schlieren imaging, we evaluated the propagation of respiratory emissions produced during the labor course and delivery. The primary outcome was the speed and propagation of breath over time, calculated through processed images collected throughout labor and delivery.

RESULTS:
In early labor with regular breathing, the speed of the breath was 1.37 meters/s (range 1.20–1.55 meters/s). The breath appeared to propagate faster with a cough during early labor at a speed of 1.69 meters/s (range 1.22–2.27 meters/s). During the second stage of labor with Valsalva and forced expiration, the propagation speed was 1.79 meters/s (range 1.71–1.86 meters/s).

CONCLUSION:
Labor and vaginal delivery increase the propagation of respiratory emissions that may increase risk of respiratory transmission of SARS-CoV-2. (Author)

2021-09223

Changes in preterm birth and caesarean deliveries in the United States during the SARS-CoV-2 pandemic. Gemmill A, Casey JA, Catalano R, et al (2022), Paediatric and Perinatal Epidemiology vol 36, no 4, July 2022, pp 485-489
Full URL: https://doi.org/10.1111/ppe.12811

Background
Preliminary studies suggest that the SARS-CoV-2 pandemic and associated social, economic and clinical disruptions have affected pregnancy decision-making and outcomes. Whilst a few US-based studies have examined regional changes in birth outcomes during the pandemic's first months, much remains unknown of how the pandemic impacted perinatal health indicators at the national-level throughout 2020, including during the 'second wave' of infections that occurred later in the year.

Objectives
To describe changes in monthly rates of perinatal health indicators during the 2020 pandemic for the entire US.

Methods
For the years 2015 to 2020, we obtained national monthly rates (per 100 births) for four perinatal indicators: preterm (<37 weeks' gestation), early preterm (<34 weeks' gestation), late preterm (34–36 weeks' gestation) and caesarean delivery. We used an interrupted time-series approach to compare the outcomes observed after the pandemic began (March 2020) to those expected had the pandemic not occurred for March through December of 2020.

Results
Observed rates of preterm birth fell below expectation across several months of the 2020 pandemic. These declines were largest in magnitude in early and late 2020, with a 5%–6% relative difference between observed and expected occurring in March and November. For example, in March 2020, the observed preterm birth rate of 9.8 per 100 live births fell below the 95% prediction interval (PI) of the rate predicted from history, which was 10.5 preterm births per 100 live births (95% PI 10.2, 10.7). We detected no changes from expectation in the rate of caesarean deliveries.

Conclusions
Our findings provide nationwide evidence of unexpected reductions in preterm delivery during the 2020 SARS-CoV-2 pandemic in the US. Observed declines below expectation were differed by both timing of delivery and birth month, suggesting that several mechanisms, which require further study, may explain these patterns. (Author)

2021-09004

Maternity Services [written answer]. House of Commons (2021), Hansard Written question 41161, 18 August 2021
Full URL: https://questions-statements.parliament.uk/written-questions/detail/2021-08-18/41161
Ms Nadine Dorries responds to a written question asked by Bim Afolami to the Secretary of State for Health and Social Care, regarding if he will take steps to ensure that all hospitals allow expectant mothers to be accompanied when (a) attending antenatal appointments and (b) they are in labour. (LDO)

2021-08961
Characteristics and Outcomes of Women With COVID-19 Giving Birth at US Academic Centers During the COVID-19 Pandemic. Chinn JJ, Sedighim S, Kirby KA (2021), JAMA Network Open vol 4, no 8, August 2021, e2120456
Full URL: https://doi.org/10.1001/jamanetworkopen.2021.20456
Importance Prior studies on COVID-19 and pregnancy have reported higher rates of cesarean delivery and preterm birth and increased morbidity and mortality. Additional data encompassing a longer time period are needed.

Objective To examine characteristics and outcomes of a large US cohort of women who underwent childbirth with vs without COVID-19.

Design, Setting, and Participants This cohort study compared characteristics and outcomes of women (age ≥18 years) who underwent childbirth with vs without COVID-19 between March 1, 2020, and February 28, 2021, at 499 US academic medical centers or community affiliates. Follow-up was limited to in-hospital course and discharge destination. Childbirth was defined by clinical classification software procedural codes of 134-137. A diagnosis of COVID-19 was identified using International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10) diagnosis of U07.1. Data were analyzed from April 1 to April 30, 2021.

Exposures The presence of a COVID-19 diagnosis using ICD-10.

Main Outcomes and Measures Analyses compared demographic characteristics, gestational age, and comorbidities. The primary outcome was in-hospital mortality. Secondary outcomes included hospital length of stay, intensive care unit (ICU) admission, mechanical ventilation, and discharge status. Continuous variables were analyzed using t test, and categorical variables were analyzed using $\chi 2$.

Results Among 869 079 women, 18 715 (2.2%) had COVID-19, and 850 364 (97.8%) did not. Most women were aged 18 to 30 years (11 550 women with COVID-19 [61.7%]; 447 534 women without COVID-19 [52.6%]) and were White (8060 White women [43.1%] in the COVID-19 cohort; 499 501 White women (58.7%) in the non–COVID-19 cohort). There was no significant increase in cesarean delivery among women with COVID-19 (6088 women [32.5%] vs 273 810 women [32.3%]; P = .57). Women with COVID-19 were more likely to have preterm birth (3072 women [16.4%] vs 97 967 women [11.5%]; P < .001). Women giving birth with COVID-19, compared with women without COVID-19, had significantly higher rates of ICU admission (977 women [5.2%] vs 7943 women [0.9%]; odds ratio [OR], 5.84 [95% CI, 5.46-6.25]; P < .001), respiratory intubation and mechanical ventilation (275 women [1.5%] vs 884 women [0.1%]; OR, 14.33 [95% CI, 12.50-16.42]; P < .001), and in-hospital mortality (24 women [0.1%] vs 71 [<0.01%]; OR, 15.38 [95% CI, 9.68-24.43]; P < .001).

Conclusions and Relevance This retrospective cohort study found that women with COVID-19 giving birth had higher rates of mortality, intubation, ICU admission, and preterm birth than women without COVID-19. (Author)

2021-08947
Experiences of Quality Perinatal Care During the US COVID-19 Pandemic. Ibrahim BB, Powell Kennedy H, Combellick J (2021), Journal of Midwifery & Women's Health vol 66, no 5, September/October 2021, pp 579-588
Full URL: https://doi.org/10.1111/jmwh.13269
Introduction

Quality perinatal care is recognized as an important birth process and outcome. During the coronavirus disease 2019 (COVID-19) pandemic, quality of perinatal care was compromised as the health care system grappled with adapting to an ever-changing, uncertain, and unprecedented public health crisis.

Methods
The aim of this study was to explore the quality of perinatal care received during the COVID-19 pandemic in the United States. Data were collected via an online questionnaire completed by people who gave birth in the United States after March 15, 2020. The questionnaire included the Mothers on Respect Index and the Mothers Autonomy in Decision Making validated measures. Low-quality perinatal care was defined as decreased respect and/or autonomy in the perinatal care received. Responses were geocoded by zip code to determine COVID-19 case-load in the county on the date of birth. Multivariate regression analyses described associations between respect and autonomy in decision-making for perinatal care and levels of COVID-19 outbreak across the United States.

Results
Participants (N = 707) from 46 states and the District of Columbia completed the questionnaire. As COVID-19 cases increased, participants' experiences of autonomy in decision-making for perinatal care decreased significantly (P = .04). Participants who identified as Black, Indigenous, and people of color, those who had an obstetrician provider, and those who gave birth in a hospital were more likely to experience low-quality perinatal care. Those with a midwife provider or who had a home birth were more likely to experience high-quality perinatal care in adjusted models.

Discussion
Variability in experiences of high-quality perinatal care by sociodemographic characteristics, birth setting, and provider type may relate to implicit bias, structural racism, and inequities in maternal health and COVID-19 outcomes for birthing people from marginalized communities. (Author)

2021-08891

Balancing restrictions and access to maternity care for women and birthing partners during the COVID-19 pandemic: the psychosocial impact of suboptimal care. Lalor J, Ayers S, Celleja Agius J, et al (2021), BJOG: An International Journal of Obstetrics and Gynaecology vol 128, no 11, October 2021, pp 1720-1725

Full URL: https://doi.org/10.1111/1471-0528.16844

Commentary on access to maternity care for women and birthing partners across Europe during the COVID-19 pandemic. Highlights the inconsistency of restrictions, the inability to meet a human rights-based approach to care, and long-term iatrogenic effects on women and their babies. (LDO)

2021-08379

COVID-related "Lockdowns" and Birth Rates in New York. McLaren Jr RA, Trejo FE, Blitz MJ, et al (2021), American Journal of Obstetrics & Gynecology MFM vol 3, no 6, November 2021, 100476

No abstract available.

2021-08364

The effect of COVID-19 on intrapartum care: a case review from early in the pandemic. Martin H, Hameed A (2021), British Journal of Midwifery vol 29, no 9, September 2021, pp 532-535

The COVID-19 pandemic has had a marked impact on maternity services in the UK. Those who are pregnant are identified as a higher risk population and there have been significant changes in the structure of antenatal, intrapartum and postnatal care. This case of interest explores a moderate case of SARS-CoV-2 during the intrapartum period in the early stages of the pandemic which was managed by a multidisciplinary approach. The family are well and are now fully recovered. Midwifery accounts recall uncertainties regarding personal protective equipment. Obstetricians recall minimalising patient contact where appropriate and anticipating for obstetric emergencies to reduce delays. Despite challenges, staff recall excellent multidisciplinary team work and the use of technology to

facilitate communication between service user and birth partner. (Author)

2021-08236

Obstetrical outcomes and follow-up for patients with asymptomatic COVID-19 at delivery: a multicenter prospective cohort study. Hill J, Patrick HS, Ananth CV, et al (2021), American Journal of Obstetrics & Gynecology MFM vol 3, no 6, November 2021, 100454

Full URL: https://doi.org/10.1016/j.ajogmf.2021.100454

BACKGROUND

Universal testing for COVID-19 on admission to the labor and delivery unit identifies asymptomatic patients. Whether or not these patients are at increased risk for adverse outcomes and go on to develop clinically significant disease is uncertain.

OBJECTIVE

This study aimed to assess the prevalence of asymptomatic COVID-19 presentation among pregnant patients admitted for delivery and to determine whether these patients become symptomatic or require hospital readmission after discharge.

STUDY DESIGN

We performed a multicenter, prospective cohort study of pregnant patients who delivered between 200/7 and 416/7 weeks' gestation and who were found to have COVID-19 based on universal screening on admission for delivery at 1 of 4 medical centers in New Jersey (exposed group). The unexposed group, comprising patients who tested negative for COVID-19, were identified at the primary study site. The primary outcomes were the rates of asymptomatic COVID-19 presentation, the development of symptoms among the asymptomatic positive patients, and hospital readmission rates in the 2 weeks following discharge. We compared the frequency of the distribution of risk factors and outcomes in relation to the COVID-19 status among patients with COVID-19 across all centers and among those without COVID-19 at the primary site. Associations between categorical risk factors and COVID-19 status were expressed as relative risks with 95% confidence intervals.

RESULTS

Between April 10, 2020, and June 15, 2020, there were 218 patients with COVID-19 at the 4 sites and 413 patients without COVID-19 at the primary site. The majority (188 [83.2%]) of patients with COVID-19 were asymptomatic. Compared with the negative controls, these asymptomatic patients were not at increased risk for obstetrical complications that may increase the risk associated with COVID-19, including gestational diabetes (8.2% vs 11.4%; risk ratio, 0.72; 95% confidence interval, 0.24–2.01) and gestational hypertension (6.1% vs 7.0%; risk ratio, 0.88; 95% confidence interval, 0.29–2.67). Postpartum follow-ups via telephone surveys revealed that these patients remained asymptomatic and had low rates of family contacts acquiring the disease, but their adherence to social distancing guidelines waned during the 2-week postpartum period. Review of inpatient and emergency department records revealed low rates of hospital readmission.

CONCLUSION

Most of the pregnant patients who screened positive for COVID-19 are asymptomatic and do not go on to develop clinically significant infection after delivery. Routine surveillance of these patients after hospital discharge appears to be sufficient. (Author)

2021-07993

Clinical briefing: Women from ethnic minorities and impact of COVID [Reviewed July 2021]. Royal College of Midwives (2021), London: RCM July 2021. 5 pages

Full URL: https://www.rcm.org.uk/media/5408/cb-women-from-ethnic-minorities-and-impact-of-covid.pdf

Briefing paper from the Royal College of Midwives (RCM). It is known that COVID-19 is having a disproportionate effect

on women from ethnic minority groups. This professional briefing offers guidance to those caring for pregnant women from those groups in pregnancy and labour, and their families, during the pandemic. (JSM)

2021-07948

Investigating Decreased Rates of Nulliparous Cesarean Deliveries during the COVID-19 Pandemic. Sinnott CM, Freret TS, Clapp MA, et al (2021), American Journal of Perinatology vol 38, no 12, October 2021, pp 1231-1235

Full URL: https://doi.org/10.1055/s-0041-1732449

Objective Preventing the first cesarean delivery (CD) is important as CD rates continue to rise. During the novel coronavirus disease 2019 (COVID-19) pandemic, quality improvement metrics at our hospital identified lower rates of CD. We sought to investigate this change and identify factors that may have contributed to the decrease.

Study Design We compared nulliparous singleton deliveries at a large academic hospital during the COVID-19 pandemic (April through July 2020 during a statewide "stay-at-home" order) to those in the same months 1 year prior to the pandemic (April through July 2019). The primary outcome, mode of delivery, was obtained from the electronic medical record system, along with indication for CD.

Results The cohort included 1,913 deliveries: 892 in 2019 and 1,021 in 2020. Patient characteristics (age, body mass index, race, ethnicity, and insurance type) did not differ between the groups. Median gestational age at delivery was the same in both groups. The CD rate decreased significantly during the COVID-19 pandemic compared with prior (28.9 vs. 33.6%; p = 0.03). There was a significant increase in the rate of labor induction (45.7 vs. 40.6%; p = 0.02), but no difference in the proportion of inductions that were elective (19.5 vs. 20.7%; p = 0.66). The rate of CD in labor was unchanged (15.9 vs. 16.3%; p = 0.82); however, more women attempted a trial of labor (87.0 vs. 82.6%; p = 0.01). Thus, the proportion of CD without a trial of labor decreased (25.1 vs. 33.0%; p = 0.04).

Conclusion There was a statistically significant decrease in CD during the COVID-19 pandemic at our hospital, driven by a decrease in CD without a trial of labor. The increased rate of attempted trial of labor suggests the presence of patient-level factors that warrant further investigation as potential targets for decreasing CD rates. Additionally, in a diverse and medically complex population, increased rates of labor induction were not associated with increased rates of CD. (Author)

2021-07942

Lived experiences of the partners of COVID-19 positive childbearing women: A qualitative study. Nespoli A, Ornaghi S, Borrelli S, et al (2022), Women and Birth: Journal of the Australian College of Midwives vol 35, no 3, May 2022, pp 289-297

Problem
Several maternity units worldwide have rapidly put in place changes to maternity care pathways and restrictive preventive measures in the attempt to limit the spread of COVID-19, resulting in birth companions often not being allowed to be present at birth and throughout hospital admission.
Background
The WHO strongly recommends that the emotional, practical, advocacy and health benefits of having a chosen birth companion are respected and accommodated, including women with suspected, likely or confirmed COVID-19.
Aim
To explore the lived experiences of the partners of COVID-19 positive childbearing women who gave birth during the first pandemic wave (March and April 2020) in a Northern Italy maternity hospital.
Methods
A qualitative study using an interpretive phenomenological approach was undertaken. Audio-recorded semi-structured interviews were conducted with 14 partners. Thematic data analysis was conducted using NVivo software. Ethical approval was obtained from the relevant Ethics Committee prior to commencing the study.
Findings
The findings include five main themes: (1) emotional impact of the pandemic; (2) partner and parent: a dual role; (3)

not being present at birth: a 'denied' experience; (4) returning to 'normality'; (5) feedback to 'pandemic' maternity services and policies.
Discussion and conclusion
Key elements of good practice to promote positive childbirth experiences in the context of a pandemic were identified: presence of a birth companion; COVID-19 screening tests for support persons; timely, proactive and comprehensive communication of information to support persons; staggered hospital visiting times; follow-up of socio-psychological wellbeing; antenatal and postnatal home visiting; family-centred policies and services. (Author)

2021-07884

Donning the powered air-purifying respirator in an emergency obstetric setting amid the COVID-19 outbreak in Singapore: a balance between safety and urgency. Koh KML, Mathur M (2021), Singapore Medical Journal vol 62, no 4, April 2021, p 207

Full URL: https://doi.org/10.11622/smedj.2020099

Correspondence suggesting ways to address the dilemma of balancing the safety of health care professionals with the time-critical nature of emergency obstetric procedures. (MB)

2021-07758

Feature Article—Continuing Education Module—International Water-Birth Practices With Recommendations During a Global Pandemic. Harper B (2021), The Journal of Perinatal Education vol 30, no 3, Summer 2021, pp 128-134

The number of hospitals globally that offer water birth has increased exponentially during the past 10 years. This article examines some of the reasons for this increase as well as the objections to water birth by The American College of Obstetricians and Gynecologists, raised in their 2014 and 2016 opinion statements. The amount of research has also increased as more hospitals are keeping track of their data and publishing both prospective studies and retrospective analyses. The effects of water birth on the neonate are discussed through three meta-analyses from 2015, 2016, and 2018. The challenges and recommendations on continuing the use of water during labor and birth as a nonpharmacologic comfort measure even during a global pandemic are highlighted and supported by the best available evidence. (Author)

2021-07726

The impact of COVID-19 visitor policy restrictions on birthing communities of colour. Altman MR, Eagen-Torkko MK, Mohammed SA, et al (2021), Journal of Advanced Nursing vol 77, no 12, December 2021, pp 4827-4835

Full URL: https://doi.org/10.1111/jan.14991

Aims
To explore the experiences of care for pregnant and birthing people, and the nurses who cared for them, during the COVID-19 pandemic, with special emphasis on the impact of visitor restrictions policies.

Design
Qualitative study using critical thematic analysis.

Methods
We conducted semi-structured interviews with 15 community members who were pregnant and/or gave birth and 14 nurses who worked in the perinatal setting between April and August 2020. Participants were recruited via purposive and snowball sampling, and interviews were conducted virtually via the Zoom platform. The research team used critical thematic analysis methods informed by other interpretive methodologies to arrive at resultant themes.

Results
Participants described experiences pertaining to how visitor restriction policies are not equitable and disproportionately impact Black, Indigenous, and People of Color (BIPOC) families, and the direct impacts of not having support people, and also provided recommendations for how to adapt current policies to be more equitable.

Conclusions
Visitor restriction policies have had a disproportionately harmful effect on BIPOC patients and families, leading some patients to make decisions that increase their physical risks to alleviate their risk of labouring and birthing without desired support.

Impact
While this pandemic is nearing the end, these results can guide structuring of policy not only for the next pandemic, but also for universal policy development. Mitigating the effects of racism in policies, by including diverse stakeholders in decision-making, should be an inherent part of hospital administration procedures. (Author)

2021-07537

Changes in obstetric interventions and preterm birth during COVID-19: A nationwide study from Iceland. Einarsdóttir K, Swift EM, Zoega H (2021), Acta Obstetricia et Gynecologica Scandinavica vol 100, no 10, October 2021, pp 1924-1930
Full URL: https://doi.org/10.1111/aogs.14231

Introduction
Previous evidence has been conflicting regarding the effect of coronavirus disease 2019 (COVID-19) pandemic lockdowns on obstetric intervention and preterm birth rates. The literature to date suggests potentially differential underlying mechanisms based on country economic setting. We aimed to study these outcomes in an Icelandic population where uniform lockdown measures were implemented across the country.

Material and methods
The study included all singleton births (n = 20 680) during 2016–2020 identified from the population-based Icelandic Medical Birth Register. We defined two lockdown periods during March–May and October–December in 2020 according to government implemented nationwide lockdown. We compared monthly rates of cesarean section, induction of labor and preterm birth during lockdown with the same time periods in the 4 previous years (2016–2019) using logit binomial regression adjusted for confounders.

Results
Our results indicated a reduction in the overall cesarean section rate, which was mainly evident for elective cesarean section, both during the first (adjusted odd ratio [aOR] 0.71, 95% CI 0.51–0.99) and second (aOR 0.72, 95% CI 0.52–0.99) lockdown periods, and not for emergency cesarean section. No change during lockdown was observed in induction of labor. Our results also suggested a reduction in the overall preterm birth rate during the first lockdown (aOR 0.69, 95% CI 0.49–0.97) and in the months immediately following the lockdown (June–September) (aOR 0.67, 95% CI 0.49–0.89). The reduction during the first lockdown was mainly evident for medically indicated preterm birth (although not statistically significant) and the reduction during June–September was mainly evident for spontaneous preterm birth.

Conclusions
This study suggested a reduction in elective cesarean section during COVID-19 lockdown, possibly reflecting changes in prioritization of non-urgent health care during lockdown. We also found a reduction in overall preterm birth during the first lockdown and spontaneous preterm birth following the first lockdown, but further research is needed to shed light on the underlying mechanisms for these findings. (Author)

2021-07225

What may happen if you are pregnant during Covid-19 lockdown? A retrospective study about peripartum outcomes.
Amadori R, Aquino CI, Colagiorgio S, et al (2021), Minerva Obstetrics and Gynecology 17 June 2021, online
Background: One of the provisions implemented to contain the spread of Covid-19 infections in Italy was the lockdown. Effects of the lockdown on childbirth outcomes and on the well-being of both the mother and the child have not yet been defined. An inadequate diet during pregnancy and a reduced physical activity can predispose

women to become overweight or obese and trigger the development of various complications and maternal-fetal adverse outcomes.

Methods: This is a retrospective study including all consecutive patients who delivered at University Hospital Maggiore della Carità in Novara, Italy, in April-May 2017 (group 1, n=294), a period prior to the pandemic, and during the same months in 2020 (group 2, n=256) during and immediately after lockdown. Clinical data were extracted from The Report "Childbirth Assistance Certificate (CedAP) - Birth Event Analysis".

Results: Demographic characteristics were similar between the two study groups, except for a decreased number of married couples in group 2 (p-value 0.018) and an increased percentage of patients with clinical checkups at Family Planning facilities in 2020 (p-value 0.04). The number of hospitalizations during pregnancy was 26 (8.9%) vs 10 (3.9%) with a significative reduction during 2020 (p-value 0.004). Regarding obstetric outcomes, we observed a significant increase in induction of labour in 2020 (23.9% vs 35.9%; p-value 0. 002), a reduction of amniorrhexis (11.3% vs 5.5% p-value 0.015), a reduction of supine positions with an increase of vertical and all fours positions in 2020 (49.3% vs 61.9% and 9.5% vs 12.4% respectively, p 0.023), and a reduction of left occipito-anterior presented part (63.2% vs 55.4%) in favor of right occipito-anterior (34.7% vs 41.2%, p-value 0.019).

Conclusions: There were no significant differences either for antepartum or intrapartum complications. Long-term studies are needed to evaluate psychological, behavioral, and epigenetic effects of maternal physical inactivity on obstetric outcomes.

2021-07133

Pregnancy and birth in the United States during the COVID-19 pandemic: The views of doulas. Adams C (2022), Birth vol 49, no 1, March 2022, pp 116-122

Full URL: https://doi.org/10.1111/birt.12580

Background

Much of the emerging research on the effects of SARS-CoV-2 disease (COVID-19) on pregnant people and their infants has been clinical, devoting little attention to how the pandemic has affected families navigating pregnancy and birth. This study examined the perspectives of doulas, or nonclinical labor support professionals, on how pregnancy and birth experiences and maternal health care delivery systems changed in the early weeks of the COVID-19 pandemic.

Methods

Semi-structured interviews using open-ended questions were conducted over the phone with 15 birth doulas. Doulas were invited to participate because of their close relationships with pregnant and birthing people and the comprehensive support they offer. The interview transcripts were analyzed inductively.

Results

Doulas' clients faced three predominant COVID-19-related pregnancy and birth challenges: (a) fear of exposure; (b) limited access to their expected support systems; and (c) uncertainties surrounding hospital restrictions on labor and birth. Doulas responded creatively to help their clients confront these challenges. Participants expressed various criticisms of how maternal health care systems handled the emerging crisis, argued that COVID-19 exposed preexisting weaknesses in US maternity care, and called for a coordinated care model involving doulas.

Discussion

Doulas' close relationships with pregnant people enabled them to be an important source of support during the COVID-19 pandemic. Added to the larger body of work on the impacts of doula care, this study supports widespread calls for universally integrating doulas into maternity care systems as a targeted strategy to better support pregnant and birthing people in both crisis and noncrisis situations. (Author)

2021-06667

Differences in obstetric healthcare utilization and delivery complications before and after the COVID-19 pandemic – a retrospective study. Herzberger EH, Efros O, Herzberger S, et al (2022), Journal of Maternal-Fetal and Neonatal Medicine vol 35, no 25, 2022, pp 7194-7199

Purpose

To investigate the effect of the COVID-19 pandemic on healthcare utilization related to labor and delivery and to assess the effect of the COVID-19 pandemic on intra-partum and delivery complications.

Methods

This retrospective study was performed at a university-affiliated, tertiary medical center. It included women admitted to the delivery room from 1 March 2020 to 23 July 2020 during the first wave of the COVID-19 pandemic. They were compared against women who were admitted to the delivery room during the same time period in 2019. The outcomes of 2701 deliveries during the pre-pandemic period were compared to those of 2668 deliveries during the pandemic period. Main outcomes were pregnancy and delivery outcomes.

Results

The mean number of emergency department visits before admission for delivery was higher in the pre-pandemic period than in the pandemic period (2.3 ± 1.5 and 2.1 ± 1.3 visits, respectively; $p < .01$). There were no significant differences in other intra- and postpartum complications. The incidence of a prolonged third stage of labor was higher in the pre-pandemic than in the pandemic period (225 (10%) and 182 (8.1%), respectively; $p = .03$). The mean duration of post-partum maternal hospitalization was longer in the pre-pandemic than in the pandemic period (3.6 ± 0.9 and 3.4 ± 1.0 days, respectively; $p < .01$). Neonatal outcomes were comparable for Apgar scores, birth weight, and newborn intensive care unit admission for both periods; however, the mean duration of neonatal hospitalization was longer in the pre-pandemic than in the pandemic period (3.5 ± 3.2 and 3.2 ± 1.1 days, respectively; $p < .01$).

Conclusions

In our study population, in the presence of public and accessible obstetric medicine, the first wave of the COVID-19 pandemic did not affect pregnancy or early delivery outcomes. (Author)

2021-06051

Peripartum anesthetic management of women with SARS-CoV-2 infection in eight medical centers across three European countries: prospective cohort observation study. Ioscovich A, Guasch E, Brogly N, et al (2022), Journal of Maternal-Fetal and Neonatal Medicine vol 35, no 25, 2022, pp 7756-7763

Objective

Several reports of obstetric anesthesia management have been published since the onset of the COVID-19 pandemic. We aimed to collect high-quality broad and detailed data from different university medical centers in several European Society of Anesthesiologist countries.

Methods

This prospective observational survey was performed in eight medical centers in Spain, Israel and Portugal from 1st April to 31st July 2020. Institutional review board approval was received at each participating center. Inclusion criteria: all women with a positive test for COVID-19. Retrieved data included maternal, delivery, anesthetic, postpartum details, and neonatal outcomes. Descriptive data are presented, and outcomes were compared for women with versus without respiratory signs and symptoms.

Results

Women with respiratory symptoms (20/12.1%) had significantly higher mean (standard deviation) temperature (37.2 °C (0.8) versus 36.8 °C (0.6)), were older (34.1 (6.7) years versus 30.5 (6.6)) and had higher body mass index kg m−2 – (29.5 (7.5) versus 28.2 (5.1)). Women with respiratory symptoms delivered at a significantly earlier gestational age (50% < 37 weeks) with a 65% cesarean delivery rate (versus 22.1% in the group without respiratory symptoms) and

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5-fold increased rate of emergency cesarean delivery, 30% performed under general anesthesia. A higher rate of intrauterine fetal death (3%) was observed than expected from the literature (0.2–0.3%) in developed countries. There was no evidence of viral vertical transmission.

Conclusion
Well-functioning neuraxial analgesia should be available to manage laboring women with respiratory symptoms, as there is a higher frequency of emergency cesarean delivery. We report a higher rate of undiagnosed parturient and intrauterine fetal death. (Author)

2021-05735

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Immunoglobulin G Antibody Screening to Identify Infections Remote From Delivery Admission. Moutos CP, Beavers RN, Younes L, et al (2021), Obstetrics & Gynecology vol 138, no 1, July 2021, pp 111-113

Universal antepartum serologic screening for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antibodies can aid in properly applying isolation and visitation policies for patients presenting to labor and delivery. (Author)

2021-05482

Clinical and Demographic Risk Factors for COVID-19 during Delivery Hospitalizations in New York City. Sutton D, Wen T, Staniczenko AP, et al (2021), American Journal of Perinatology vol 38, no 8, July 2021, pp 857-868

Objective This study was aimed to review 4 weeks of universal novel coronavirus disease 2019 (COVID-19) screening among delivery hospitalizations, at two hospitals in March and April 2020 in New York City, to compare outcomes between patients based on COVID-19 status and to determine whether demographic risk factors and symptoms predicted screening positive for COVID-19.

Study Design This retrospective cohort study evaluated all patients admitted for delivery from March 22 to April 18, 2020, at two New York City hospitals. Obstetrical and neonatal outcomes were collected. The relationship between COVID-19 and demographic, clinical, and maternal and neonatal outcome data was evaluated. Demographic data included the number of COVID-19 cases ascertained by ZIP code of residence. Adjusted logistic regression models were performed to determine predictability of demographic risk factors for COVID-19.

Results Of 454 women delivered, 79 (17%) had COVID-19. Of those, 27.9% (n = 22) had symptoms such as cough (13.9%), fever (10.1%), chest pain (5.1%), and myalgia (5.1%). While women with COVID-19 were more likely to live in the ZIP codes quartile with the most cases (47 vs. 41%) and less likely to live in the ZIP code quartile with the fewest cases (6 vs. 14%), these comparisons were not statistically significant ($p = 0.18$). Women with COVID-19 were less likely to have a vaginal delivery (55.2 vs. 51.9%, $p = 0.04$) and had a significantly longer postpartum length of stay with cesarean (2.00 vs. 2.67days, $p < 0.01$). COVID-19 was associated with higher risk for diagnoses of chorioamnionitis and pneumonia and fevers without a focal diagnosis. In adjusted analyses, including demographic factors, logistic regression demonstrated a c-statistic of 0.71 (95% confidence interval [CI]: 0.69, 0.80).

Conclusion COVID-19 symptoms were present in a minority of COVID-19-positive women admitted for delivery. Significant differences in obstetrical outcomes were found. While demographic risk factors demonstrated acceptable discrimination, risk prediction does not capture a significant portion of COVID-19-positive patients. (Author)

2021-05456

Giving birth during the COVID-19 pandemic, perspectives from a sample of the United States birthing persons during the first wave: March-June 2020. Breman RB, Neerland C, Bradley D, et al (2021), Birth vol 48, no 4, December 2021, pp 524-533

Full URL: https://doi.org/10.1111/birt.12559

Background

The COVID-19 pandemic forced hospitals in the United States to adjust policy and procedure in order to provide safe care and prevent the spread of disease. At the beginning of the pandemic, media and case reports described pressure for medical interventions, visitor restrictions, separation from newborns, and an increase in patient demand for community birth (home and birth center). The purpose of this study was to describe birth experiences during the COVID-19 pandemic centering the birthing person's perspective.

Methods
A survey was e-mailed to users of the Ovia Pregnancy app reaching a national convenience sample who gave birth between March 1, 2020, and June 11, 2020. Survey topics included birth location, the Mothers on Respect index, and open-ended questions capturing patient perspectives on the pandemic's effect on their birth experiences. Differences were assessed based on state-level COVID rate and by race. Content analysis was performed to analyze open-ended responses.

Results
Respondents from highly impacted COVID-19 states more frequently changed or considered changing their birth location. Racial differences were also found with Black respondents reporting significantly more preterm births and lower respect scores when compared to White respondents. Six themes emerged from the content analysis: Institutional Policies, Changes in Care, Hospital Staff Interactions, Sub-par Care, Issues of Support, and Mental Health.

Discussion
The health care community must continue to adapt policies and procedures to best support birthing patients during the COVID-19 pandemic. The community must also continue to address the reality that Black patients receive less respectful care compared with White patients. (Author)

2021-05124

Maternity Services: Coronavirus [written answer]. House of Commons (2021), Hansard Written question 13133, 9 June 2021
Full URL: https://questions-statements.parliament.uk/written-questions/detail/2021-06-09/13133

Ms Nadine Dorries responds to a written question from Rachael Maskell to the Secretary of State for Health and Social Care, regardng whether, from 21 June 2021, partners will be able to attend, in person, all maternity appointments, including the birth of a child. (JSM)

2021-04968

Trends in Home Birth Information Seeking in the United States and United Kingdom During the COVID-19 Pandemic. Schmidt CN, Cornejo LN, Rubashkin NA, et al (2021), JAMA Network Open vol 4, no 5, May 2021, e2110310
Full URL: https://doi.org/10.1001/jamanetworkopen.2021.10310

This cross-sectional study used online search data to assess changes in home birth information-seeking behaviors across the United States and United Kingdom during the COVID-19 pandemic. (Author)

2021-04860

Timing of delivery with coronavirus disease 2019 pneumonia requiring intensive care unit admission. Rose CH, Wyatt MA, Narang K, et al (2021), American Journal of Obstetrics & Gynecology MFM vol 3, no 4, July 2021, 100373
Full URL: https://doi.org/10.1016/j.ajogmf.2021.100373

Approximately 4% of pregnant patients with coronavirus disease 2019 require intensive care unit admission. Given the practical implications of advanced ventilatory and circulatory support techniques, urgent or emergent delivery for nonreassuring fetal status frequently presents a logistical impossibility. This article proposes a protocol for obstetrical management of patients in these situations, emphasizing coordinated preparation among obstetrical, anesthesiology, and intensivist teams for planned preterm delivery at gestational ages when neonatal outcomes are likely to be favorable. (Author)

2021-04530

Use of facemask during labor does not affect cord blood gas values at birth. Ornaghi S, Guinea Montalvo CK, Fumagalli S, et al (2021), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 261, June 2021, pp 242-243

No abstract available.

2021-04128

Covid crisis forces suspension of maternity services. Moore A (2021), Health Service Journal 7 January 2021

Full URL: https://www.hsj.co.uk/

Some trusts in London and the South East are closing standalone birth centres and warning they cannot support home births because of high levels of demand for ambulance services from covid patients. (Author)

2021-03942

Autonomy in pregnancy: the legal and ethical implications of COVID-19 and the suspension of out-of-hospital birth options. Chambers E (2021), MIDIRS Midwifery Digest vol 31, no 2, June 2021, pp 212-216

Discusses the legal and ethical implications for personal autonomy and choice in maternity services during the COVID-19 pandemic. Concludes that the suspension of home birth services was lawful, necessary and proportionate. (LDO)

2021-03828

Cesarean section rates in the COVID-19 era: False alarms and the safety of the mother and child. Arab W, Atallah D (2021), European Journal of Midwifery vol 5, May 2021, p 14

Full URL: https://doi.org/10.18332/ejm/134998

Letter to the editor discussing rates of caesarean section and iatrogenic preterm deliveries in obstetric-led units during the COVID-19 pandemic. The authors suggest that vaginal birth should be favoured as it decreases the risk of clinical deterioration, COVID-19 related thromboembolism and neonatal morbidity. (LDO)

2021-03586

Partner testing of severe acute respiratory syndrome coronavirus 2–positive women presenting for delivery. Sakowicz A, Rosati J, Caldarelli LA, et al (2021), American Journal of Obstetrics & Gynecology MFM vol 3, no 4, July 2021, 100361

Full URL: https://doi.org/10.1016/j.ajogmf.2021.100361

Research letter presenting a study of SARS-CoV-2 testing among pregnant women and their partners at Northwestern Memorial Hospital in the United States. 153 women and 33 partners tested positive for SARS-CoV-2 within 10 days of delivery. (LDO)

2021-03508

COVID-19 is associated with traumatic childbirth and subsequent mother-infant bonding problems. Mayopoulos GA, Ein-Dor T, Dishy GA, et al (2021), Journal of Affective Disorders vol 282, 1 March 2021, pp 122-125

Full URL: https://doi.org/10.1016/j.jad.2020.12.101

Background

Knowledge of women's experience of childbirth in the outbreak of the coronavirus (COVID-19) pandemic and associated maternal health outcomes is scarce.

Methods

A sample of primarily American women who gave birth around the height of COVID-19 (n = 1,611) and matched controls, i.e., women who gave birth before COVID-19 (n = 640), completed an anonymous Internet survey about recent childbirth, birth-related traumatic stress (peritraumatic distress inventory; PTSD-checklist), maternal bonding (maternal attachment inventory; mother-to-infant bonding scale) and breastfeeding status. Groups (n = 637 in each)

were matched on demographics, prior mental health/trauma and childbirth factors to determine the unique contribution of COVID-19 to the psychological experience of childbirth.

Results
Mothers in COVID-19-exposed communities endorsed more clinically acute stress response to childbirth than matched controls ($Z = 2.65$, $p = .008$, OR= 1.38). A path mediation model revealed that acute stress mediated the relationship between study group and postpartum outcomes. Specifically, higher acute stress response in birth was associated with more childbirth-related posttraumatic stress disorder symptoms ($\beta = .42$, $p < .001$) and less bonding with the infant ($\beta = .26$, $p < .001$), including breastfeeding problems ($\beta = .10$, $p < .01$).

Limitations
Use of a convenient internet sample introduces bias towards more educated women and reliance on retrospective self-report assessments may entail recall bias.

Conclusions
COVID-19 is a major stressor for delivering women. It can heighten traumatic childbirth experiences and interfere with successful postpartum adjustment. Clinical attention to traumatic stress in childbirth and problems with caring for the young during this pandemic is important.

(Author)

2021-03442

Face masks in labour: 'I feared I would vomit'. Talwar D (2021), BBC News 14 May 2021

Full URL: https://www.bbc.co.uk/news/health-57021736

Wearing a face mask has become part of daily life during the pandemic. But there are some people who are exempt from the rules - and that includes women giving birth. (Author)

2021-03238

Covid: 'Miracle' baby born to Newport mum in coma. Bird N (2021), BBC News 10 May 2021

Full URL: https://www.bbc.co.uk/news/av/health-57013743

A woman who was in a coma with Covid while pregnant has told how she woke up the day after her baby was born. (Author)

2021-03194

Induction of labour during the COVID-19 pandemic: a national survey of impact on practice in the UK. Harkness M, Yuill C, Cheyne H, et al (2021), BMC Pregnancy and Childbirth vol 21, no 310, 19 April 2021

Full URL: https://doi.org/10.1186/s12884-021-03781-x

Background
Induction of labour (IOL) is one of the most commonly performed interventions in maternity care, with outpatient cervical ripening increasingly offered as an option for women undergoing IOL. The COVID-19 pandemic has changed the context of practice and the option of returning home for cervical ripening may now assume greater significance. This work aimed to examine whether and how the COVID-19 pandemic has changed practice around IOL in the UK.

Method
We used an online questionnaire to survey senior obstetricians and midwives at all 156 UK NHS Trusts and Boards that currently offer maternity services. Responses were analysed to produce descriptive statistics, with free text responses analysed using a conventional content analysis approach.

Findings

Responses were received from 92 of 156 UK Trusts and Boards, a 59% response rate. Many Trusts and Boards reported no change to their IOL practice, however 23% reported change in methods used for cervical ripening; 28% a change in criteria for home cervical ripening; 28% stated that more women were returning home during cervical ripening; and 24% noted changes to women's response to recommendations for IOL. Much of the change was reported as happening in response to attempts to minimise hospital attendance and restrictions on birth partners accompanying women.

Conclusions
The pandemic has changed practice around induction of labour, although this varied significantly between NHS Trusts and Boards. There is a lack of formal evidence to support decision-making around outpatient cervical ripening: the basis on which changes were implemented and what evidence was used to inform decisions is not clear. (Author)

2021-03004

Birth and Breastfeeding in the Hospital Setting during the COVID-19 Pandemic. Spatz DL (2021), MCN - American Journal of Maternal/Child Nursing vol 46, no 1, January/February 2021, pp 30-35

For new families giving birth in a hospital setting, the COVID-19 pandemic has presented numerous challenges to their birth, breastfeeding, and postpartum experiences. We present experiences of three first-time, healthy mothers and their babies, as they gave birth in the hospital and were breastfeeding during the start of the pandemic in Philadelphia, PA. Each case is framed in the mother's prenatal goals, infant feeding intentions, birth, breastfeeding, and postpartum experiences. Shared concerns and experiences among the three participants are described in five key areas: 1) Recommendations changing every day, 2) Guilt, concern, and stress, 3) In-person versus telehealth visits, 4) Missing time with family and friends, and 5) Silver linings. Through these mothers' experiences, nurses and other health care providers can learn from their perceptions and events and proactively work to ensure we provide sound anticipatory guidance, enhance our communication, and improve provision of evidence-based lactation care and support. (Author)

2021-02755

Traumatic birth: Definitions, treatments and the pandemic. Greenfield M (2021), International Journal of Birth and Parent Education vol 8, no 3, April 2021, pp 38-41

This article will present an overview of the current understanding of traumatic births, and then examine the additional effect that the pandemic and lockdown have had. The first half of the article will define what a traumatic birth is and provide information about how people experience a traumatic birth. The factors that make a traumatic birth more likely will then be presented, before exploring what the long-term consequences are for parents and babies. Finally, an overview of the most common nonpharmacological treatments for the consequences of traumatic birth will be presented. In the second half of the article, data from a large mixed methods survey undertaken in the early days of lockdown will be used to explore how parents' birth experiences may have been impacted by the pandemic, and in turn, how this may have led to experiences of traumatic birth and wider perinatal mental health issues. (Author)

2021-02655

Preventing post-partum haemorrhage at home during COVID-19: what are we waiting for?. Hobday K, Prata N, Hulme J, et al (2021), The Lancet Global Health vol 9, no 3, March 2021, pp E245-E246

Full URL: https://doi.org/10.1016/S2214-109X(21)00003-6

Discusses the impact that disruptions in health service delivery due to the COVID-19 pandemic will have on the distribution of misoprostol for the prevention of post-partum haemorrhage. (MB)

2021-02648

Why COVID-19 strengthens the case for a dedicated financing mechanism to scale up innovation in women's, children's, and adolescents' health. Bustreo F, Merialdi M, Hinton R, et al (2021), The Lancet Global Health vol 9, no 3, March 2021, pp E239-E240

Full URL: https://doi.org/10.1016/S2214-109X(20)30507-6

Argues that, due to the COVID-19 pandemic, the case for a dedicated financing mechanism for scaling up innovations in women's, children's, and adolescents' health is stronger than ever. (Author, edited)

2021-02602

Counting stillbirths and COVID 19—there has never been a more urgent time. Homer CSE, Leisher SH, Aggarwal N, et al (2021), The Lancet Global Health vol 9, no 1, January 2021, pp E10-E11

Full URL: https://doi.org/10.1016/S2214-109X(20)30456-3

Comments that in order to reduce preventable stillbirths, all perinatal outcomes need to be counted, particularly in the light of the considerable impact of the COVID-19 pandemic on maternal and newborn health. (MB)

2021-01726

The role of pandemic-related pregnancy stress in preference for community birth during the beginning of the COVID-19 pandemic in the United States. Preis H, Mahaffey B, Lobel M (2021), Birth vol 48, no 2, June 2021, pp 242-250

Background

The COVID-19 pandemic introduced unparalleled uncertainty into the lives of pregnant women, including concerns about where it is the safest to give birth, while preserving their rights and wishes. Reports on the increased interest in community births (at home or in birth centers) are emerging. The purpose of this project was to quantitatively investigate psychological factors related to this birth preference.

Methods

This study included 3896 pregnant women from the COVID-19 Pregnancy Experiences (COPE) Study who were anticipating a vaginal birth. COPE Study participants were recruited online between April 24 and May 15, 2020, and completed a questionnaire that included preference with respect to place of birth and psychological constructs: fear of childbirth, basic beliefs about birth, pandemic-related preparedness stress, and pandemic-related perinatal infection stress.

Results

Women who preferred a community birth, on average, had less childbirth fear, had stronger beliefs that birth is a natural process, were less likely to see birth as a medical process, and were less stressed about being unprepared for birth and being infected with COVID-19. In multivariate models, higher stress about perinatal COVID-19 infection was associated with greater likelihood of preferring a community birth. The effect of perinatal infection stress on preference was stronger when preparedness stress was high.

Discussion

Women's birth preferences during the COVID-19 pandemic are associated with psychological processes related to risk perception. Community births are more appealing to women who view being in a hospital as hazardous because of the pandemic. Policies and prenatal care aimed to increase access to safe in-hospital and out-of-hospital birth services should be encouraged.

2021-01513

The experiences of childbearing women who tested positive to COVID-19 during the pandemic in northern Italy. Fumagalli S, Omaghi S, Borrelli S, et al (2022), Women and Birth: Journal of the Australian College of Midwives vol 35, no 3, May 2022, pp 242-253

Full URL: https://doi.org/10.1016/j.wombi.2021.01.001

Problem

The COVID-19 pandemic has significantly challenged maternity provision internationally. COVID-19 positive women are one of the childbearing groups most impacted by the pandemic due to drastic changes to maternity care pathways put in place.

Background
Some quantitative research was conducted on clinical characteristics of pregnant women with COVID-19 and pregnant women's concerns and birth expectations during the COVID-19 pandemic, but no qualitative findings on childbearing women's experiences during the pandemic were published prior to our study.
Aim
To explore childbearing experiences of COVID-19 positive mothers who gave birth in the months of March and April 2020 in a Northern Italy maternity hospital.
Methods
A qualitative interpretive phenomenological approach was undertaken. Audio-recorded semi-structured interviews were conducted with 22 women. Thematic analysis was completed using NVivo software. Ethical approval was obtained from the research site's Ethics Committee prior to commencing the study.
Findings
The findings include four main themes: 1) coping with unmet expectations; 2) reacting and adapting to the 'new ordinary'; 3) 'pandemic relationships'; 4) sharing a traumatic experience with long-lasting emotional impact.
Discussion
The most traumatic elements of women's experiences were the sudden family separation, self-isolation, transfer to a referral centre, the partner not allowed to be present at birth and limited physical contact with the newborn.
Conclusion
Key elements of good practice including provision of compassionate care, presence of birth companions and transfer to referral centers only for the most severe COVID-19 cases should be considered when drafting maternity care pathways guidelines in view of future pandemic waves.

2021-01483

Homebirth in the Time of Covid. Wainer N (2020), Midwifery Today no 136, Winter 2020

Frequent contributor Nancy Wainer writes about how homebirth has changed and why it is still the best choice during the pandemic. (Author)

2021-01451

Prematurity Rates During the Coronavirus Disease 2019 (COVID-19) Pandemic Lockdown in Melbourne, Australia. Matheson A, McGannon CJ, Malhotra A, et al (2021), Obstetrics & Gynecology vol 137, no 3, March 2021, pp 405-407

Low rates of preterm birth were observed during the coronavirus disease 2019 (COVID-19) lockdown in Melbourne, Australia.

2021-01450

Preterm Birth During the Coronavirus Disease 2019 (COVID-19) Pandemic in a Large Hospital System in the United States. Wood R, Sinnott C, Goldfarb I, et al (2021), Obstetrics & Gynecology vol 137, no 3, March 2021, pp 403-404

The preterm birth rate was unchanged in a metropolitan U.S. hospital system during the peak of the coronavirus disease 2019 (COVID-19) pandemic compared with the prior year.

2021-01353

Patient characteristics associated with SARS-CoV-2 infection in parturients admitted for labour and delivery in Massachusetts during the spring 2020 surge: A prospective cohort study. Reale SC, Lumbreras-Marquez MI, King CH, et al (2021), Paediatric and Perinatal Epidemiology vol 35, no 1, January 2021, pp 24-33

Background
While studies from large cities affected by coronavirus disease 2019 (COVID-19) have reported on the prevalence of SARS-CoV-2 in the context of universal testing during admission for delivery, the patient demographic, social and clinical factors associated with SARS-CoV-2 infection in pregnant women are not fully understood.

Objective
To evaluate the epidemiological factors associated with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in women admitted for labour and delivery, in the context of universal screening at four Boston-area hospitals.

Methods
In this prospective cohort study, we reviewed the health records of all women admitted for labour and delivery at four hospitals from the largest health system in Massachusetts between 19 April 2020 and 27 June 2020. We calculated the risk of SARS-CoV-2 infection, including asymptomatic infection. We calculated associations between SARS-CoV-2 infection and demographic and clinical characteristics.

Results
A total of 93 patients (3.2%, 95% confidence interval 2.5, 3.8) tested positive for SARS-CoV-2 infection on admission for labour and delivery out of 2945 patients included in the analysis; 80 (86.0%) of the patients who tested positive were asymptomatic at the time of testing. Factors associated with SARS-CoV-2 infection included the following: younger age, obesity, African American or Hispanic race/ethnicity, residence in heavily affected communities (as measured in cases reported per capita), presence of a household member with known SARS-CoV-2 infection, non-health care essential worker occupation and MassHealth or Medicaid insurance compared to commercial insurance. 93.8% of patients testing positive for SARS-CoV-2 on admission had one or more identifiable factors associated with disease acquisition.

Conclusions
In this large sample of deliveries during the height of the surge in infections during the spring of 2020, SARS-CoV-2 infection was largely concentrated in patients with distinct demographic characteristics, those largely from disadvantaged communities. Racial disparities seen in pregnancy persist with respect to SARS-CoV-2 infection.

20210122-37*

COVID-19 and Perinatal Care: Facing Challenges, Seizing Opportunities. Tilden EL, Phillippi JC, Snowden JM (2021), Journal of Midwifery & Women's Health vol 66, no 1, January/February 2021, pp 10-13

We highlight current barriers and opportunities to advancing birth equity and perinatal care integration in light of the novel coronavirus pandemic (COVID-19). (Author, edited)

2021-00815

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) universal screening in gravids during labor and delivery. Savirón-Cornudella R, Villalba A, Zapardiel J, et al (2021), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 256, January 2021, pp 400-404

Full URL: https://doi.org/10.1016/j.ejogrb.2020.11.069

Objective
To screen pregnant women at risk of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection during delivery using reverse-transcription polymerase chain reaction (RT-PCR) test and serum immunoglobulin (Ig) testing.
Method
Between March 31 st and August 31 st of 2020, consecutive pregnant women admitted for labor and delivery in a single hospital were screened for SARS-CoV-2 with nasopharyngeal RT-PCR swab tests and detection of serum IgG and IgM.
Results
We studied 266 pregnant women admitted for labor and delivery. The prevalence of acute or past SARS-CoV-2 infection was 9.0 %, including (i) two cases with respiratory symptoms of SARS-Co-V-2 infection and positive RT-PCR; (ii) four asymptomatic women with positive RT-PCR without clinical symptoms and negative serological tests between two and 15 weeks later; and (iii) two women with false positive RT-PCR due to technical problems. All newborns of the 6 pregnant women with RT-PCR positive had negative RT-PCR and did not require Neonatal Intensive Care Unit

admission. There were eighteen asymptomatic women with positive serological IgG tests and negative RT-PCR.
Conclusion
In our cohort of gravids, we found 2.2 % of women with positive RT-PRC tests and 6.7 % with positive serological tests during the first wave of the SARS-CoV-2 pandemic.

2021-00768

Rapid antigen detection testing for universal screening for severe acute respiratory syndrome coronavirus 2 in women admitted for delivery. Rottenstreich A, Zarbiv G, Kabiri D, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 5, May 2021, pp 539-540

Full URL: https://doi.org/10.1016/j.ajog.2021.01.002

Research letter evaluating the performance of an antigen-based rapid detection tests for universal screening for SARS-CoV-2 in women admitted for delivery. (LDO)

2021-00745

Campaign Update: Removing COVID-19-related maternity restrictions on partners. AIMS Campaigns Team (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 4, December 2020

Full URL: https://www.aims.org.uk/journal/item/campaign-update-covid-restrictions-partners

An update from the AIMS Campaigns team about their progress in the campaign for the needs of maternity service users to be considered in current national guidance. (Author)

2021-00711

Birth in a pandemic after a pregnancy loss. Hardy C (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020

Full URL: https://www.aims.org.uk/journal/item/covid-19-clare-hardy

After losing a baby to miscarriage, Clare Hardy describes how her subsequent pregnancy and birth were affected by Covid-19 as well as anxiety about a further loss. (Author)

2021-00710

Preparing for freebirth during Covid-19. Hyde H-B (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020

Full URL: https://www.aims.org.uk/journal/item/covid19-hannah-beth

Hannah-Beth Hyde explains why she feels that a freebirth is her safest option during the Covid-19 pandemic. (Author)

2021-00707

Homebirth to Midwife Led Unit transfer. Sumner L (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020

Full URL: https://www.aims.org.uk/journal/item/covid-19-leanne-sumner

Leanne Sumner's positive birth, accidentally on the MLU!. (Author)

2021-00705

When partners are banned from birth. Castelino L (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020

Full URL: https://www.aims.org.uk/journal/item/covid-19-lucy-castelino

As Lucy Castelino arrived at the hospital to birth her twins, she was told that her partner could not be there at all, nor for the next 5 days. (Author)

2021-00702

Balancing the trade offs. Wallace I (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020

Full URL: https://www.aims.org.uk/journal/item/covid-19-isla-wallace

Isla Wallace discusses how balancing the risks of spreading Covid-19 with the risks of being separated from her partner and newborn affected her. (Author)

2021-00701

A time of worry and uncertainty. Miller F (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020

Full URL: https://www.aims.org.uk/journal/item/covid-19-felicity-miller

Felicity Miller explains how the changes to maternity services in her area are causing huge stress and anxiety. (Author)

2021-00337

Coronavirus (COVID-19) infection in pregnancy: Information for healthcare professionals [Version 13] [Superseded by Version 14, 25 August 2021]. Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of Paediatrics and Child Health, et al (2021), London: RCOG 19 February 2021. 97 pages

NB: This version has now been superseded by version 14,
25 August 2021.

This document aims to provide guidance to healthcare professionals who care for pregnant women during the COVID-19 pandemic. It is not intended to replace existing clinical guidelines, but to act as a supplement with additional advice on how to implement standard practice during this time. The advice in this document is provided as a resource for UK healthcare professionals based on a combination of available evidence, good practice and expert consensus opinion. The priorities are: (i) The reduction of transmission of SARS-CoV-2 to pregnant women, their family members and healthcare workers. (ii) The provision of safe, personalised and woman-centred care during pregnancy, birth and the early postnatal period, during the COVID-19 pandemic. (iii) The provision of safe, personalised and woman-centred care to pregnant and postnatal women with suspected or confirmed COVID-19. This is very much an evolving situation requiring this guidance to be a living document that is under regular review and updated as new information and evidence emerges. (Author, edited)

2021-00215

Childbirth: Coronavirus [written answer]. House of Commons (2021), Hansard Written question 146742, 1 February 2021

Full URL: https://questions-statements.parliament.uk/written-questions/detail/2021-02-01/146742

Ms Nadine Dorries responds to a written question asked by Ms Harriet Harman to the Secretary of State for Health and Social Care, regarding what estimate has been made of the number of women who have gone through labour without a support partner present due to the ongoing COVID-19 outbreak in (a) Camberwell and Peckham, (b) Southwark, (c) London and (d) England. (LDO)

2021-00177

Outcomes of the novel Odon Device in indicated operative vaginal birth. Holton EJ, Lenguerrand E, Alvarez M, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 6, June 2021, pp 607.e1-607.e17

Full URL: https://doi.org/10.1016/j.ajog.2020.12.017

Background
No new method of assisting vaginal birth has been introduced into clinical practice since the development of the vacuum extractor in the 1950s. The Odon Device is a new device that employs a circumferential air cuff over the fetal head to assist birth. In this study, the Odon Device has been used to assist vaginal birth for standard clinical indications.
Objective

This study aimed to investigate the clinical impact, safety, and acceptability of the Odon Device to women, their babies, and clinicians and to assess the feasibility of recruiting women to an interventional intrapartum research study.
Study Design
This is a nonrandomized, single-arm interventional feasibility study of the Odon Device for operative vaginal birth undertaken in a single maternity unit: Southmead Hospital, Bristol, United Kingdom. The Odon Device was used to assist birth in 40 women who required the birth to be assisted for suspected fetal compromise and/or prolonged second stage of labor. The primary clinical outcome was the proportion of births successfully assisted with the Odon Device, and the primary feasibility outcome was the proportion of eligible women who were approached and who agreed to participate. Neonatal outcome data were reviewed at day 28, and maternal outcomes were investigated up to day 90.
Results
Between October 2018 and January 2019, 298 of 384 approached, eligible women (77.6%) consented to participate. Of these women, 40 received the intervention—the use of the Odon Device. Birth was assisted in all cephalic (occiput anterior, occiput transverse, and occiput posterior) fetal positions, at all stations at or below the ischial spine and with or without regional analgesia. The Odon Device was effective in 19 of 40 cases (48%). Of the 40 births, 21 (52.5%) required additional assistance: 18 of 40 births (45%) were completed using nonrotational forceps, 1 of 40 births (3%) required rotational forceps, and 2 of 40 births (5%) required an emergency cesarean delivery. There was no serious maternal or neonatal adverse event related to the use of the device, and there was no serious adverse device effect. There were 4 devices (10%) that were ineffective because of a manufacturing fault. Furthermore, 39 of 40 women (98%) reported a high birth perception score. All practitioners were able to use the device as intended, although some steps in using the device were reported to be easier to perform (setup and deflation of air chamber) than others (application of the device and withdrawal of the applicator).
Conclusion
Recruitment to an interventional study of a new device for operative vaginal birth was feasible; 78% of eligible women were willing to participate, often expressing an aspiration for an alternative to forceps and vacuum. The success rate of the Odon Device was lower than reported success rates of vacuum and forceps; however, in this study, the device had been used to assist birth for standard clinical indications. There was no significant maternal or neonatal safety concern associated with the use of the device, although the number of births studied was small. Further feasibility study to establish iterative changes to the device, technique, and clinical indications is necessary.

2021-00174

Modest reduction in adverse birth outcomes following the COVID-19 lockdown. Caniglia EC, Magosi LE, Zash R, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 6, June 2021, pp 615.e1-615.e12
Full URL: https://doi.org/10.1016/j.ajog.2020.12.1198
Background
Widespread lockdowns imposed during the coronavirus disease 2019 crisis may impact birth outcomes.
Objective
This study aimed to evaluate the association between the COVID-19 lockdown and the risk of adverse birth outcomes in Botswana.
Study Design
In response to the coronavirus disease 2019 crisis, Botswana enforced a lockdown that restricted movement within the country. We used data from an ongoing nationwide birth outcomes surveillance study to evaluate adverse outcomes (stillbirth, preterm birth, small-for-gestational-age fetuses, and neonatal death) and severe adverse outcomes (stillbirth, very preterm birth, very-small-for-gestational-age fetuses, and neonatal death) recorded prelockdown (January 1, 2020–April 2, 2020), during lockdown (April 3, 2020–May 7, 2020), and postlockdown (May 8, 2020–July 20, 2020). Using difference-in-differences analyses, we compared the net change in each outcome from the prelockdown to lockdown periods in 2020 relative to the same 2 periods in 2017–2019 with the net change in each outcome from the prelockdown to postlockdown periods in 2020 relative to the same 2 periods in 2017–2019.
Results

In this study, 68,448 women delivered a singleton infant in 2017–2020 between January 1 and July 20 and were included in our analysis (mean [interquartile range] age of mothers, 26 [22–32] years). Across the included calendar years and periods, the risk of any adverse outcome ranged from 27.92% to 31.70%, and the risk of any severe adverse outcome ranged from 8.40% to 11.38%. The lockdown period was associated with a 0.81 percentage point reduction (95% confidence interval, −2.95% to 1.30%) in the risk of any adverse outcome (3% relative reduction) and a 0.02 percentage point reduction (95% confidence interval, −0.79% to 0.75%) in the risk of any severe adverse outcome (0% relative reduction). The postlockdown period was associated with a 1.72 percentage point reduction (95% confidence, −3.42% to 0.02%) in the risk of any adverse outcome (5% relative reduction) and a 1.62 percentage point reduction (95% confidence interval, −2.69% to −0.55%) in the risk of any severe adverse outcome (14% relative reduction). Reductions in adverse outcomes were largest among women with human immunodeficiency virus and among women delivering at urban delivery sites, driven primarily by reductions in preterm birth and small-for-gestational-age fetuses.
Conclusion
Adverse birth outcomes decreased from the prelockdown to postlockdown periods in 2020, relative to the change during the same periods in 2017–2019. Our findings may provide insights into associations between mobility and birth outcomes in Botswana and other low- and middle-income countries.

20201221-46

A crisis and an opportunity. Hogg S (2020), International Journal of Birth and Parent Education vol 7, no 4, July 2020, p 41

Column from Sally Hogg discussing the impact of COVID-19 on pregnancy, childbirth, infant development and parental mental health. (LDO)

20201221-45*

Birth experience during COVID-19 confinement (CONFINE): protocol for a multicentre prospective study. Bertholdt C, Epstein J, Banasiak C, et al (2020), BMJ Open vol 10, no 12, December 2020

Full URL: http://dx.doi.org/10.1136/bmjopen-2020-043057

Introduction The absence of companionship during childbirth is known to be responsible for negative emotional birth experience, which can increase the risk of postpartum depression and post-traumatic stress disorder. The context of COVID-19 epidemic and the related confinement could increase the rate of negative experience and mental disorders. The main objective is to compare, in immediate post partum, the maternal sense of control during childbirth between a group of women who gave birth during confinement ('confinement' group) versus a group of women who gave birth after confinement but in the context of epidemic ('epidemic' group) versus a group of control women ('control' group; excluding confinement and epidemic context).
Methods and analysis This is a national multicentre prospective cohort study conducted in four French maternity units. We expect to include 927 women in a period of 16 months. Women will be recruited immediately in post partum during three different periods constituting the three groups: 'confinement'; 'epidemic' and 'control' group. The maternal sense of control will be evaluated by the Labour Agentry Scale questionnaire completed immediately in post partum. Postnatal depression (Edinburgh Postnatal Depression Scale), post-traumatic stress disorder (Impact of Event Scale-Revised) and breast feeding (evaluative statement) will be evaluated at 2 months post partum.
Ethics and dissemination The study was approved by the French Ethics Committee, the CPP (Comité de Protection des Personnes) SUD OUEST ET OUTRE-MER IV on 16th of April 2020 with reference number CPP2020-04-040. The results of this study will be published in a peer-reviewed journal and will be presented at relevant conferences.
Trial registration number NCT04348929. (Author)

20201221-20*

Clinical characteristics and outcomes of pregnant women with COVID-19 and the risk of vertical transmission: a systematic review. Chi J, Gong W, Gao Q (2021), Archives of Gynecology and Obstetrics vol 303, no 2, February 2021, pp 337-345

Full URL: https://doi.org/10.1007/s00404-020-05889-5

Purpose
This systematic review summarizes the clinical features and maternal-infant outcomes of 230 pregnant women (154 patients gave birth) infected with COVID-19 and their 156 infants, including the possibility and evidence of vertical transmission.
Methods
An electronic search of PubMed, Embase, Medline, MedRxiv, CNKI, and the Chinese Medical Journal Full Text Database following PRISMA guidelines was performed through April 18, 2020. Search terms included COVID-19, SARS-CoV-2, pregnant women, infants, and vertical transmission.
Results
A total of 230 women with COVID-19 (154 deliveries, 66 ongoing pregnancies, and 10 abortions) and 156 newborns from 20 eligible studies were included in this systematic review. A total of 34.62% of the pregnant patients had obstetric complications, and 59.05% of patients displayed fever. Lymphopenia was observed in 40.71% of patients. A total of 5.19% of women received mechanical ventilation. Seven women were critically ill. One mother and two newborns died. A total of 24.74% of newborns were premature. Five newborns' throat swab tests of SARS-CoV-2 were positive, all of which were delivered by cesarean section. For eight newborns with negative throat swab tests, three had both elevated IgM and IgG against SARS-CoV-2. Nucleic acid tests of vaginal secretions, breast milk, amniotic fluid, placental blood, and placental tissues were negative.
Conclusion
Most pregnant patients were mildly ill. The mortality of pregnant women with COVID-19 was lower than that of overall COVID-19 patients. Cesarean section was more common than vaginal delivery for pregnant women with COVID-19. Premature delivery was the main adverse event for newborns. The vertical transmission rate calculated by SARS-CoV-2 nucleic acid tests was 3.91%. Serum antibodies against SARS-CoV-2 should be tested more frequently, and multiple samples should be included in pathogenic testing. (Author)

20201218-7*

Questionnaire-based vs universal PCR testing for SARS-CoV-2 in women admitted for delivery. Mei-Dan E, Satkunaratnam A, Cahan T, et al (2021), Birth vol 48, no 1, March 2021, pp 96-103

Background
It has been suggested that women admitted for delivery should have universal PCR testing for SARS-CoV-2. Yet, the considerable difference in the incidence of COVID-19 between different geographic regions may affect screening strategies. Therefore, we aimed to compare questionnaire-based testing versus universal PCR testing for SARS-CoV-2 in women admitted for delivery.
Methods
A prospective cohort study of women admitted for delivery at a single center during a four-week period (April 22-May 25, 2020). All women completed a questionnaire about COVID-19 signs, symptoms, or risk factors, and a nasopharyngeal swab for PCR for SARS-CoV-2. Women who were flagged as suspected COVID-19 by the questionnaire (questionnaire-positive) were compared with women who were not flagged by the questionnaire (questionnaire-negative).
Results
Overall, 446 women were eligible for analysis, of which 54 (12.1%) were questionnaire-positive. PCR swab detected SARS-CoV-2 in four (0.9%) women: 3 of 392 (0.8%) in the questionnaire-negative group, and 1 of 54 (1.9%) in the questionnaire-positive group (P = .43), yielding a number needed to screen of 92 (95% CI 62-177). In 96% of the cases, the PCR results were obtained only in the postpartum period. No positive PCR results were obtained from neonatal testing for SARS-CoV-2. The sensitivity of the questionnaire was 75.0%, and the negative predictive value was 99.7%.
Conclusions
Although the rate of positive PCR results was not significantly different between the groups, the number needed to screen is considerably high. The use of questionnaire-based PCR testing in areas with low incidence of COVID-19 allows for a reasonable allocation of resources and is easy to implement. (Author)

20201218-40*

COVID-19 and caesareans. Winter GF (2020), British Journal of Midwifery vol 28, no 12, December 2020, pp 860-861

George F Winter offers insight into the risk associated with carrying out caesarean sections on women who test positive for SARS-CoV-2 compared with those who do not. (Author)

20201218-23*

A Review on Mode of Delivery during COVID-19 between December 2019 and April 2020. Debrabandere ML, Farabaugh DC, Giordano (2021), American Journal of Perinatology vol 38, no 4, March 2021, pp 332-341

Full URL: https://doi.org/10.1055/s-0040-1721658

Objective This study aims to review the published literature to determine mode of delivery in pregnant women with coronavirus disease 2019 (COVID-19) and the indications reported for cesarean section early in the pandemic to add information to the current narrative and raise awareness of trends discovered.

Study Design A systematic review was conducted by searching PubMed, Scopus, and ScienceDirect databases for articles published between December 2019 and April 29, 2020 using a combination of the keywords such as COVID-19, coronavirus 2019, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), pregnancy, vaginal delivery, cesarean section, vertical transmission, management, and guidelines. Peer-reviewed case studies with confirmed SARS-CoV-2 women who delivered were included to determine mode of delivery, indications for cesarean section, and maternal and neonatal characteristics.

Results A review of 36 total articles revealed deliveries in 203 SARS-CoV-2 positive pregnant women. A comparable severity of disease in pregnant versus nonpregnant women was noted, as previously determined. Overall, 68.9% of women delivered via cesarean section, with COVID-19 status alone being a common indication. Maternal COVID-19 may also be associated with increased risk of preterm labor, although neonatal outcomes were generally favorable. Despite eight of 206 newborns testing positive for SARS-CoV-2, there remains no definitive evidence of vertical transmission.

Conclusion COVID-19 status alone became a common indication for cesarean delivery early in the pandemic, despite lack of evidence for vertical transmission. The increase in cesarean rate in this data may reflect obstetricians attempting to serve their patients in the best way possible given the current climate of constantly evolving guidelines on safest mode of delivery for the mother, infant, and provider. Upholding current recommendations from trusted organizations as new data are published, while also providing individualized support to expecting mothers on most appropriate mode of delivery, will reduce the amount of unnecessary, unplanned cesarean sections and could lessen the psychological impact of delivering during the COVID-19 pandemic. (Author)

20201216-5*

Pregnant women allowed support of one person 'at all times'. Anon (2020), BBC News 16 December 2020

Full URL: https://www.bbc.co.uk/news/health-55330549

Pregnant women should be allowed to have one person alongside them during scans, appointments, labour and birth, under new NHS guidance sent to trusts in England. (Author)

20201215-7*

Covid encouraged Bury St Edmunds woman to try home birth. Anon (2020), BBC News 14 December 2020

Full URL: https://www.bbc.co.uk/news/av/uk-england-suffolk-55308105

Video report about a woman's decision to give birth to her third child at home to avoid having to go to hospital during the coronavirus pandemic. (MB)

20201214-15*

Coronavirus: Support in Labour [written answer]. Scottish Parliament (2020), Official Report Written question S5W-33400, 20 November 2020

Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-33400

Jeane Freeman responds to a written question from Alex Cole-Hamilton to the Scottish Government, regarding for what reason there can be a variance between NHS boards on the visiting or attendance rights of the partners of women in labour when these areas are under the same COVID-19 restrictions level. (JSM)

20201130-27

Pregnancy in the COVID-19 pandemic. Barlow C (2020), MIDIRS Midwifery Digest vol 30, no 4, December 2020, pp 482-487

The current pandemic is presenting a great challenge for midwives to provide safe, holistic care for women with unclear complex needs and is changing many plans for pregnancy and childbirth. This article will look at those challenges while examining the current evidence in pregnancies and suggesting how health care professionals can support women to have positive birthing experiences. (Author)

20201127-7*

Detection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in vaginal swabs of women with acute SARS-CoV-2 infection: a prospective study. Schwartz A, Yogev Y, Zilberman A, et al (2021), BJOG: An International Journal of Obstetrics and Gynaecology vol 128, no 1, January 2021, pp 97-100

Objective
To determine whether severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is present in the vaginal secretions of both reproductive-aged and postmenopausal women during acute SARS-CoV-2 infection.
Design
Prospective study.
Setting
A single tertiary, university-affiliated medical centre in Israel. Time period, 1 June 2020 through to 31 July 2020.
Population
Women who were hospitalised in a single tertiary medical centre, who were diagnosed with acute SARS-CoV-2 infection by a nasopharyngeal RT-PCR test.
Methods
Women were diagnosed with acute SARS-CoV-2 infection by a nasopharyngeal RT-PCR test. Vaginal RT-PCR swabs were obtained from all study participants after a proper cleansing of the perineum.
Main outcome measures
Detection of SARS-CoV-2 in vaginal RT-PCR swabs.
Results
Vaginal and nasopharyngeal swabs were obtained from 35 women, aged 21-93 years. Twenty-one women (60%) were in their reproductive years, of whom, five were in their third trimester of pregnancy. Most of the participants (57%) were healthy without any underlying medical conditions. Of the 35 patients sampled, 2 (5.7%) had a positive vaginal RT-PCR for SARS-CoV-2, one was premenopausal and the other was a postmenopausal woman. Both women had mild disease.
Conclusion
Our findings contradict most previous reports, which did not detect the presence of viral colonisation in the vagina. Although passage through the birth canal exposes neonates to the vaginal polymicrobial flora, an acquisition of pathogens does not necessarily mandate neonatal infection or clinical disease. Nevertheless, when delivering the infant of a woman with acute SARS-CoV-2 infection, a clinician should consider the possibility of vaginal colonisation, even if it is uncommon.
Tweetable abstract
When delivering the infant of a woman with acute SARS-CoV-2 infection, a clinician should consider the possibility of vaginal colonisation. (Author)

20201126-46*

Vaginal delivery in SARS-CoV-2-infected pregnant women in Israel: a multicenter prospective analysis. Rottenstreich A,

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Tsur A, Braverman N, et al (2021), Archives of Gynecology and Obstetrics vol 303, no 6, June 2021, pp 1401-1405
Full URL: https://doi.org/10.1007/s00404-020-05854-2

Key Message
Among SARS-CoV-2-infected mothers, vaginal delivery rates were high and associated with favorable outcomes with no cases of neonatal COVID-19.
Purpose
To investigate the mode of delivery and its impact on immediate neonatal outcome in SARS-CoV-2-infected women.
Methods
A prospective study following pregnant women diagnosed with COVID-19 who delivered between March 15th and July 4th in seven university affiliated hospitals in Israel.
Results
A total of 52 women with a confirmed diagnosis of COVID-19 delivered in the participating centers during the study period. The median gestational age at the time of delivery was 38 weeks, with 16 (30.8%) cases complicated by spontaneous preterm birth. Forty-three women (82.7%) underwent a trial of labor. The remaining 9 women underwent pre-labor cesarean delivery mostly due to obstetric indications, whereas one woman with a critical COVID-19 course underwent urgent cesarean delivery due to maternal deterioration. Among those who underwent a trial of labor (n = 43), 39 (90.7%) delivered vaginally, whereas 4 (9.3%) cases resulted in cesarean delivery. Neonatal RT-PCR nasopharyngeal swabs tested negative in all cases, and none of the infants developed pneumonia. No maternal and neonatal deaths were encountered.
Conclusions
In this prospective study among SARS-CoV-2-infected mothers, vaginal delivery rates were high and associated with favorable outcomes with no cases of neonatal COVID-19. Our findings underscore that delivery management among SARS-CoV-2-infected mothers should be based on obstetric indications and may potentially reduce the high rates of cesarean delivery previously reported in this setting. (Author)

20201126-39*

Application of the Principles of Biomedical Ethics to the Labor and Delivery Unit During the COVID-19 Pandemic. Boyle A, Dotson S, Ellison P, et al (2020), Journal of Women's Health vol 29, no 11, November 2020, pp 1361-1371
Full URL: https://doi.org/10.1089/jwh.2020.8812

After its identification as a human pathogen in 2019, the novel coronavirus, SARS-CoV-2, has spread rapidly around the world. Health care workers worldwide have had the task of preparing and responding to the pandemic with little evolving data or guidelines. Regarding the protocols for our labor and delivery unit, we focused on applying the four pillars of biomedical ethics-beneficence, nonmaleficence, autonomy, and justice-while considering the women, their fetuses, their significant others and support persons, health care professionals and auxiliary staff, and society as a whole. We also considered the downstream effect of our decisions in labor and delivery on other disciplines of medicine, including pediatrics, anesthesiology, and critical care. This article focuses on how these prima facie principles helped guide our recommendations in this unprecedented time. (Author)

20201125-11*

Support in Labour: Coronavirus [written answer]. Scottish Parliament (2020), Official Report Written question S5W-33166, 11 November 2020
Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-33166

Jeane Freeman responds to a written question from Alex Cole-Hamilton to the Scottish Government, regarding the reasons why the COVID-19 restrictions prevent the partners of mothers in active labour from being present at birth. (JSM)

20201124-1*

COVID-19: Stillbirths and perinatal deaths [written answer]. Scottish Parliament (2020), Official Report Written question S5W-32984, 3 November 2020

Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-32984

Joe FitzPatrick responds to a written question asked by Monica Lennon to the Scottish Government, regarding what action it has taken to review stillbirths and perinatal outcomes during the COVID-19 pandemic, and whether there was an increase in intrapartum stillbirths during the early months of the pandemic. (MB)

20201123-55*

Obstetric Anesthesia During the COVID-19 Pandemic. Bauer ME, Bernstein K, Dinges E, et al (2020), Anesthesia & Analgesia vol 131, no 1, July 2020, pp 7-15

Full URL: http://dx.doi.org/10.1213/ANE.0000000000004856

With increasing numbers of coronavirus disease 2019 (COVID-19) cases due to efficient human-to-human transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the United States, preparation for the unpredictable setting of labor and delivery is paramount. The priorities are 2-fold in the management of obstetric patients with COVID-19 infection or persons under investigation (PUI): (1) caring for the range of asymptomatic to critically ill pregnant and postpartum women; (2) protecting health care workers and beyond from exposure during the delivery hospitalization (health care providers, personnel, family members). The goal of this review is to provide evidence-based recommendations or, when evidence is limited, expert opinion for anesthesiologists caring for pregnant women during the COVID-19 pandemic with a focus on preparedness and best clinical obstetric anesthesia practice. (Author)

20201119-4*

Maternity Services: Coronavirus [written answer]. House of Commons (2020), Hansard Written question 45270, 11 May 2020

Full URL: https://questions-statements.parliament.uk/written-questions/detail/2020-05-11/45270

Helen Whately responds to a written question asked by Julian Knight to the Secretary of State for Health and Social Care, regarding the steps his Department is taking with NHS Trusts to widen access to COVID-19 testing to birthing partners of expectant mothers to allow them more access to the birthing facility and more time with the mother and new baby. (LDO)

20201118-15*

Childbirth: Coronavirus [written answer]. House of Commons (2020), Hansard Written question 110101, 2 November 2020

Full URL: https://questions-statements.parliament.uk/written-questions/detail/2020-11-02/110101

Ms Nadine Dorries responds to a written question from Daniel Kawczynski to the Secretary of State for Health and Social Care, regarding what the rules are on the presence of partners during the birthing process during the covid-19 outbreak. (JSM)

20201117-111*

Characteristics and Maternal and Birth Outcomes of Hospitalized Pregnant Women with Laboratory-Confirmed COVID-19 - COVID-NET, 13 States, March 1-August 22, 2020. Delahoy MJ, Whitaker M, O'Halloran A, et al (2020), Morbidity and Mortality Weekly Report (MMWR) vol 69, no 38, 25 September 2020, pp 1347-1354

Full URL: http://dx.doi.org/10.15585/mmwr.mm6938e1

Presents data on maternal and birth outcomes of hospitalised pregnant women with COVID-19 in the United States. Results indicate that 45.5% of pregnant women were symptomatic at the time of hospital admission and 16.2% were admitted to an intensive care unit. Preterm delivery was reported for 23.1% of symptomatic women and 8% of asymptomatic women among those with live births. (LDO)

20201117-108*

Association of SARS-CoV-2 Test Status and Pregnancy Outcomes. Ahlberg M, Neovius M, Saltvedt S, et al (2020), JAMA (Journal of the American Medical Association) vol 324, no 17, 3 November 2020, pp 1782-1785

Full URL: https://doi.org/10.1001/jama.2020.19124

Research letter exploring pregnancy outcomes for those with and without SARS-CoV-2 at Karolinska University Hospital in Sweden. Patients with SARS-CoV-2 were more likely to have pre-eclampsia and less likely to undergo induction of labour. Other outcomes such as postpartum haemorrhage and preterm birth did not significantly differ between the groups. (LDO)

20201116-94*

Clinical care of pregnant and postpartum women with COVID-19: Living recommendations from the National COVID-19 Clinical Evidence Taskforce. Vogel JP, Tendal B, Giles M, et al (2020), Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG) vol 60, no 6, December 2020, pp 840-851

To date, 18 living recommendations for the clinical care of pregnant and postpartum women with COVID-19 have been issued by the National COVID-19 Clinical Evidence Taskforce. This includes recommendations on mode of birth, delayed umbilical cord clamping, skin-to-skin contact, breastfeeding, rooming-in, antenatal corticosteroids, angiotensin-converting enzyme inhibitors, disease-modifying treatments (including dexamethasone, remdesivir and hydroxychloroquine), venous thromboembolism prophylaxis and advanced respiratory support interventions (prone positioning and extracorporeal membrane oxygenation). Through continuous evidence surveillance, these living recommendations are updated in near real-time to ensure clinicians in Australia have reliable, evidence-based guidelines for clinical decision-making. Please visit https://covid19evidence.net.au/ for the latest recommendation updates. (Author)

20201116-82*

Increase of stillbirth and decrease of late preterm infants during the COVID-19 pandemic lockdown. de Curtis M, Villani L, Polo A (2021), Archives of Disease in Childhood: Fetal and Neonatal Edition vol 106, no 4, July 2021, p 456

Full URL: http://dx.doi.org/10.1136/archdischild-2020-320682

Analyses perinatal data during lockdown in comparison to the same months in 2019 in the Lazio region of Italy. Results demonstrate a threefold increase in the number of stillbirths, an increase in full-term births and a decrease in the percentage of late preterm births. (LDO)

20201116-24

Not alone. Scanlan C (2020), Midwives vol 23, November 2020, p 50

Charlotte Scanlan talks about giving birth during COVID-19, 'Staff were incredible at making me feel as supported as possible despite the circumstances'. (Author)

20201112-42*

Coronavirus disease 2019 infection and placental histopathology in women delivering at term. Patberg ET, Adams T, Rekawek P, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 4, April 2021, pp 382.e1-382.e18

Full URL: https://doi.org/10.1016/j.ajog.2020.10.020

Background

- There is a paucity of data describing the effects of COVID-19, especially in asymptomatic patients, on placental pathology. Although the pathophysiology of COVID-19 is not completely understood, there is emerging evidence that it causes a severe systemic inflammatory response and results in a hypercoagulable state with widespread microthrombi. We hypothesized that it is plausible that a similar disease process may occur in the fetal-maternal unit.

Objective

- The aim of this study was to determine whether COVID-19 in term patients admitted to Labor and Delivery, including women without COVID-19 symptomatology, is associated with increased placental injury compared to a cohort of COVID-19 negative controls.

Study Design

- This was a retrospective cohort study performed at NYU Winthrop Hospital between 3/31/2020 and 6/17/2020. During the study period all women admitted to Labor and Delivery were routinely tested for SARS-CoV-2 regardless of

symptomatology. The placental histopathological findings of COVID-19 patients (n=77) who delivered a singleton gestation at term were compared to a control group of term patients without COVID-19 (n=56). Controls were excluded if they had obstetric or medical complications including fetal growth restriction, oligohydramnios, hypertension, diabetes, coagulopathy or thrombophilia. Multivariable logistic regression models were performed for variables that were significant in univariable analyses. A subgroup analysis was also performed comparing asymptomatic COVID-19 cases to negative controls.
Results
- In univariable analyses, COVID-19 cases were more likely to have evidence of fetal vascular malperfusion, i.e. presence of avascular villi and/or mural fibrin deposition (32.5% (25/77) vs. 3.6% (2/56), p<0.0001) and villitis of unknown etiology (20.8% (16/77) vs. 7.1% (4/56), p=0.030). These findings persisted in a subgroup analysis of asymptomatic COVID-19 cases compared to COVID-19 negative controls. In a multivariable model adjusting for maternal age, race/ethnicity, mode of delivery, preeclampsia, fetal growth restriction and oligohydramnios, the frequency of fetal vascular malperfusion abnormalities remained significantly higher in the COVID-19 group (OR= 12.63, 95% CI [2.40, 66.40]). While the frequency of villitis of unknown etiology was more than double in COVID-19 cases compared to controls, this did not reach statistical significance in a similar multivariable model (OR=2.11, 95% CI [0.50, 8.97]). All neonates of mothers with COVID-19 tested negative for SARS-CoV-2 by PCR.
Conclusions
- Despite the fact that all neonates born to mothers with COVID-19 were negative for SARS-CoV-2 by PCR, we found that COVID-19 in term patients admitted to Labor and Delivery is associated with increased rates of placental histopathologic abnormalities, particularly fetal vascular malperfusion and villitis of unknown etiology. These findings appear to occur even among asymptomatic term patients. (Author) [Erratum: American Journal of Obstetrics & Gynecology (AJOG), American Journal of Obstetrics & Gynecology (AJOG), vol 228, no 1, January 2023, p 128. https://doi.org/10.1016/j.ajog.2021.04.255].

20201104-8*

Impact of COVID-19 mitigation measures on the incidence of preterm birth: a national quasi-experimental study. Been JV, Ochoa LB, Bertens LCM, et al (2020), The Lancet Public Health vol 5, no 11, November 2020, pp e604-e611
Full URL: https://doi.org/10.1016/S2468-2667(20)30223-1
Background
Preterm birth is the leading cause of child mortality globally, with many survivors experiencing long-term adverse consequences. Preliminary evidence suggests that numbers of preterm births greatly reduced following implementation of policy measures aimed at mitigating the effects of the COVID-19 pandemic. We aimed to study the impact of the COVID-19 mitigation measures implemented in the Netherlands in a stepwise fashion on March 9, March 15, and March 23, 2020, on the incidence of preterm birth.
Methods
We used a national quasi-experimental difference-in-regression-discontinuity approach. We used data from the neonatal dried blood spot screening programme (2010-20) cross-validated against national perinatal registry data. Stratified analyses were done according to gestational age subgroups, and sensitivity analyses were done to assess robustness of the findings. We explored potential effect modification by neighbourhood socioeconomic status, sex, and small-for-gestational-age status.
Findings
Data on 1 599 547 singleton neonates were available, including 56 720 births that occurred after implementation of COVID-19 mitigation measures on March 9, 2020. Consistent reductions in the incidence of preterm birth were seen across various time windows surrounding March 9 (± 2 months [n=531 823] odds ratio [OR] 0·77, 95% CI 0·66-0·91, p=0·0026; ± 3 months [n=796 531] OR 0·85, 0·73-0·98, p=0·028; ± 4 months [n=1 066 872] OR 0·84, 0·73-0·97, p=0·023). Decreases in incidence observed following the March 15 measures were of smaller magnitude, but not statistically significant. No changes were observed after March 23. Reductions in the incidence of preterm births after March 9 were consistent across gestational age strata and robust in sensitivity analyses. They appeared confined to neighbourhoods of high socioeconomic status, but effect modification was not statistically significant.
Interpretation

In this national quasi-experimental study, initial implementation of COVID-19 mitigation measures was associated with a substantial reduction in the incidence of preterm births in the following months, in agreement with preliminary observations elsewhere. Integration of comparable data from across the globe is needed to further substantiate these findings and start exploring underlying mechanisms.
Funding: None. (Author)

20201102-1*

Exclusive: Watchdog investigating national rise in stillbirths. Discombe M (2020), Health Service Journal 2 November 2020, online

A national review has been launched by regulators because of an increased number of stillbirths during the first wave of covid, HSJ can reveal. (Author)

20201030-16*

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Antibodies at Delivery in Women, Partners, and Newborns. Egerup P, Fich Olsen L, Christiansen A-MH, et al (2021), Obstetrics & Gynecology vol 137, no 1, January 2021, pp 49-55
Full URL: https://doi.org/10.1097/AOG.0000000000004199
OBJECTIVE:
To investigate the frequency of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antibodies in parturient women, their partners, and their newborns and the association of such antibodies with obstetric and neonatal outcomes.
METHODS:
From April 4 to July 3, 2020, in a single university hospital in Denmark, all parturient women and their partners were invited to participate in the study, along with their newborns. Participating women and partners had a pharyngeal swab and a blood sample taken at admission; immediately after delivery, a blood sample was drawn from the umbilical cord. The swabs were analyzed for SARS-CoV-2 RNA by polymerase chain reaction, and the blood samples were analyzed for SARS-CoV-2 antibodies. Full medical history and obstetric and neonatal information were available.
RESULTS:
A total of 1,313 parturient women (72.5.% of all women admitted for delivery at the hospital in the study period), 1,188 partners, and 1,206 newborns participated in the study. The adjusted serologic prevalence was 2.6% in women and 3.5% in partners. Seventeen newborns had SARS-CoV-2 immunoglobulin G (IgG) antibodies, and none had immunoglobulin M antibodies. No associations between SARS-CoV-2 antibodies and obstetric or neonatal complications were found (eg, preterm birth, preeclampsia, cesarean delivery, Apgar score, low birth weight, umbilical arterial pH, need for continuous positive airway pressure, or neonatal admission), but statistical power to detect such differences was low. Full serologic data from 1,051 families showed an absolute risk of maternal infection of 39% if the partner had antibodies.
CONCLUSION:
We found no association between SARS-CoV-2 infection and obstetric or neonatal complications. Sixty-seven percent of newborns delivered by mothers with antibodies had SARS-CoV-2 IgG antibodies. A limitation of our study is that we lacked statistical power to detect small but potentially meaningful differences between those with and without evidence of infection. (Author)

20201028-29*

Coronavirus (COVID-19) infection in pregnancy: Information for healthcare professionals [Version 12] [Superseded by Version 13, 19 February 2021]. Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of Paediatrics and Child Health, et al (2020), London: RCOG 14 October 2020. 77 pages
Full URL: https://www.rcm.org.uk/media/4383/2020-10-14-coronavirus-covid-19-infection-in-pregnancy-v12.pdf
NB: This version has been superseded by version 13, 19 February 2021.

This document aims to provide guidance to healthcare professionals who care for pregnant women during the

COVID-19 pandemic. It is not intended to replace existing clinical guidelines, but to act as a supplement with additional advice on how to implement standard practice during this time. The advice in this document is provided as a resource for UK healthcare professionals based on a combination of available evidence, good practice and expert consensus opinion. The priorities are: (i) The reduction of transmission of SARS-CoV-2 to pregnant women. (ii) The provision of safe, personalised and woman-centred care during pregnancy, birth and the early postnatal period, during the COVID-19 pandemic. (iii) The provision of safe, personalised and woman-centred care to pregnant and postnatal women with suspected/confirmed COVID-19. This is very much an evolving situation requiring this guidance to be a living document that is under regular review and updated as new information and evidence emerges. (Author, edited)

20201027-4*

A marked decrease in preterm deliveries during the coronavirus disease 2019 pandemic. Meyer R, Friedrich L, Maixner N, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 2, February 2021, pp 234-237

Full URL: https://doi.org/10.1016/j.ajog.2020.10.017

Research letter exploring preterm birth rates and neonatal outcomes at the Sheba Medical Center in Israel during the COVID-19 pandemic. Results indicate that preterm birth rates in pregnancies of less than 34 weeks of gestation decreased by over 50%. (LDO)

20201027-36*

Infection prevention and control for labor and delivery, well baby nurseries, and neonatal intensive care units. Saiman L, Acker KP, Dumitru D, et al (2020), Seminars in Perinatology vol 44, no 7, November 2020, 151320

Full URL: https://doi.org/10.1016/j.semperi.2020.151320

During the early months of the COVID-19 pandemic, infection prevention and control (IP&C) for women in labor and mothers and newborns during delivery and receiving post-partum care was quite challenging for staff, patients, and support persons due to a relative lack of evidence-based practices, high rates of community transmission, and shortages of personal protective equipment (PPE). We present our IP&C policies and procedures for the obstetrical population developed from mid-March to mid-May 2020 when New York City served as the epicenter of the pandemic in the U.S. For patients, we describe screening for COVID-19, testing for SARS-CoV-2, and clearing patients from COVID-19 precautions. For staff, we address self-monitoring for symptoms, PPE in different clinical scenarios, and reducing staff exposures to SARS-CoV-2. For visitors/support persons, we address limiting them in labor and delivery, the postpartum units, and the NICU to promote staff and patient safety. We describe management of SARS-CoV-2-positive mothers and their newborns in both the well-baby nursery and in the neonatal ICU. Notably, in the well-baby nursery we do not separate SARS-CoV-2-positive mothers from their newborns, but emphasize maternal mask use and social distancing by placing newborns in isolates and asking mothers to remain 6 feet away unless feeding or changing their newborn. We also encourage direct breastfeeding and do not advocate early bathing. Newborns of SARS-CoV-2-positive mothers are considered persons under investigation (PUIs) until 14 days of life, the duration of the incubation period for SARS-CoV-2. We share two models of community-based care for PUI neonates. Finally, we provide our strategies for enhancing communication and education during the early months of the pandemic. (Author)

20201027-2*

Singleton preterm birth rates for racial and ethnic groups during the coronavirus disease 2019 pandemic in California. Main EK, Chang S-C, Carpenter AM, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 2, February 2021, pp 239-241

Full URL: https://doi.org/10.1016/j.ajog.2020.10.033

Research letter exploring the impact of the COVID-19 pandemic on preterm birth rates in California between April and July 2020. Results indicate that there were no changes in overall preterm birth rates among any of the ethnic group categories. (LDO)

20201026-80*

Labour: Social support [written answer]. Scottish Parliament (2020), Official Report Written question S5W- 32204, 30 September 2020

Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-32204

Jeane Freeman responds to a written question from Mark Griffin to the Scottish Government, regarding what the current guidance is for fathers and partners wishing to stay with the mother and their child in maternity wards after birth, and when it will next update the Coronavirus (COVID-19): hospital visiting guidance. (JSM)

20201026-20*

The Impact of Perinatal SARS-CoV2 Infection During the Peripartum Period. Janssen O, Thompson M, Milburn S, et al (2020), American Journal of Obstetrics & Gynecology MFM 20 October 2020, online

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100267

Research letter examining perinatal SARS-CoV-2 infection outcomes and inpatient volume between 25 March and 15 May 2020 in the New York City area. The premature birth rate among SARS-CoV-2 positive patients was 8.2% in comparison to 7.5% among SARS-CoV-2 negative mothers in the comparative period between January and June 2020. (LDO)

20201026-19*

Decreased incidence of preterm birth during coronavirus disease 2019 pandemic. Berghella V, Boelig R, Roman A, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100258

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100258

Research letter exploring rates of premature birth at Thomas Jefferson University Hospital in the United States during the COVID-19 pandemic. Results indicate a 25% decrease in the overall incidence of premature birth in 2020 compared with 2019. (LDO)

20201023-15*

Maternity Services: Coronavirus [written answer]. House of Commons (2020), Hansard Written question 101004, 8 October 2020

Full URL: https://questions-statements.parliament.uk/written-questions/detail/2020-10-08/101004

Ms Nadine Dorries responds to a written question from Catherine McKinnell to the Secretary of State for Health and Social Care, pursuant to the Answers of 23 September 2020 to Questions 90184 and 89844, what assessment his Department has made of the number of NHS trusts that still have restrictions in place on birth partners attending hospital during scans and from admittance during labour. (Author, edited)

20201022-53*

The rate of SARS-CoV-2 positivity in asymptomatic pregnant women admitted to hospital for delivery: Experience of a pandemic center in Turkey. Tanacan A, Erol SA, Turgay B, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 253, October 2020, pp 31-34

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.051

Objective

To investigate the rate of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) positivity in asymptomatic pregnant women admitted to hospital for delivery in a Turkish pandemic center.

Study Design

This prospective cohort study was conducted in Ankara City Hospital between April, 15, 2020 and June, 5, 2020. A total of 206 asymptomatic pregnant women (103 low-risk pregnant women without any defined risk factor and 103 high-risk pregnant women) were screened for SARS-CoV-2 positivity upon admission to hospital for delivery. Detection of SARS-CoV2 in nasopharyngeal and oropharyngeal samples was performed by Real Time Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) method targeting RdRp (RNA dependent RNA polymerase) gene. Two groups

were compared in terms of demographic features, clinical characteristics and SARS-CoV-2 positivity.
Results
Three of the 206 pregnant women participating in the study had positive RT-PCR tests (1.4 %) and all positive cases were in the high-risk pregnancy group. Although, one case in the high-risk pregnancy group had developed symptoms highly suspicious for COVID-19, two repeated RT-PCR tests were negative. SARS-CoV-2 RT-PCR positivity rate was significantly higher in the high-risk pregnancy group (2.9 % vs 0%, p = 0.04).
Conclusion
Healthcare professionals should be cautious in the labor and delivery of high-risk pregnant women during the pandemic period and universal testing for COVID-19 may be considered in selected populations. (Author)

20201022-16*

Obstetric Hemorrhage Risk Associated with Novel COVID-19 Diagnosis from a Single-Institution Cohort in the United States. Wang MJ, Schapero M, Iverson R, et al (2020), American Journal of Perinatology vol 37, no 14, December 2020, pp 1411-1416

Objective The study aimed to compare the quantitative blood loss (QBL) and hemorrhage-related outcomes of pregnant women with and without a coronavirus disease 2019 (COVID-19) diagnosis.
Study Design This retrospective cohort study of all live deliveries at Boston Medical Center between April 1, 2020 and July 22, 2020 compares the outcomes of pregnant women with a laboratory-confirmed COVID-19 positive diagnosis and pregnant women without COVID-19. The primary outcomes are QBL and obstetric hemorrhage. The secondary outcomes analyzed were a maternal composite outcome that consisted of obstetric hemorrhage, telemetry-level (intermediate care unit) or intensive care unit, transfusion, length of stay greater than 5 days, or intraamniotic infection, and individual components of the maternal composite outcome. Groups were compared using Student's t-test, Chi-squared tests, or Fisher's exact. Logistic regression was used to adjust for confounding variables.
Results Of 813 women who delivered a live infant between April 1 and July 22, 2020, 53 women were diagnosed with COVID-19 on admission to the hospital. Women with a COVID-19 diagnosis at their time of delivery were significantly more likely to identify as a race other than white (p = 0.01), to deliver preterm (p = 0.05), to be diagnosed with preeclampsia with severe features (p < 0.01), and to require general anesthesia (p < 0.01). Women diagnosed with COVID-19 did not have a significantly higher QBL (p = 0.64). COVID-19 positive pregnant patients had no increased adjusted odds of obstetric hemorrhage (adjusted odds ratio [aOR]: 0.41, 95% confidence interval [CI]: 0.17-1.04) and no increased adjusted odds of the maternal morbidity composite (aOR: 0.98, 95% CI: 0.50-1.93) when compared with those without a diagnosis of COVID-19.
Conclusion Pregnant women with COVID-19 diagnosis do not have increased risk for obstetric hemorrhage, increased QBL or risk of maternal morbidity compared with pregnant women without a COVID-19 diagnosis. Further research is needed to describe the impact of a COVID-19 diagnosis on maternal hematologic physiology and pregnancy outcomes. (Author)

20201021-98*

Impact of labor and delivery unit policy modifications on maternal and neonatal outcomes during the coronavirus disease 2019 pandemic. Greene NH, Kilpatrick SJ, Wong MS, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100234
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100234
Background
In response to the coronavirus disease 2019 pandemic, hospitals nationwide have implemented modifications to labor and delivery unit practices designed to protect delivering patients and healthcare providers from infection with severe acute respiratory syndrome coronavirus 2. Beginning in March 2020, our hospital instituted labor, and delivery unit modifications targeting visitor policy, use of personal protective equipment, designation of rooms for triage and delivery of persons suspected or infected with coronavirus disease 2019, delivery management, and newborn care. Little is known about the ramifications of these modifications in terms of maternal and neonatal outcomes.
Objective

The objective of this study was to determine whether labor and delivery unit policy modifications we made during the coronavirus disease 2019 pandemic were associated with differences in outcomes for mothers and newborns.
Study Design
We conducted a retrospective cohort study of all deliveries occurring in our hospital between January 1, 2020, and April 30, 2020. Patients who delivered in January and February 2020 before labor and delivery unit modifications were instituted were designated as the preimplementation group, and those who delivered in March and April 2020 were designated as the postimplementation group. Maternal and neonatal outcomes between the pre- and postimplementation groups were compared. Differences between the 2 groups were then compared with the same time period in 2019 and 2018 to assess whether any apparent differences were unique to the pandemic year. We hypothesized that maternal and newborn lengths of stay would be shorter in the postimplementation group. Statistical analysis methods included Student's t-tests and Wilcoxon tests for continuous variables and chi-square or Fisher exact tests for categorical variables.
Results
Postpartum length of stay was significantly shorter after implementation of labor unit changes related to coronavirus disease 2019. A postpartum stay of 1 night after vaginal delivery occurred in 48.5% of patients in the postimplementation group compared with 24.9% of the preimplementation group (P<.0001). Postoperative length of stay after cesarean delivery of ≤2 nights occurred in 40.9% of patients in the postimplementation group compared with 11.8% in the preimplementation group (P<.0001). Similarly, after vaginal delivery, 49.0% of newborns were discharged home after 1 night in the postimplementation group compared with 24.9% in the preimplementation group (P<.0001). After cesarean delivery, 42.5% of newborns were discharged after ≤2 nights in the postimplementation group compared with 12.5% in the preimplementation group (P<.0001). Slight differences in the proportions of earlier discharge between mothers and newborns were due to multiple gestations. There were no differences in cesarean delivery rate, induction of labor, or adverse maternal or neonatal outcomes between the 2 groups.
Conclusion
Labor and delivery unit policy modifications to protect pregnant patients and healthcare providers from coronavirus disease 2019 indicate that maternal and newborn length of stay in the hospital were significantly shorter after delivery without increases in the rate of adverse maternal or neonatal outcomes. In the absence of long-term adverse outcomes occurring after discharge that are tied to earlier release, our study results may support a review of our discharge protocols once the pandemic subsides to move toward safely shortening maternal and newborn lengths of stay. (Author)

20201013-15*

Universal Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV-2) Testing Uptake in the Labor and Delivery Unit: Implications for Health Equity. Kernberg A, Kelly J, Nazeer S, et al (2020), Obstetrics & Gynecology vol 136, no 6, December 2020, pp 1103-1108

Full URL: https://doi.org/10.1097/AOG.0000000000004127

OBJECTIVE:
To understand severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) testing uptake in the labor and delivery unit and rationales for declining testing, and to institute a process to increase equitable testing uptake.
METHODS:
We conducted a quality-improvement initiative from May 28-June 25, 2020, during the first 4 weeks of universal SARS-CoV-2 testing in the Barnes-Jewish Hospital labor and delivery unit. All consecutive patients presenting for delivery without coronavirus disease 2019 (COVID-19) symptoms were offered testing over four 1-week phases. Phase I documented the rate of testing uptake. Phase II recorded patients' reasons for declining testing. Phase III used phase II findings to create and implement shared decision-making tools. Phase IV offered each patient who declined nasopharyngeal testing an oropharyngeal alternative. The primary outcome was rate of SARS-CoV-2 testing uptake by phase.
RESULTS:
Of 270 patients, 223 (83%) accepted testing and 47 (17%) declined. Maternal age and mode of delivery were similar between groups, whereas testing uptake was higher among nulliparous, White, Hispanic, or privately insured

patients. There was a significant increase in the primary outcome of SARS-CoV-2 testing across phases I-IV, from 68% to 76% to 94% to 95%, respectively (Somers' D 0.45; 95% CI of association 0.30-0.59). The most commonly cited reason for declining testing was concern regarding testing discomfort. In subgroup analyses by race and insurance type, there was a significant increase in testing uptake across phases I-IV for Black patients (56%, 54%, 91%, 92%; Somers' D 0.36; 95% CI of association 0.28-0.64), White patients (76%, 93%, 96%, 100%; Somers' D 0.59; 95% CI of association 0.38-0.8), those with Medicaid insurance (60%, 64%, 88%, 92%; 95%; Somers' D 0.39; CI of association 0.22 to 0.56), and those with private insurance (77%, 96%, 97%, 100%; Somers' D 0.63; 95% CI of association 0.40-0.86).
CONCLUSION:
Universal SARS-CoV-2 testing uptake significantly increased through a rapid-cycle improvement initiative. Aligning hospital policy with patient-centered approaches led to nearly universally acceptable testing. (Author)

20201013-14*

Severe acute respiratory syndrome coronavirus 2 antibodies in pregnant women admitted to labor and delivery units.
Haizler-Cohen L, Davidov A, Blitz MJ, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 1, January 2021, pp 112-114
Full URL: https://doi.org/10.1016/j.ajog.2020.09.022
Research letter exploring the seroprevalence rate of SARS-CoV-2 antibodies in pregnant women admitted to labour and delivery units. (LDO)

20201013-11*

Preprocedural asymptomatic coronavirus disease 2019 cases in obstetrical and surgical units. Kelly JC, Raghuraman N, Carter EB, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 1, January 2021, pp 114-116
Full URL: https://doi.org/10.1016/j.ajog.2020.09.023
Research letter exploring SARS-CoV-2 preprocedural asymptomatic infection rates in obstetrical and surgical units in one urban tertiary centre. (LDO)

20201007-72*

Vaginal delivery in women with COVID-19: report of two cases. Cao D, Chen M, Peng M, et al (2020), BMC Pregnancy and Childbirth vol 20, no 580, 2 October 2020
Full URL: https://doi.org/10.1186/s12884-020-03281-4
Background
During the ongoing global outbreak of COVID-19, pregnant women who are susceptible to COVID-19 should be highly concerned. The issue of vertical transmission and the possibility of neonatal infection is a major concern.
Case presentation
Case 1: A 35-year-old pregnant woman with a gestational age of 37 weeks and 6 days was admitted to our hospital at the point of giving birth. Except for the abnormalities in her chest CT image, she was asymptomatic. She had an uncomplicated spontaneous vaginal delivery, and her infant was discharged home for isolation. Because of the positive result of the maternal swabs for SARS-CoV-2 obtained on the 2nd day after sampling, we transferred the mother to the designated hospital and followed up with her by telephone interviews. Luckily, it was confirmed on February 23 that the newborn did not develop any COVID-19 symptoms after observation for 14 days after birth.
Case 2: Another pregnant woman, with a gestational age of 38 weeks and 2 days, was also admitted to our hospital because of spontaneous labor with cervical dilation of 5 cm. Since she had the typical manifestations of COVID-19, including cough, lymphopenia, and abnormal chest CT images, she was highly suspected of having COVID-19. Based on the experience from case 1, we helped the mother deliver a healthy baby by vaginal delivery. On the 2nd day after delivery, the maternal nasopharyngeal swab result was positive, while the infant's result was negative.
Conclusion
There is still insufficient evidence supporting maternal-fetal vertical transmission for COVID-19-infected mothers in late pregnancy, and vaginal delivery may not increase the possibility of neonatal infection. (Author)

20201007-24*

Childbirth [written answer]. House of Commons (2020), Hansard Written question 96004, 28 September 2020

Full URL: https://questions-statements.parliament.uk/written-questions/detail/2020-09-28/96004

Ms Nadine Dorries responds to a written question from Kevan Jones to the Secretary of State for Health and Social Care, regarding what guidance he is providing to NHS trusts on ensuring that partners are able to be with expectant mothers for the entirety of the birth during the covid-19 outbreak. (JSM)

20201006-25*

Effect of the COVID-19 pandemic response on intrapartum care, stillbirth, and neonatal mortality outcomes in Nepal: a prospective observational study. Ashish KC, Gurung R, Kinney MV, et al (2020), The Lancet Global Health vol 8, no 10, October 2020, pp E1273-E1281

Full URL: https://doi.org/10.1016/S2214-109X(20)30345-4

Background

The COVID-19 pandemic response is affecting maternal and neonatal health services all over the world. We aimed to assess the number of institutional births, their outcomes (institutional stillbirth and neonatal mortality rate), and quality of intrapartum care before and during the national COVID-19 lockdown in Nepal.

Methods

In this prospective observational study, we collected participant-level data for pregnant women enrolled in the SUSTAIN and REFINE studies between Jan 1 and May 30, 2020, from nine hospitals in Nepal. This period included 12·5 weeks before the national lockdown and 9·5 weeks during the lockdown. Women were eligible for inclusion if they had a gestational age of 22 weeks or more, a fetal heart sound at time of admission, and consented to inclusion. Women who had multiple births and their babies were excluded. We collected information on demographic and obstetric characteristics via extraction from case notes and health worker performance via direct observation by independent clinical researchers. We used regression analyses to assess changes in the number of institutional births, quality of care, and mortality before lockdown versus during lockdown.

Findings

Of 22 907 eligible women, 21 763 women were enrolled and 20 354 gave birth, and health worker performance was recorded for 10 543 births. From the beginning to the end of the study period, the mean weekly number of births decreased from 1261·1 births (SE 66·1) before lockdown to 651·4 births (49·9) during lockdown-a reduction of 52·4%. The institutional stillbirth rate increased from 14 per 1000 total births before lockdown to 21 per 1000 total births during lockdown (p=0·0002), and institutional neonatal mortality increased from 13 per 1000 livebirths to 40 per 1000 livebirths (p=0·0022). In terms of quality of care, intrapartum fetal heart rate monitoring decreased by 13·4% (−15·4 to −11·3; p<0·0001), and breastfeeding within 1 h of birth decreased by 3·5% (−4·6 to −2·6; p=0·0032). The immediate newborn care practice of placing the baby skin-to-skin with their mother increased by 13·2% (12·1 to 14·5; p<0·0001), and health workers' hand hygiene practices during childbirth increased by 12·9% (11·8 to 13·9) during lockdown (p<0·0001).

Interpretation

Institutional childbirth reduced by more than half during lockdown, with increases in institutional stillbirth rate and neonatal mortality, and decreases in quality of care. Some behaviours improved, notably hand hygiene and keeping the baby skin-to-skin with their mother. An urgent need exists to protect access to high quality intrapartum care and prevent excess deaths for the most vulnerable health system users during this pandemic period.

Funding

Grand Challenges Canada. (Author)

20200925-48*

My birth, my way. Joanna (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020

Full URL: https://www.aims.org.uk/journal/item/covid-19-joanna

Describes how the coronavirus pandemic meant that the hospital Joanna was attending for antenatal care was unable

to provide her with a midwife to be present at her home birth, so she opted to give birth to her baby daughter unassisted. (JSM)

20200925-29*

Effect of delayed obstetric labor care during the COVID-19 pandemic on perinatal outcomes. Sun SV, Guazzelli CAF, de Morais LR, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 2, November 2020, pp 287-289

During the COVID-19 quarantine period, there was an increased number of patients admitted in advanced stages of labor, resulting in higher rates of vaginal deliveries compared to the same period in 2019. (Author)

20200924-70*

Covid-19: Dad lost weight to attend daughter's birth. Anon (2020), BBC News 24 September 2020

Full URL: https://www.bbc.co.uk/news/av/health-54273387

Reports that in March, Gavin Jackson weighed 21 stone and was diagnosed with hypertension; he was told that he was at high risk of contracting COVID-19 and would not be able to attend the birth of his daughter. Describes how he changed his lifestyle, lost weight and was able to attend the birth of his baby daughter, Ava, and support his wife Claire in labour. Includes audio-visual footage. (JSM)

20200911-27*

Management strategy of pregnant women during COVID-19 pandemic. Suzumori N, Goto S, Sugiura-Ogasawara M (2020), Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG) vol 60, no 4, August 2020, pp E9-E10

Letter to the editor presenting a strategy in flowchart format for the management of pregnant women during the COVID-19 pandemic. The authors suggest that mode of delivery should be caesarean section in all cases of COVID-19, and neonates should be rapidly separated from mothers to prevent transmission. (LDO)

20200910-69*

Intraoperative coagulopathy during cesarean section as an unsuspected initial presentation of COVID-19: a case report. Kinsey KE, Ganz E, Khalil S, et al (2020), BMC Pregnancy and Childbirth vol 20, no 481, 24 August 2020

Full URL: https://doi.org/10.1186/s12884-020-03140-2

Background

The world's understanding of COVID-19 continues to evolve as the scientific community discovers unique presentations of this disease. This case report depicts an unexpected intraoperative coagulopathy during a cesarean section in an otherwise asymptomatic patient who was later found to have COVID-19. This case suggests that there may be a higher risk for intrapartum bleeding in the pregnant, largely asymptomatic COVID-positive patient with more abnormal COVID laboratory values.

Case

The case patient displayed D-Dimer elevations beyond what is typically observed among this hospital's COVID-positive peripartum population and displayed significantly more oozing than expected intraoperatively, despite normal prothrombin time, international normalized ratio, fibrinogen, and platelets.

Conclusion

There is little published evidence on the association between D-Dimer and coagulopathy among the pregnant population infected with SARS-CoV-2. This case report contributes to the growing body of evidence on the effects of COVID-19 in pregnancy. A clinical picture concerning for intraoperative coagulopathy may be associated with SARS-CoV-2 infection during cesarean sections, and abnormal COVID laboratory tests, particularly D-Dimer, may help identify the patients in which this presentation occurs. (Author)

20200909-1*

Framework to assist NHS trusts to reintroduce access for partners, visitors and other supporters of pregnant women

in English maternity services. Royal College of Obstetricians & Gynaecologists, Royal College of Midwives, Society & College of Radiographers, et al (2020), London: NHS England 8 September 2020, 7 pages

This framework has been designed to assist NHS trusts to reintroduce access for partners, visitors and other supporters of pregnant women in English maternity services. It applies to inpatient and outpatient settings. (Author)

20200903-5

COVID-19: a discussion on pregnancy, birth and psychological well-being. Anderson M (2020), MIDIRS Midwifery Digest vol 30, no 3, September 2020, pp 344-347

Discusses the impact of COVID-19 on the physical and mental health of pregnant women. Highlights rates of hospitalisation, mechanical ventilation and adverse pregnancy outcomes such as miscarriage, pre-eclampsia and perinatal death. Explores the impact of social distancing measures on domestic abuse, levels of anxiety and choices around place of birth. (LDO)

20200902-65*

Characteristics and Outcomes of 241 Births to Women With Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection at Five New York City Medical Centers. Khoury R, Bernstein PS, Debolt C, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 273-282

OBJECTIVE:
To describe the characteristics and birth outcomes of women with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection as community spread in New York City was detected in March 2020.
METHODS:
We performed a prospective cohort study of pregnant women with laboratory-confirmed SARS-CoV-2 infection who gave birth from March 13 to April 12, 2020, identified at five New York City medical centers. Demographic and clinical data from delivery hospitalization records were collected, and follow-up was completed on April 20, 2020.
RESULTS:
Among this cohort (241 women), using evolving criteria for testing, 61.4% of women were asymptomatic for coronavirus disease 2019 (COVID-19) at the time of admission. Throughout the delivery hospitalization, 26.5% of women met World Health Organization criteria for mild COVID-19, 26.1% for severe, and 5% for critical. Cesarean birth was the mode of delivery for 52.4% of women with severe and 91.7% with critical COVID-19. The singleton preterm birth rate was 14.6%. Admission to the intensive care unit was reported for 17 women (7.1%), and nine (3.7%) were intubated during their delivery hospitalization. There were no maternal deaths. Body mass index (BMI) 30 or higher was associated with COVID-19 severity (P=.001). Nearly all newborns tested negative for SARS-CoV-2 infection immediately after birth (97.5%).
CONCLUSION:
During the first month of the SARS-CoV-2 outbreak in New York City and with evolving testing criteria, most women with laboratory-confirmed infection admitted for delivery did not have symptoms of COVID-19. Almost one third of women who were asymptomatic on admission became symptomatic during their delivery hospitalization. Obesity was associated with COVID-19 severity. Disease severity was associated with higher rates of cesarean and preterm birth. (Author)

20200902-37

Induction of Labor in an Intubated Patient With Coronavirus Disease 2019 (COVID-19). Slayton-Milam S, Sheffels S, Chan D, et al (2020), Obstetrics & Gynecology vol 136, no 5, November 2020, pp 962-964

BACKGROUND:
In the global coronavirus disease 2019 (COVID-19) pandemic, to date, delivery of critically ill pregnant patients has predominantly been by cesarean.
CASE:
A 27-year-old pregnant woman was admitted to a 166-bed community hospital at 33 weeks of gestation with acute hypoxemic respiratory failure secondary to COVID-19. She underwent mechanical ventilation for 9 days. While

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ventilated, she underwent induction of labor, resulting in a successful forceps assisted-vaginal birth. She was extubated on postpartum day 5 and discharged on postpartum day 10. The neonate was intubated for 24 hours but was otherwise healthy and discharged home at 36 2/7 weeks postmenstrual age.
CONCLUSION:
Critically ill patients requiring mechanical ventilation, in this case due to COVID-19, may undergo induction of labor and vaginal delivery when carefully selected. (Author)

20200901-59*

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Universal Testing Experience on a Los Angeles Labor and Delivery Unit. Naqvi M, Burwick RM, Ozimek JA, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 235-236
Full URL: https://doi.org/10.1097/AOG.0000000000003987
Research letter discussing universal screening for SARS-CoV-2 at Cedars-Sinai Medical Center in the United States. Findings revealed that only one asymptomatic woman tested positive for SARS-CoV-2 among a cohort of 80 women. (LDO)

20200901-37*

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Environmental Contamination and Childbirth. Hermesch AC, Horve PF, Edelman A, et al (2020), Obstetrics & Gynecology vol 136, no 4, October 2020, pp 827-829
Full URL: https://doi.org/10.1097/AOG.0000000000004112
Research letter presenting the results of a study on childbirth and the risk of environmental exposure to SARS-CoV-2. (LDO)

20200901-22*

Inpatient obstetric management of COVID-19. Aubey J, Zork N, Sheen J-J (2020), Seminars in Perinatology vol 44, no 7, November 2020, 151280
Full URL: https://doi.org/10.1016/j.semperi.2020.151280
Objective
To describe inpatient management strategies and considerations for pregnant patients with severe acute respiratory syndrome coronavirus 2 infection.
Findings
The novel coronavirus has posed challenges to both obstetric patients and the staff caring for them, due to its variable presentation and current limited knowledge about the disease. Inpatient antepartum, intrapartum and postpartum management can be informed by risk stratification, severity of disease, and gestational age. Careful planning and anticipation of emergent situations can prevent unnecessary exposures to patients and clinical staff.
Conclusion
As new data arises, management recommendations will evolve, thus practitioners must maintain a low threshold for adaptation of their clinical practice during obstetric care for patients with severe acute respiratory syndrome coronavirus 2 infection. (Author)

20200824-47*

COVID-19 outbreak and decreased hospitalisation of pregnant women in labour. Kumari V, Mehta K, Choudhary R (2020), The Lancet Global Health vol 8, no 9, September 2020, pp E1116-E1117
Full URL: https://doi.org/10.1016/S2214-109X(20)30319-3
Presents the findings of a retrospective analysis of pregnant women across four hospitals in western India during the 10 weeks following lockdown. (MB)

20200820-6*

COVID-19 and pregnancy: A review of clinical characteristics, obstetric outcomes and vertical transmission. Pettirosso E,

Giles M, Cole S, et al (2020), Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG) vol 60, no 5, October 2020, pp 640-659

Background
Since its emergence in December 2019, COVID-19 has spread to over 210 countries, with an estimated mortality rate of 3-4%. Little is understood about its effects during pregnancy.
Aims
To describe the current understanding of COVID-19 illness in pregnant women, to describe obstetric outcomes and to identify gaps in the existing knowledge.
Methods
Medline Ovid, EMBASE, World Health Organization COVID-19 research database and Cochrane COVID-19 in pregnancy spreadsheet were accessed on 18/4, 18/5 and 23/5 2020. Articles were screened via Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. The following were excluded: reviews, opinion pieces, guidelines, articles pertaining solely to other viruses, single case reports.
Results
Sixty articles were included in this review. Some pregnant participants may have been included in multiple publications, as admission dates overlap for reports from the same hospital. However, a total of 1287 confirmed SARS-CoV-2 positive pregnant cases are reported. Where universal testing was undertaken, asymptomatic infection occurred in 43.5-92% of cases. In the cohort studies, severe and critical COVID-19 illness rates approximated those of the non-pregnant population. Eight maternal deaths, six neonatal deaths, seven stillbirths and five miscarriages were reported. Thirteen neonates were SARS-CoV-2 positive, confirmed by reverse transcription polymerase chain reaction of nasopharyngeal swabs.
Conclusions
Where universal screening was conducted, SARS-CoV-2 infection in pregnancy was often asymptomatic. Severe and critical disease rates approximate those in the general population. Vertical transmission is possible; however, it is unclear whether SARS-CoV-2 positive neonates were infected in utero, intrapartum or postpartum. Future work should assess risks of congenital syndromes and adverse perinatal outcomes where infection occurs in early and mid-pregnancy. (Author)

20200812-11*

Perceptions of patients and providers regarding restriction of labor and delivery support people in the early stages of the coronavirus disease 2019 pandemic. Cronin S, Piacquadio M, Brendel K, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100196

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100196

Research report presenting a study on patient and provider perspectives of restricting labour and delivery support during the COVID-19 outbreak. On average, patients thought that 1.4 visitors should be allowed and providers thought that 0.9 visitors should be allowed. 20% of patients and 29% of providers were in favour of a hospital policy to disallow visitors. (LDO)

20200811-25*

COVID-19 and Treg/Th17 imbalance: Potential relationship to pregnancy outcomes. Muyayalo KP, Huang DH, Zhao SJ, et al (2020), American Journal of Reproductive Immunology 14 July 2020, online

Caused by a novel type of virus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), coronavirus disease 2019 (COVID-19) constitutes a global public health emergency. Pregnant women are considered to have a higher risk of severe morbidity and even mortality due to their susceptibility to respiratory pathogens and their particular immunologic state. Several studies assessing SARS-CoV-2 infection during pregnancy reported adverse pregnancy outcomes in patients with severe conditions, including spontaneous abortion, preterm labor, fetal distress, cesarean section, preterm birth, neonatal asphyxia, neonatal pneumonia, stillbirth, and neonatal death. However, whether these complications are causally related to SARS-CoV-2 infection is not clear. Here, we reviewed the scientific evidence supporting the contributing role of Treg/Th17 cell imbalance in the uncontrolled systemic inflammation

characterizing severe cases of COVID-19. Based on the recognized harmful effects of these CD4+ T-cell subset imbalances in pregnancy, we speculated that SARS-CoV-2 infection might lead to adverse pregnancy outcomes through the deregulation of otherwise tightly regulated Treg/Th17 ratios, and to subsequent uncontrolled systemic inflammation. Moreover, we discuss the possibility of vertical transmission of COVID-19 from infected mothers to their infants, which could also explain adverse perinatal outcomes. Rigorous monitoring of pregnancies and appropriate measures should be taken to prevent and treat early eventual maternal and perinatal complications. (Author)

20200804-34*

Good clinical practice advice for the management of pregnant women with suspected or confirmed COVID-19 in Nigeria. Okunade KS, Makwe CC, Akinajo OR, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 3, September 2020, pp 278-284

The impact on healthcare services in settings with under-resourced health systems, such as Nigeria, is likely to be substantial in the coming months due to the COVID-19 pandemic, and maternity services still need to be prioritized as an essential core health service. The healthcare system should ensure the provision of safe and quality care to women during pregnancy, labor, and childbirth, and at the same time, maternity care providers including obstetricians and midwives must be protected and prioritized to continue providing care to childbearing women and their babies during the pandemic. This practical guideline was developed for the management of pregnant women with suspected or confirmed COVID-19 in Nigeria and other low-resource countries. (Author)

20200804-25*

Pregnancy, Birth and the COVID-19 Pandemic in the United States. Davis-Floyd R, Gutschow K, Schwartz DA (2020), Medical Anthropology vol 39, no 5, July 2020, pp 413-427

Full URL: https://doi.org/10.1080/01459740.2020.1761804

How quickly and in what ways are US maternity care practices changing due to the COVID-19 pandemic? Our data indicate that partners and doulas are being excluded from birthing rooms leaving mothers unsupported, while providers face lack of protective equipment and unclear guidelines. We investigate rapidly shifting protocols for in- and out-of-hospital births and the decision making behind them. We ask, will COVID-19 cause women, families, and providers to look at birthing in a different light? And will this pandemic offer a testing ground for future policy changes to generate effective maternity care amidst pandemics and other types of disasters? (Author)

20200803-4*

Association Between Mode of Delivery Among Pregnant Women With COVID-19 and Maternal and Neonatal Outcomes in Spain. Martínez-Perez O, Vouga M, Melguizo SC, et al (2020), JAMA (Journal of the American Medical Association) vol 324, no 3, 21 July 2020, pp 296-299

Full URL: https://doi.org/10.1001/jama.2020.10125

Research report on mode of delivery among pregnant women with COVID-19 and subsequent maternal and neonatal outcomes. Findings show that severe adverse maternal outcomes occurred in 11% of women overall and in 13.5% of those undergoing caesarean delivery. (LDO) [Erratum: JAMA (Journal of the American Medical Association), vol 324, no 3, 21 July 2020, p 305. https://doi.org/10.1001/jama.2020.12271]

20200731-5*

Guidance for intrapartum care for women with COVID-19 [Version 7]. Royal College of Midwives (2020), London: RCM 10 June 2020. 5 pages

Full URL: https://www.rcm.org.uk/media/4109/guidance-for-intrapartum-care-for-women-with-covid-19_030620.pdf

This briefing is provided as a resource for midwives based on a combination of available evidence, good practice, and expert advice for the intrapartum care of women diagnosed with COVID-19. This is very much an evolving situation and this guidance will be updated as new information becomes available. (Author, edited)

20200731-2*

Clinical briefing: Waterbirth during the COVID-19 Pandemic [Reviewed June 2021]. Royal College of Midwives (2020), London: RCM 29 July 2020. 7 pages

Full URL: https://www.rcm.org.uk/media/5421/cb-waterbirth-during-covid.pdf

Briefing paper from the Royal College of Midwives exploring the current evidence about the safety of waterbirth during the current COVID19 pandemic. New evidence continues to evolve and this briefing will continue to be revised in line with emerging evidence. (Author)

20200729-8*

Ecuador's New Life Birthing Centers at the Time of Covid-19. New Life Team Members (2020), Midwifery Today no 134, Summer 2020

Provides an overview of New Life Birthing Centers which is a non-profit organisation and operates holistic birth centres in low resource countries. Discusses the birth centre in Ecuador which is now offering more home visits due to the COVID-19 outbreak. (LDO)

20200729-5*

Pregnancy, Birth, and Breastfeeding with Covid-19. Smith CK (2020), Midwifery Today no 134, Summer 2020

Provides an overview of existing guidelines on pregnancy, labour, the postpartum period and breastfeeding during the COVID-19 pandemic. Includes guidelines from the Center for Disease Control and Prevention (CDC) and the American College of Obstetricians and Gynecologists (ACOG). (LDO)

20200729-3*

Letter to My Soon-to-be Parents-As We Negotiate These Unusual Times. Wainer N (2020), Midwifery Today no 134, Summer 2020

Nancy Wainer writes a letter to expectant parents explaining how homebirth midwives are conducting care during the COVID-19 outbreak. Includes a list of questions around social distancing and hygiene that expectant parents may be asked when visited by midwives. (LDO)

20200728-24*

Rapid Analytic Review: Labour and Birth Companionship in a pandemic [Version 5]. Lavender T, Downe S, Renfrew M, et al (2020), London: RCM 27 April 2020. 24 pages

Full URL: https://www.rcm.org.uk/media/3951/birth-companionship-in-a-pandemic-master-27-04-2020-002.pdf

This very rapid review looking at companionship of choice for asymptomatic childbearing women in hospital throughout labour and birth, was conducted by the RCM Professional Advisory Group, led by Professor Tina Lavender, as part of a series of COVID-19 related reviews. Key findings and considerations for practice are provided from page 3 onwards. Appendix one provides more details on the search strategy and findings. (Author, edited)

20200728-22*

RCM Professional Briefing on waterbirths for women without symptoms during the COVID-19 pandemic [Version 3][Superseded by Clinical briefing: Waterbirth during the COVID-19 Pandemic June 2021]. Royal College of Midwives (2020), London: RCM 7 May 2020. 5 pages

Full URL: https://www.rcm.org.uk/media/4034/rcm-professional-briefing-on-waterbirth-in-the-time-of-covid-v-3-7-may-2020.pdf

This briefing explores the current evidence about the safety of waterbirth for women without symptoms of COVID-19 during the current pandemic. (Author) NB: This briefing has been superseded by Clinical briefing: Waterbirth during the COVID-19 Pandemic.

20200728-16*

Country Contacts. Various (2020), Midwifery Today no 134, Summer 2020

Midwives from 12 countries share the practical changes they have made when providing maternity care during the COVID-19 pandemic. Changes include online antenatal consultations, the refusal of partners or doulas in the delivery room, delayed cord clamping, frequent hand washing and the use of personal protective equipment. Midwives also discuss the increase in rates of home birth and unattended birth. (LDO)

20200728-15*

The Impacts of Covid-19 on Birth Practices in the United States. Davis-Floyd R, Gutschow K, Schwartz DA (2020), Midwifery Today no 134, Summer 2020

Discusses the impact of COVID-19 on antenatal appointments, hospital protocols, birthing partners and the number of home births and unattended births in the United States. (LDO)

20200727-42*

Maternal and neonatal characteristics and outcomes among COVID-19 infected women: An updated systematic review and meta-analysis. Dubey P, Reddy S, Manuel S, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 490-501

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.034

Objective

Coronavirus disease 2019 (COVID-19) has become a global pandemic and may adversely affect pregnancy outcomes. We estimated the adverse maternal and neonatal characteristics and outcomes among COVID-19 infected women and determined heterogeneity in the estimates and associated factors.

Study Designs

PubMed search was performed of confirmed COVID-19 pregnant cases and related outcomes were ascertained prior to July 8, 2020, in this systematic review and meta-analysis. Studies reporting premature birth, low birth weight, COVID-19 infection in neonates, or mode of delivery status were included in the study. Two investigators independently performed searches, assessed quality of eligible studies as per the Cochrane handbook recommendations, extracted and reported data according to PRISMA guidelines. Pooled proportions of maternal and neonatal outcomes were estimated using meta-analyses for studies with varying sample sizes while a systematic review with descriptive data analysis was performed for case report studies. Maternal and neonatal outcomes included C-section, premature birth, low birth weight, adverse pregnancy events and COVID transmission in neonates.

Results

A total of 790 COVID-19 positive females and 548 neonates from 61 studies were analyzed. The rates of C-section, premature birth, low birth weight, and adverse pregnancy events were estimated as 72 %, 23 %, 7 %, and 27 % respectively. In the heterogeneity analysis, the rate of C-section was substantially higher in Chinese studies (91 %) compared to the US (40 %) or European (38 %) studies. The rates of preterm birth and adverse pregnancy events were also lowest in the US studies (12 %, 15 %) compared to Chinese (17 %, 21 %), and European studies (19 %, 19 %). In case reports, the rates of C-section, preterm birth, and low birth weight were estimated as 69 %, 56 %, and 35 %, respectively. Adverse pregnancy outcomes were associated with infection acquired at early gestational ages, more symptomatic presentation, myalgia symptom at presentation, and use of oxygen support therapy.

Conclusions

Adverse pregnancy outcomes were prevalent in COVID-19 infected females and varied by location, type, and size of the studies. Regular screening and early detection of COVID-19 in pregnant women may provide more favorable outcomes. (Author)

20200723-8*

Hospitals: Coronavirus [written answer]. House of Commons (2020), Hansard Written question 69537, 6 July 2020

Full URL: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-07-06/69537/

Ms Nadine Dorries responds to a written question asked by Stella Creasy to the Secretary of State for Health and Social Care, regarding the number of NHS trusts that are now enabling partners to attend (a) scans, (b) hospital appointments and (c) the birth of a child as COVID-19 lockdown restrictions are eased. (LDO)

20200723-71*

Change in the Incidence of Stillbirth and Preterm Delivery During the COVID-19 Pandemic. Khalil A, von Dadelszen P, Draycott T, et al (2020), JAMA (Journal of the American Medical Association) vol 324, no 7, 10 July 2020, pp 705-706

Full URL: https://jamanetwork.com/journals/jama/fullarticle/2768389

Correspondence summarising the results of a study which aimed to detect any changes in stillbirth and rates of premature delivery during the current COVID-19 pandemic. The authors compared pregnancy outcomes at St.Georges University Hospital during two time periods: 1st October 2019 - 31st January 2020 (prior to the first reported cases of COVID-19 in the UK), and from 1st February 2020 - 14th June 2020. The study found an increase in the number of stillbirths during the pandemic, but no significant changes in the rate of premature births. (JSM)

20200723-6*

Hospital visiting during the coronavirus outbreak: guidance [Last updated 15 July 2020]. Welsh Government (2020), Cardiff: Welsh Government 22 April 2020

Full URL: https://gov.wales/hospital-visiting-during-coronavirus-outbreak-guidance#section-46536

Gives guidance on how the NHS can support hospital visiting in a safe and planned way during the coronavirus pandemic. Annex 2 sets out the principles for pregnant women attending pre-planned antenatal appointments in Wales, and updates guidance on the presence of partners at antenatal appointments and scans, and in labour and delivery. (JSM)

20200722-89*

Maintaining certainty in the most uncertain of times. Dethier D, Abernathy A (2020), Birth vol 47, no 3, September 2020, pp 257-258

Personal experience of a physician caring for a mother in the early postnatal period during the COVID-19 pandemic. Discusses the disproportionate effect of the virus on marginalised women, universal testing at admission to the labour and delivery ward, and the separation of the mother and newborn after birth. (LDO)

20200722-81*

Danish premature birth rates during the COVID-19 lockdown. Hedermann G, Hedley PL, Baekvad-Hansen M, et al (2021), Archives of Disease in Childhood: Fetal and Neonatal Edition vol 106, no 1, January 2021, pp 93-95

Full URL: http://dx.doi.org/10.1136/archdischild-2020-319990

To explore the impact of COVID-19 lockdown on premature birth rates in Denmark, a nationwide register-based prevalence proportion study was conducted on all 31 180 live singleton infants born in Denmark between 12 March and 14 April during 2015-2020.
The distribution of gestational ages (GAs) was significantly different (p=0.004) during the lockdown period compared with the previous 5 years and was driven by a significantly lower rate of extremely premature children during the lockdown compared with the corresponding mean rate for the same dates in the previous years (OR 0.09, 95% CI 0.01 to 0.40, p<0.001). No significant difference between the lockdown and previous years was found for other GA categories.
The reasons for this decrease are unclear. However, the lockdown has provided a unique opportunity to examine possible factors related to prematurity. Identification of possible causal mechanisms might stimulate changes in clinical practice. (Author)

20200722-80*

Reduction in preterm births during the COVID-19 lockdown in Ireland: a natural experiment allowing analysis of data

from the prior two decades. Philip RK, Purtill H, Reidy E, et al (2020), MedRxiv 5 June 2020, online
Full URL: https://doi.org/10.1101/2020.06.03.20121442
[This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice]

Background: Aetiology of preterm birth (PTB) is heterogeneous and preventive strategies remain elusive. Socio-environmental measures implemented as Ireland's prudent response to the SARS-CoV-2 virus (COVID-19) pandemic represented, in effect, a national lockdown and have possibly influenced the health and wellbeing of pregnant women and unborn infants. Cumulative impact of such socio-environmental factors operating contemporaneously on PTB has never been assessed before. Methods: Regional PTB trends of very low birth weight (VLBW) infants in one designated health area of Ireland over two decades were analysed. Poisson regression and rate ratio analyses with 95% CI were conducted. Observed regional data from January to April 2020 were compared to historical regional and national data and forecasted national figures for 2020. Results: Poisson regression analysis found that the regional historical VLBW rate per 1000 live births for January to April, 2001 to 2019 was 8.18 (95% CI: 7.21, 9.29). During January to April 2020, an unusually low VLBW rate of just 2.17 per 1000 live births was observed. The rate ratio of 3.77 (95% CI: 1.21, 11.75), p = 0.022, estimates that for the last two decades there was, on average, 3.77 times the rate of VLBW, compared to the period January to April 2020 during which there is a 73% reduction. National Irish VLBW rate for 2020 is forecasted to be reduced to 400 per 60,000 births compared to historical 500 to 600 range. Conclusion: An unprecedented reduction in PTB of VLBW infants was observed in one health region of Ireland during the COVID-19 lockdown. Potential determinants of this unique temporal trend reside in the summative socio-environmental impact of the COVID-19 dictated lockdown. Our findings, if mirrored in other regions that have adopted similar measures to combat the pandemic, demonstrate the potential to evaluate these implicated interdependent behavioural and socio-environmental modifiers to positively influence PTB rates globally. (Author)

20200722-41*
Simulations of Deliveries of SARS-CoV-2 Positive Pregnant Women and Their Newborn Babies: Plan to Implement a Complex and Ever-Changing Protocol. Rastogi S (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1061-1065

Full URL: https://doi.org/10.1055/s-0040-1713602
Management of severe acute respiratory Syndrome corona virus-2 (SARS-CoV-2) infected pregnant women at time of delivery presents a unique challenge. The variability in the timing and the method of delivery, ranging from normal vaginal delivery to an emergent cesarean section, adds complexity to the role of the health care providers in the medical care of the patient and in the interactions, they have with other providers. These variations are further influenced by the availability of isolation rooms in the facility and adequacy of personal protective equipment. The protocols already set in place can be further challenged when the facility reaches its capacity to manage the patients.
To fulfill the goal of providing adequate management to the SARS-CoV-2 infected pregnant women and their infants, avoid variation from suggested guidelines, and decrease risk of exposure of the health care workers, the health care provider team needs to review the variations regularly. While familiarity can be achieved by reviewing the guidelines, clinical case simulations provide a more hands-on approach.
Using case-based simulations and current guidance from the Center for Disease Control, American Academy of Pediatrics, and recent reviews, we discuss a management guideline developed at our institution to facilitate provision of care to SARS-CoV-2 infected pregnant women during delivery and to their infants, while protecting health care providers from exposure, and in keeping with the local facility logistics. (Author)

20200721-47*
A positive induction during Covid-19. Colquhoun F (2020), Association for Improvements in Maternity Services (AIMS) vol 32, no 2, June 2020
Full URL: https://www.aims.org.uk/journal/item/covid-19-frances-colquhoun
The author describes her experience of giving birth to her daughter, following an induced labour during the Covid-19

pandemic. (JSM)

20200717-1*

Hospitals: Coronavirus (written answer). House of Commons (2020), Hansard Written question 69536, 6 July 2020

Full URL: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-07-06/69536/

Ms Nadine Dorries responds to a written question from Stella Creasy to the Secretary of State for Health and Social Care, regarding what guidance he has issued to NHS trusts on enabling partners to attend (a) scans, (b) hospital appointments and (b) the birth of a child during the covid-19 outbreak. (JSM)

20200714-4*

Maternal mental health in the time of the COVID-19 pandemic. Thapa SB, Mainali A, Schwank SE, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 7, July 2020, pp 817-818

Editorial on the increased risks of developing mental health problems among pregnant women during the COVID-19 pandemic. Public health measures such as physical distancing and isolation during pregnancy and the intrapartum period may cause additional anxiety and distress. Recommends the use of online psychological support, screening tools and counselling. (LDO)

20200710-2*

The 2020 COVID-19 pandemic. Altimier L, Seiver A (2020), Journal of Neonatal Nursing vol 26, no 4, August 2020, pp 183-191

Full URL: https://doi.org/10.1016/j.jnn.2020.06.002

Provides an overview of the pathophysiology, diagnosis, transmission and treatment of COVID-19. The authors specifically discuss the clinical characteristics and outcomes of SARS-CoV-2 infections in newborn infants, children and pregnant women. (LDO)

20200709-23*

Midwives [written answer]. House of Commons (2020), Hansard Written question 63195, 23 June 2020

Full URL: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-06-23/63195/

Ms Nadine Dorries responds to a written question asked by Sir David Amess to the Secretary of State for Health and Social Care, regarding the number of (a) home birth services and (b) midwifery units that temporarily closed after 1 March 2020; and on what date each of those units reopened. (LDO)

20200709-12*

NHS Trusts: Maternity Services [written answer]. House of Commons (2020), Hansard Written question 63194, 23 June 2020

Full URL: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-06-23/63194/

Ms Nadine Dorries responds to a written question asked by Sir David Amess to the Secretary of State for Health and Social Care, regarding the number of NHS Trusts that have provided standard-of-care access to all four birthing options during the COVID-19 outbreak. (LDO)

20200707-14*

Induction of labour in a pandemic. A rapid analytic scoping review [Version 2]. Cheyne H, Downe S, Hunter B, et al on behalf of the Royal College of Midwives (2020), London: RCM 7 April 2020. 14 pages

Full URL: https://www.rcm.org.uk/media/3924/professional-clinical-briefing-no-7-intrapartum-care-with-symptomsmrd010520.pdf

Rapid review addressing several issues relating to induction of labour during a pandemic, focusing on intraprtum care for women with suspected COVID-19: expectant management versus induction of labour for prolonged pregnancy; the

impact of current policy on reduced fetal movements; and the risks and benefits of outpatient cervical ripening. (JSM)

20200707-12*

Clinical briefing: Face-coverings and care in labour for all women [Reviewed June 2021]. Royal College of Midwives (2020), London: RCM 1 July 2020. 4 pages

Full URL: https://www.rcm.org.uk/media/5400/cb-face-coverings-and-care-in-labour-for-all-women.pdf

Briefing paper from the Royal College of Midwives (RCM) on whether it should be recommended that women wear face-coverings or facemasks during labour and birth. (Author, edited)

20200703-27*

COVID-19 and maternal and infant health: are we getting the balance right? A rapid scoping review. Topalidou A, Thomson G, Downe S (2020), The Practising Midwife vol 23, no 7, July/August 2020, pp 36-45

Aim: The purpose of this study was to summarise the evidence of the clinical and psychological impacts of COVID-19 on perinatal women and their infants.
Methods: A rapid scoping review was conducted based on methods proposed by Arksey and O'Malley, and the World Health Organization's (WHO) practical guide for rapid reviews. We searched EMBASE, MEDLINE(R) and MIDIRS.
Results: From 1,319 hits, 26 met the inclusion criteria and were included. Most of the studies (n=22) were from China. The majority of the publications are single case studies or case reports. The findings were analysed narratively, and six broad themes emerged. These were: Vertical transmission and transmission during birth, mother-baby separation, breastmilk, likelihood of infection and clinical picture, analgesia or anaesthesia, and infants and young children. The literature search revealed that there is very little formal evidence on the impact of COVID-19 on pregnant, labouring and postnatal women, or their babies. The clinical evidence to date suggests that pregnant and childbearing women, and their babies, are not at increased risk of either getting infected, or of having severe symptoms or consequences, when compared to the population as a whole, which contrasts with outcomes for this group in other viral pandemics. There is no evidence on the short- and longer-term psychological impacts on childbearing women during COVID-19.
Conclusion: Despite this lack of evidence, many maternity services have been imposing severe restrictions on aspects of maternity care previously acknowledged as vital to optimum health (including birth companionship, breastfeeding, and contact between mother and baby). There is a critical research gap relating to the clinical and psychological consequences of both COVID-19 and of maternity service responses to the pandemic. (Author)

20200703-14*

Midwives: Coronavirus [written answer]. House of Commons (2020), Hansard Written question 66055, 29 June 2020

Full URL: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-06-29/66055/

Ms Nadine Dorries responds to a written question asked by Stella Creasy to the Secretary of State for Health and Social Care, regarding the number of (a) home birth services and (b) midwifery units temporarily closed between 1 March 2020 to date due to the COVID-19 outbreak; for how long each such service was closed; and how many of those services have since reopened. (LDO)

20200630-6*

Midwives [written answer]. House of Commons (2020), Hansard Written question 63457, 23 June 2020

Full URL: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-06-23/63457/

Ms Nadine Dorries responds to a written question asked by Rosie Duffield to the Secretary of State for Health and Social Care, regarding the number of (a) home birth services and (b) midwifery units in England that have been temporarily closed since 1 March 2020; for what period of time those services were closed; and how many have now reopened. (LDO)

20200630-4*

NHS Trusts: Maternity Services [written answer]. House of Commons (2020), Hansard Written question 63456, 23 June 2020

Full URL: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-06-23/63456/

Ms Nadine Dorries responds to a written question asked by Rosie Duffield to the Secretary of State for Health and Social Care, regarding the number of NHS Trusts in England which have provided full standard-of-care access to all four birthing options as set out by NICE in each week since 1 March 2020. (LDO)

20200629-31*

Testing of Patients and Support Persons for Coronavirus Disease 2019 (COVID-19) Infection Before Scheduled Deliveries. Bianco A, Buckley AB, Overbey J, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 283-287

Full URL: https://doi.org/10.1097/AOG.0000000000003985

OBJECTIVE:
To evaluate the rate of coronavirus disease 2019 (COVID-19) infection with the use of universal testing in our obstetric population presenting for scheduled deliveries, as well as the concordance or discordance rate among their support persons during the initial 2-week period of testing. Additionally, we assessed the utility of a screening tool in predicting severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) testing results in our cohort.
METHODS:
This was an observational study in which all women who were scheduled for a planned delivery within the Mount Sinai Health system from April 4 to April 15, 2020, were contacted and provided with an appointment for themselves as well as their support persons to undergo COVID-19 testing 1 day before their scheduled delivery. Both the patients and the support persons were administered a standardized screen specific for COVID-19 infection by telephone interview. Those support persons who screened positive were not permitted to attend the birth. All patients and screen-negative support persons underwent SARS-CoV-2 testing.
RESULTS:
During the study period, 155 patients and 146 support persons underwent SARS-CoV-2 testing. The prevalence of asymptomatic COVID-19 infection was 15.5% (CI 9.8-21.2%) and 9.6% (CI 4.8-14.4%) among patients and support persons, respectively. The rate of discordance among tested pairs was 7.5%. Among patients with COVID-19 infection, 58% of their support persons also had infection; in patients without infection, fewer than 3.0% of their support persons had infection.
CONCLUSION:
We found that more than 15% of asymptomatic maternity patients tested positive for SARS-CoV-2 infection despite having screened negative with the use of a telephone screening tool. Additionally, 58% of their asymptomatic, screen-negative support persons also tested positive for SARS-CoV-2 infection. Alternatively, testing of the support persons of women who had tested negative for COVID-19 infection had a low yield for positive results. This has important implications for obstetric and newborn care practices as well as for health care professionals. (Author)

20200629-19*

Rates of Maternal and Perinatal Mortality and Vertical Transmission in Pregnancies Complicated by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Co-V-2) Infection: A Systematic Review. Huntley BJ, Huntley ES, Di Mascio D, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 303-312

Full URL: https://doi.org/10.1097/AOG.0000000000004010

OBJECTIVE:
To ascertain the frequency of maternal and neonatal complications, as well as maternal disease severity, in pregnancies affected by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.
DATA SOURCES:
MEDLINE, Ovid, ClinicalTrials.gov, MedRxiv, and Scopus were searched from their inception until April 29, 2020. The analysis was limited to reports with at least 10 pregnant patients with SARS-CoV-2 infection that reported on maternal and neonatal outcomes.

METHODS OF STUDY SELECTION:
Inclusion criteria were pregnant women with a confirmed diagnosis of SARS-CoV-2 infection. A systematic search of the selected databases was performed by implementing a strategy that included the MeSH terms, key words, and word variants for 'coronavirus,' 'SARS-CoV-2,' 'COVID-19,' and 'pregnancy.r The primary outcomes were maternal admission to the intensive care unit (ICU), critical disease, and death. Secondary outcomes included rate of preterm birth, cesarean delivery, vertical transmission, and neonatal death. Categorical variables were expressed as percentages with number of cases and 95% CIs.
TABULATION, INTEGRATION, AND RESULTS:
Of the 99 articles identified, 13 included 538 pregnancies complicated by SARS-CoV-2 infection, with reported outcomes on 435 (80.9%) deliveries. Maternal ICU admission occurred in 3.0% of cases (8/263, 95% CI 1.6-5.9) and maternal critical disease in 1.4% (3/209, 95% CI 0.5-4.1). No maternal deaths were reported (0/348, 95% CI 0.0-1.1). The preterm birth rate was 20.1% (57/284, 95% CI 15.8-25.1), the cesarean delivery rate was 84.7% (332/392, 95% CI 80.8-87.9), the vertical transmission rate was 0.0% (0/310, 95% CI 0.0-1.2), and the neonatal death rate was 0.3% (1/313, 95% CI 0.1-1.8).
CONCLUSION:
With data from early in the pandemic, it is reassuring that there are low rates of maternal and neonatal mortality and vertical transmission with SARS-CoV-2. The preterm birth rate of 20% and the cesarean delivery rate exceeding 80% seems related to geographic practice patterns.
SYSTEMATIC REVIEW REGISTRATION:
PROSPERO, CRD42020181497. (Author)

20200629-12*

Coronavirus Disease 2019 (COVID-19) and Pregnancy: Combating Isolation to Improve Outcomes. Jago CA, Singh SS, Moretti F (2020), Obstetrics & Gynecology vol 136, no 1, July 2020, pp 33-36
Full URL: https://doi.org/10.1097/AOG.0000000000003946

With the current global coronavirus disease 2019 (COVID-19) pandemic, new challenges arise as social distancing and isolation have become the standard for safety. Evidence supports the protective benefits of social connections and support during pregnancy and labor; there are increased maternal, fetal, and pregnancy risks when pregnant and laboring women lack support. As health care professionals take appropriate precautions to protect patients and themselves from infection, there must be a balance to ensure that we do not neglect the importance of social and emotional support during important milestones such as pregnancy and childbirth. Resources are available to help pregnant women, and technology represents an opportunity for innovation in providing care. (Author)

20200626-67*

Management of a delivery suite during the COVID-19 epidemic. Qi H, Chen M, Luo X, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 250, July 2020, pp 250-252
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.031

Background
Since the first report of the new coronavirus (COVID-19) infection in December of 2019, it has become rapidly prevalent and been declared as a Public Health Emergency of International Concern by the World Health Organization. There are quite a few cases reported involving delivery with COVID-19 infection, but little valuable suggestion was provided about what healthcare providers of obstetrics and neonatology should do in their clinic practice for unknown status or presumed negative women. Here, we summarized the current practice of delivery management in China that successfully prevented rapid increase in adverse pregnancy outcomes and nosocomial infection in departments of obstetrics and neonatology during the pandemic of COVID-19. (Author)

20200626-43*

Coronavirus disease 2019 among pregnant Chinese women: case series data on the safety of vaginal birth and breastfeeding. Wu Y, Liu C, Dong L, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 9, August

2020, pp 1109-1115
Full URL: https://doi.org/10.1111/1471-0528.16276

Objective
To assess whether vaginal secretions and breast milk of women with coronavirus disease 2019 (COVID-19) contain severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
Design
Single centre cohort study.
Setting
Renmin Hospital of Wuhan University, Wuhan, Hubei province, China.
Population
We studied 13 SARS-CoV-2-infected pregnant women diagnosed between 31 January and 9 March 2020.
Methods
We collected clinical data, vaginal secretions, stool specimens and breast milk from SARS-CoV-2-infected women during different stages of pregnancy and collected neonatal throat and anal swabs.
Main outcomes and measures
We assessed viral presence in different biosamples.
Results
Of the 13 women with COVID-19, five were in their first trimester, three in their second trimester and five in their third trimester. Of the five women in their third trimester who gave birth, all delivered live newborns. Among these five deliveries, the primary adverse perinatal outcomes included premature delivery (n = 2) and neonatal pneumonia (n = 2). One of nine stool samples was positive; all 13 vaginal secretion samples, and five throat swabs and four anal swabs collected from neonates, were negative for the novel coronavirus. However, one of three samples of breast milk was positive by viral nucleic acid testing.
Conclusions
In this case series of 13 pregnant women with COVID-19, we observed negative viral test results in vaginal secretion specimens, suggesting that a vaginal delivery may be a safe delivery option. However, additional research is urgently needed to examine breast milk and the potential risk for viral contamination.
Tweetable abstract
New evidence for the safety of vaginal delivery and breastfeeding in pregnant women infected with SARS-CoV-2, positive viral result in a breast-milk sample. (Author)

20200626-33*

Vaginal delivery in SARS-CoV-2-infected pregnant women in Northern Italy: a retrospective analysis. Ferrazzi E, Frigerio L, Savasi V, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 9, August 2020, pp 1116-1121

Objective
To report mode of delivery and immediate neonatal outcome in women infected with COVID-19.
Design
Retrospective study.
Setting
Twelve hospitals in northern Italy.
Participants
Pregnant women with COVID-19-confirmed infection who delivered.
Exposure
COVID 19 infection in pregnancy.
Methods
SARS-CoV-2-infected women who were admitted and delivered from 1 to 20 March 2020 were eligible. Data were collected from the clinical records using a standardised questionnaire on maternal general characteristics, any medical or obstetric co-morbidity, course of pregnancy, clinical signs and symptoms, treatment of COVID 19 infection, mode of delivery, neonatal data and breastfeeding.
Main outcome and measures

Data on mode of delivery and neonatal outcome.
Results
In all, 42 women with COVID-19 delivered at the participating centres; 24 (57.1%, 95% CI 41.0-72.3) delivered vaginally. An elective caesarean section was performed in 18/42 (42.9%, 95% CI 27.7-59.0) cases: in eight cases the indication was unrelated to COVID-19 infection. Pneumonia was diagnosed in 19/42 (45.2%, 95% CI 29.8-61.3) cases: of these, 7/19 (36.8%, 95% CI 16.3-61.6) required oxygen support and 4/19 (21.1%, 95% CI 6.1-45.6) were admitted to a critical care unit. Two women with COVID-19 breastfed without a mask because infection was diagnosed in the postpartum period: their newborns tested positive for SARS-Cov-2 infection. In one case, a newborn had a positive test after a vaginal operative delivery.
Conclusions
Although postpartum infection cannot be excluded with 100% certainty, these findings suggest that vaginal delivery is associated with a low risk of intrapartum SARS-Cov-2 transmission to the newborn.
Tweetable abstract
This study suggests that vaginal delivery may be associated with a low risk of intrapartum SARS-Cov-2 transmission to the newborn. (Author)

20200624-69*

Labor and Delivery Visitor Policies During the COVID-19 Pandemic: Balancing Risks and Benefits. Arora KS, Mauch JT, Gibson KS, et al (2020), JAMA (Journal of the American Medical Association) vol 323, no 24, 23/30 June 2020, pp 2468-2469

Discusses variations in labour ward visitor policies during the Covid-19 pandemic. (MB)

20200624-44*

Analysis of vaginal delivery outcomes among pregnant women in Wuhan, China during the COVID-19 pandemic. Liao J, He X, Gong Q, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 53-57

Objective
To study vaginal delivery outcomes and neonatal prognosis and summarize the management of vaginal delivery during the COVID-19 pandemic.
Methods
A retrospective analysis of medical records and comparison of vaginal delivery outcomes between 10 pregnant women with clinical diagnosis of COVID-19 and 53 pregnant women without COVID-19 admitted to Zhongnan Hospital of Wuhan University between January 20 and March 2, 2020. Results of laboratory tests, imaging tests, and SARS-CoV-2 nucleic acid tests were also analyzed in neonates delivered by pregnant women with clinical diagnosis of COVID-19.
Results
There were no significant differences in gestational age, postpartum hemorrhage, and perineal resection rates between the two groups. There were no significant differences in birth weight of neonates and neonatal asphyxia rates between the two groups. Neonates delivered by pregnant women with clinical diagnosis of COVID-19 tested negative for SARS-CoV-2 infection.
Conclusions
Under the premise of full evaluation of vaginal delivery conditions and strict protection measures, pregnant women with ordinary type COVID-19 can try vaginal delivery without exacerbation of COVID-19 and without increasing the risk of SARS-CoV-2 infection in neonates. (Author)

20200623-55*

No Change in Cesarean Section Rate During COVID-19 Pandemic in New York City. Malhotra Y, Miller R, Bajaj K, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 253, October 2020, pp 328-329
Full URL: https://doi.org/10.1016/j.ejogrb.2020.06.010

Discusses the caesarean section rate in New York City during the COVID-19 pandemic. Reports that SARS-CoV-2 infection did not affect mode of delivery between 8 March 2020 and 20 April 2020. (LDO)

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20200622-25*

Practical considerations for the emergency delivery of babies from mothers with confirmed or suspected COVID-19. Wells P, Taylor A, Battersby C, et al (2020), Infant vol 16, no 3, May 2020, pp 94-98

Maternity and neonatal departments must be prepared for the delivery of babies from COVID-19 positive women. We describe a guideline developed at the North Middlesex University Hospital maternity unit, for multidisciplinary team members attending an emergency caesarean section of mothers with confirmed or suspected COVID-19. Anticipated staff actions and personal protective equipment were considered to optimise staff safety and reduce transmission of SARS-CoV-2. We recommend units generate individualised guidance suitable to their settings. (Author)

20200619-35*

COVID-19 as a risk factor for obstetric violence. Sadler M, Leiva G, Olza I (2020), Sexual and Reproductive Health Matters 19 June 2020, online

Full URL: https://doi.org/10.1080/26410397.2020.1785379

Argues that some restrictions and interventions being imposed on childbearing women during the current COVID-19 pandemic amount to obstetric violence as they are unnecessary, are not based on scientific evidence and are an abuse of human dignity. (JSM)

20200616-78*

The Relationship between Status at Presentation and Outcomes among Pregnant Women with COVID-19. London V, McLaren Jr R, Atallah F, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 991-994

Full URL: https://doi.org/10.1055/s-0040-1712164

Objective This study was aimed to compare maternal and pregnancy outcomes of symptomatic and asymptomatic pregnant women with novel coronavirus disease 2019 (COVID-19).

Study Design This is a retrospective cohort study of pregnant women with COVID-19. Pregnant women were divided into two groups based on status at admission, symptomatic or asymptomatic. All testing was done by nasopharyngeal swab using polymerase chain reaction (PCR) for severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2). Initially, nasopharyngeal testing was performed only on women with a positive screen (symptoms or exposure) but subsequently, testing was universally performed on all women admitted to labor and delivery. Chi-square and Wilcoxon's rank-sum tests were used to compare outcomes between groups.

Results Eighty-one patients were tested because of a positive screen (symptoms [n = 60] or exposure only [n = 21]) and 75 patients were universally tested (all asymptomatic). In total, there were 46 symptomatic women and 22 asymptomatic women (tested based on exposure only [n = 12] or as part of universal screening [n = 10]) with confirmed COVID-19. Of symptomatic women (n = 46), 27.3% had preterm delivery and 26.1% needed respiratory support while none of the asymptomatic women (n = 22) had preterm delivery or need of respiratory support (p = 0.007 and 0.01, respectively).

Conclusion Pregnant women who presented with COVID19-related symptoms and subsequently tested positive for COVID-19 have a higher rate of preterm delivery and need for respiratory support than asymptomatic pregnant women. It is important to be particularly rigorous in caring for COVID-19 infected pregnant women who present with symptoms. (Author)

20200616-43*

A Survey of Labor and Delivery Practices in New York City during the COVID-19 Pandemic. Peña JA, Bianco AT, Simpson LL, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 975-981

Full URL: https://doi.org/10.1055/s-0040-1713120

Recently, a novel coronavirus, precisely severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2), that causes the disease novel coronavirus disease 2019 (COVID-19) has been declared a worldwide pandemic. Over a million cases have been confirmed in the United States. As of May 5, 2020, New York State has had over 300,000 cases and 24,000 deaths with more than half of the cases and deaths occurring in New York City (NYC). Little is known, however, of how

this virus impacts pregnancy. Given this lack of data and the risk for severe disease in this relatively immunocompromised population, further understanding of the obstetrical management of COVID-19, as well as hospital level preparation for its control, is crucial. Guidance has come from expert opinion, professional societies and public health agencies, but to date, there is no report on how obstetrical practices have adapted these recommendations to their local situations. We therefore developed an internet-based survey to elucidate the practices put into place to guide the care of obstetrical patients during the COVID-19 pandemic. We surveyed obstetrical leaders in four academic medical centers in NYC who were implementing and testing protocols at the height of the pandemic. We found that all sites made changes to their practices, and that there appeared to be agreement with screening and testing for COVID-19, as well as labor and delivery protocols, for SARS-CoV-2-positive patients. We found less consensus with respect to inpatient antepartum fetal surveillance. We hope that this experience is useful to other centers as they formulate their plans to face this pandemic. (Author)

20200615-78*

Homebirth: COVID-19 [written answer]. Scottish Parliament (2020), Official Report Written question SW5-29152, 19 May 2020

Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-29152

Joe FitzPatrick responds to a written question from Jeremy Balfour to the Scottish Government, regarding what it is doing to support homebirths during the COVID-19 outrbreak. (JSM)

20200615-3*

Delivery for respiratory compromise among pregnant women with coronavirus disease 2019. McLaren Jr RA, London V, Atallah F, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 3, September 2020, pp 451-453

Full URL: https://doi.org/10.1016/j.ajog.2020.05.035

Retrospective observational study of delivery and its impact on respiratory distress among women with COVID-19. Results show that delivery did not worsen the respiratory status of women with persistent oxygen desaturation. (LDO)

20200611-27*

Birth Partners: Coronavirus [written answer]. Scottish Parliament (2020), Official Report Written question S5W-29155, 19 May 2020

Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-29155

Jeane Freeman responds to a written question asked by Jeremy Balfour to the Scottish Government, regarding the advice it has given to NHS boards on the attendance of birthing partners in (a) labour, (b) antenatal and (c) postnatal wards during the COVID-19 outbreak. (LDO)

20200611-26*

Birth Choices: Coronavirus [written answer]. Scottish Parliament (2020), Official Report Written question S5W-29151, 19 May 2020

Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-29151

Jeane Freeman responds to a written question asked by Jeremy Balfour to the Scottish Government, regarding how it is working with (a) birth practitioners and (b) medical staff to ensure that people's rights regarding how and where they give birth are upheld. (LDO)

20200610-5*

Universal testing of patients and their support persons for severe acute respiratory syndrome coronavirus 2 when presenting for admission to labor and delivery at Mount Sinai Health System. Buckley A, Bianco A, Stone J (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100147

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100147

Discusses the policy to implement universal SARS-CoV-2 testing prior to admission to labour and delivery wards in the Mount Sinai Health System. Results revealed 50 SARS-CoV-2 infections among the 307 women tested. This policy may

help to protect health care workers and direct the use of personal protective equipment (PPE). (LDO)

20200610-10*

Laboring alone? Brief thoughts on ethics and practical answers during the coronavirus disease 2019 pandemic. Ecker JL, Minkoff HL (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100141

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100141

Commentary on allowing partners in delivery rooms during the COVID-19 pandemic. The emotional and physical support provided by partners must be balanced with the safety of health care workers. The authors conclude that partners should be permitted where there is appropriate personal protective equipment and screening measures. (LDO)

20200525-5*

Are Covid-19-positive Mothers Dangerous for Their Term and Well Newborn Babies? Is There an Answer?. Stanojević M (2020), Journal of Perinatal Medicine 13 May 2020, online

Full URL: https://doi.org/10.1515/jpm-2020-0186

Background: The pandemic caused by the new coronavirus SARS-CoV-2 (Covid-19) is quite a challenging experience for the world. At the moment of birth, the fetus is prepared to face the challenge of labor and the exposure to the outside world, meaning that labor and birth represent the first extrauterine major exposure to a complex microbiota. The vagina, which is a canal for reproduction, is by evolution separated (but not far) from the anus and urethra. Passing through the birthing canal is a mechanism for intergenerational transmission of vaginal and gut microorganisms for the vertical transmission of microbiota not only from our mothers and grandmothers but also from earlier ancestors. Methods: Many national and international instructions have been developed since the beginning of the Covid-19 outbreak in January 2020 in Wuhan in China. All of them pointed out hygiene measures, social distancing and avoidance of social contacts as the most important epidemiological preventive measures. Pregnancy and neonatal periods are considered as high risk for Covid-19 infection. Results: The instructions defined the care for pregnant women in the delivery room, during a hospital stay and after discharge. The controversial procedures in the care of Covid-19-suspected or -positive asymptomatic women in labor were: mode of delivery, companion during birth and labor, skin-to-skin contact, breastfeeding, and visits during a hospital stay. Conclusion: There is a hope that instruction on coping with the coronavirus (Covid-19) infection in pregnancy with all proposed interventions affecting mothers, babies and families, besides saving lives, are beneficial and efficient by exerting no harm. (Author)

20200525-26*

Safety and Efficacy of Different Anesthetic Regimens for Parturients With COVID-19 Undergoing Cesarean Delivery: A Case Series of 17 Patients. Chen R, Zhang Y, Huang L, et al (2020), Canadian Journal of Anesthesia vol 67, no 6, June 2020, pp 655-633

Full URL: https://doi.org/10.1007/s12630-020-01630-7

Purpose: To assess the management and safety of epidural or general anesthesia for Cesarean delivery in parturients with coronavirus disease (COVID-19) and their newborns, and to evaluate the standardized procedures for protecting medical staff.
Methods: We retrospectively reviewed the cases of parturients diagnosed with severe acute respiratory syndrome coronavirus (SARS-CoV-2) infection disease (COVID-19). Their epidemiologic history, chest computed tomography scans, laboratory measurements, and SARS-CoV-2 nucleic acid positivity were evaluated. We also recorded the patients' demographic and clinical characteristics, anesthesia and surgery-related data, maternal and neonatal complications, as well as the health status of the involved medical staff.
Results: The clinical characteristics of 17 pregnant women infected with SARS-CoV-2 were similar to those previously reported in non-pregnant adult patients. All of the 17 patients underwent Cesarean delivery with anesthesia performed according to standardized anesthesia/surgery procedures. Fourteen of the patients underwent continuous epidural anesthesia with 12 experiencing significant intraoperative hypotension. Three patients received general anesthesia with tracheal intubation because emergency surgery was needed. Three of the parturients are still

recovering from their Cesarean delivery and are receiving in-hospital treatment for COVID-19. Three neonates were born prematurely. There were no deaths or serious neonatal asphyxia events. All neonatal SARS-CoV-2 nucleic acid tests were negative. No medical staff were infected throughout the patient care period.
Conclusions: Both epidural and general anesthesia were safely used for Cesarean delivery in the parturients with COVID-19. Nevertheless, the incidence of hypotension during epidural anesthesia appeared excessive. Proper patient transfer, medical staff access procedures, and effective biosafety precautions are important to protect medical staff from COVID-19. (Author)

20200525-11*

Vaginal delivery in SARS-CoV-2 infected pregnant women in Northern Italy: a retrospective analysis. Ferrazzi E, Frigerio L, Savasi V, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology 27 April 2020, online

Objective: To report mode of delivery and immediate neonatal outcome in COVID-19 infected women.
Design: This is a retrospective study.
Setting: Twelve hospitals in northern Italy.
Participants: Pregnant women with COVID-19 confirmed infection who delivered.
Exposure: COVID 19 infection in pregnancy.
Methods: SARS-CoV-2 infected women who were admitted and delivered during the period 1-20 march 2020 were eligible. Data were collected from the clinical records using a standardized questionnaire on maternal general characteristics, any medical or obstetric co-morbidity, course of pregnancy, clinical signs and symptoms, treatment of COVID 19 infection, mode of delivery, neonatal data and breastfeeding MAIN OUTCOME AND MEASURE: Data on mode of delivery and neonatal outcome RESULTS: 42 women with COVID-19 delivered at the participating centres: 24(57,1%, 95% CI= 41,0-72,3) delivered vaginally. An elective cesarean section was performed in 18/42 (42,9%, 95%CI 27,7-59,0) cases: in 8 cases the indication was unrelated to COVID-19 infection. Pneumonia was diagnosed in 19/42(45,2%, 95%CI 29,8-61,3) cases: of these 7/19(36,8%,95CI 16,3-61,6) required oxygen support and 4/19(21,1%,95%CI=6,1-45,6) were admitted to a critical care unit. Two women with COVID-19 breastfed without a mask because infection was diagnosed in the post-partum period: their new-borns tested positive for SARS-Cov-2 infection. In one case a new-born had a positive test after a vaginal operative delivery.
Conclusions: Although post-partum infection cannot be excluded with 100% certainty, these findings suggest that vaginal delivery is associated with a low risk of intrapartum SARS-Cov-2 transmission to the new-born. (Author)

20200521-40*

Successful Treatment of Preterm Labor in Association with Acute COVID-19 Infection. Browne PC, Linfert JB, Perez-Jorge E (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 866-868

Novel coronavirus disease 2019 (COVID-19) infection occurring during pregnancy is associated with an increased risk of preterm delivery. This case report describes successful treatment of preterm labor during acute COVID-19 infection. Standard treatment for preterm labor may allow patients with acute COVID-19 infection to recover without the need for preterm delivery. (Author)

20200518-27*

Emergency Caesarean delivery in a patient with confirmed COVID-19 under spinal anaesthesia. Xia H, Zhao S, Wu Z, et al (2020), British Journal of Anaesthesia vol 124, no 5, May 2020, pp E216-E218

Full URL: https://doi.org/10.1016/j.bja.2020.02.016

Reports the case of a 27-year old woman who was admitted to hospital at 36 weeks and 5 days' gestation due to fever. The woman, who was delivered by emergency caesarean section due to below normal oxygen saturation levels and reduced fetal movements, later tested positive for COVOD-19. (MB)

20200515-2*

Delivery Room Preparedness and Early Neonatal Outcomes During COVID19 Pandemic in New York City. Perlman J,

Oxford C, Chang C, et al (2020), Pediatrics vol 146, no 2, August 2020, e20201567
Full URL: https://doi.org/10.1542/peds.2020-1567

Since the initial report of a novel Coronavirus SARS-CoV-2 in Wuhan in December 2019 there has been widespread dissemination of disease worldwide. The impact on the neonatal population has been reported almost exclusively from China. The study goal is to characterize for the first time in the United States, the delivery room (DR) management and early course of infants born to COVID19 positive mothers, during three weeks at the peak of the pandemic in NYC, and to describe the challenges and approaches developed to meet these excessive needs. (Author)

20200514-73*

Coronavirus: Planning your birth. NHS England (2020), London: NHS England May 2020. 2 pages
Full URL: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/05/C0441-maternity-leaflets-cv19-planning-your-birth.pdf

Consumer information emphasising that maternity services are still open during the current coronavirus pandemic, and encouraging women to contact their midwife or maternity services if they are at all concerned about their own health or the health of their baby. Advises women to document their birth plans and choices, as this will help guide the maternity professionals in providing women with the best birth experience possible. (JSM)

20200514-67*

Coronavirus disease 2019 during pregnancy: a systematic review of reported cases. Gatta AND, Rizzo R, Pilu G, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 36-41
Full URL: https://doi.org/10.1016/j.ajog.2020.04.013

Objective
This study aimed to conduct a systematic review of the clinical outcomes reported for pregnant patients with coronavirus disease 2019.
Data Sources
The PubMed, CINAHL, and Scopus databases were searched using a combination of key words such as 'Coronavirus and/or pregnancy,' 'COVID and/or pregnancy,' 'COVID disease and/or pregnancy,' and 'COVID pneumonia and/or pregnancy.' There was no restriction of language to allow collection of as many cases as possible.
Study Eligibility Criteria
All studies of pregnant women who received a coronavirus disease 2019 diagnosis using acid nucleic test, with reported data about pregnancy, and, in case of delivery, reported outcomes, were included.
Study Appraisal and Synthesis Methods
All the studies included have been evaluated according to the tool for evaluating the methodological quality of case reports and case series described by Murad et al.
Results
Six studies that involved 51 pregnant women were eligible for the systematic review. At the time of the report, 3 pregnancies were ongoing; of the remaining 48 pregnant women, 46 gave birth by cesarean delivery, and 2 gave birth vaginally; in this study, 1 stillbirth and 1 neonatal death were reported.
Conclusion
Although vertical transmission of severe acute respiratory syndrome coronavirus 2 infection has been excluded thus far and the outcome for mothers and neonates has been generally good, the high rate of preterm delivery by cesarean delivery is a reason for concern. Cesarean delivery was typically an elective surgical intervention, and it is reasonable to question whether cesarean delivery for pregnant patients with coronavirus disease 2019 was warranted. Coronavirus disease 2019 associated with respiratory insufficiency in late pregnancies certainly creates a complex clinical scenario. (Author)

20200514-6*

Re: Novel Coronavirus COVID-19 in late pregnancy: Outcomes of first nine cases in an inner city London hospital. Govind A, Essien S, Kartikeyan A, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 251, August

2020, pp 272-274
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.004

Discusses the cases of nine mothers with COVID-19 who delivered at an inner-city London hospital. Three women delivered by emergency caesarean section, six women underwent elective caesarean section and one woman delivered vaginally. Only one of the nine infants tested positive for the virus. (LDO)

20200514-4*

Vaginal delivery in a woman infected with SARS-CoV-2 - the first case reported in Portugal. Polónia-Valente R, Moucho M, Tavares M, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 250, July 2020, pp 253-254
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.007

Discusses the case of a 31-year-old woman at 38 weeks' gestation who was admitted at the obstetrical emergency department and tested positive for SARS-CoV-2. The patient was in the latent phase of labour and complained of mild uterine contractions. An operative vaginal delivery and fetal vacuum extraction were subsequently performed in order to shorten the second stage of labour. (LDO)

20200513-97*

Reflections on COVID-19. Lowe NK (2020), JOGNN: Journal of Obstetric, Gynecologic and Neonatal Nursing vol 49, no 3, May 2020, pp 223-224
Full URL: https://doi.org/10.1016/j.jogn.2020.04.002

Editorial reflecting on the changes we have undergone to our personal and professional lives since the COVID-19 pandemic began. Raises concerns that some New York hospitals were not allowing women in labour to have one support person with them, despite research stressing the importance of support in labour to patient care, even during the coronavirus crisis. Explains how hospital policies such as these have been overturned by an executive order issued by New York's Governor, Andrew Cuomo, on March 27 2020, which stipulates that all public and private hospitals in New York must comply with the latest guidance from the New York State Department of Health, that all women must be allowed to have a partner with them in the labour and delivery room. (JSM)

20200513-16*

Safe delivery for pregnancies affected by COVID-19. Qi H, Luo X, Zheng Y, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 8, July 2020, pp 927-929

Discusses existing guidelines on the safe delivery of infants in pregnancies affected by COVID-19. Includes the timing of delivery, requirements for caesarean section, prevention of infection in the delivery room, anaesthesia and monitoring the neonate. (LDO)

20200512-8*

Screening all pregnant women admitted to labor and delivery for the virus responsible for coronavirus disease 2019. Vintzileos WS, Muscat J, Hoffmann E, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 284-286
Full URL: https://doi.org/10.1016/j.ajog.2020.04.024

This research letter discusses a study to determine the accuracy of maternal symptomatology in predicting COVID-19 infections. The results showed that 66% of women who tested positive for COVID-19 were asymptomatic. (LDO)

20200511-62*

Severe acute respiratory syndrome coronavirus 2 detection in the female lower genital tract. Cui P, Chen Z, Wang T, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 131-134
Full URL: https://doi.org/10.1016/j.ajog.2020.04.038

This research letter discusses the existence of SARS-CoV-2 in the female lower genital tract. Among the 35 participants in this study SARS-CoV-2 was not found in vaginal fluid and cervical exfoliated cells. This suggests that the female

lower genital tract may not be a transmission route for the virus, and has implications for mode of delivery in SARS-CoV-2 infected pregnant women. (LDO)

20200507-10*

Coronavirus: Am I at risk during pregnancy?. Roxby P (2020), BBC News 7 May 2020

Full URL: https://www.bbc.co.uk/news/health-52474213

As a precaution, pregnant women have been told to be particularly strict about avoiding social contact, so they reduce their risk of catching coronavirus. But what do we know about its impact on pregnancy? (Author)

20200505-13*

Guidance for provision of midwife-led settings and home birth in the evolving coronavirus (COVID-19) pandemic. Royal College of Obstetricians and Gynaecologists, Royal College of Midwives (2020), Royal College of Obstetricians and Gynaecologists (RCOG) 17 April 2020

Guidance on the safety of midwife-led birth settings and home birth during the COVID-19 pandemic. Suggests that birthplace options may become more limited if services are centralised as a result of the pandemic. (LDO)

20200505-11*

Coronavirus COVID-19: Supporting healthy pregnant women to safely give birth. Burns E, Feeley C, Venderlaan J, et al (2020), Oxford: Oxford Brookes University 29 April 2020, 4 pages

Full URL: https://www.brookes.ac.uk/WorkArea/DownloadAsset.aspx?id=2147622699

Guidance on the safety of water birth during the COVID-19 pandemic. Suggests that birthing pools are low risk for the transmission of the virus and should be encouraged as an effective method of analgesia. (LDO)

20200429-35*

General Guidelines in the Management of an Obstetrical Patient on the Labor and Delivery Unit during the COVID-19 Pandemic. Stephens AJ, Barton JR, Bentum NA, et al (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 829-836

Full URL: https://doi.org/10.1055/s-0040-1710308

Novel coronavirus disease 2019 (COVID-19) is a respiratory tract infection that was first identified in China. Since its emergence in December 2019, the virus has rapidly spread, transcending geographic barriers. The World Health Organization and the Centers for Disease Control and Prevention have declared COVID-19 as a public health crisis. Data regarding COVID-19 in pregnancy is limited, consisting of case reports and small cohort studies. However, obstetric patients are not immune from the current COVID-19 pandemic, and obstetric care will inevitably be impacted by the current epidemic. As such, clinical protocols and practice on labor and delivery units must adapt to optimize the safety of patients and health care workers and to better conserve health care resources. In this commentary, we provide suggestions to meet these goals without impacting maternal or neonatal outcomes. (Author)

20200427-28*

Labor and Delivery Guidance for COVID-19. Boelig RC, Manuck T, Oliver EA, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 2, suppl, May 2020, 100110

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100110

Guidance on labour and delivery during the COVID-19 pandemic. Includes screening before admission, the use of personal protective equipment (PPE) and intrapartum and postpartum care. The authors also present specific guidance on caring for confirmed COVID-19 patients and critically ill COVID-19 patients. (LDO)

20200427-11*

Forecasting the Impact of Coronavirus Disease During Delivery Hospitalization: An Aid for Resources Utilization. Putra M, Kesavan M, Brackney K, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100127

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100127

Background
The ongoing Coronavirus disease (COVID-19) pandemic has severely impacted the United States. In cases of infectious disease outbreak, forecasting models are often developed for resources utilization. Pregnancy and delivery pose unique challenges, given the altered maternal immune system and the fact that the majority of American women choose to deliver in the hospital setting.
Objectives
The aim of our study is to forecast the incidence of COVID-19 in general population and to forecast the overall incidence, severe cases, critical cases and fatal COVID-19 cases during delivery hospitalization in the United States.
Study design
We use a phenomenological model with generalized logistic growth models to forecast the incidence of COVID-19 in the United States from 4/15/2020 - 12/31/2020. Incidence data from 3/1/2020 - 4/14/2020 were used to provide best-fit model solution. Subsequently, Monte-Carlo simulation was performed for each week from 3/1/2020 - 12/31/2020 to estimate the incidence of COVID-19 in delivery hospitalizations using the available data estimate.
Results
From 3/1/2020 - 12/31/2020, our model forecasted a total of 860,475 cases of COVID-19 in general population across the United States. The cumulative incidence for COVID-19 during delivery hospitalization is anticipated to be 16,601 (95% CI, 9,711 - 23,491) cases. Among those, 3,308 (95% CI, 1,755 - 4,861) cases are expected to be severe, 681 (95% CI, 1324 - 1,038) critical and 52 (95% CI, 23 - 81) maternal mortality. Assuming similar baseline maternal mortality rate as the year of 2018, we projected an increase in maternal mortality rate in the US to at least 18.7 (95% CI, 18.0 - 19.5) deaths per 100,000 live birth as a direct result of COVID-19.
Conclusions
COVID-19 infection in pregnant women is expected to severely impact obstetrical care. From 3/1/2020 - 12/31/2020, we project 3,308 severe and 681 critical cases, with about 52 COVID-19 related maternal mortalities during delivery hospitalization in the United States. These data might be helpful for counseling and resource allocation. (Author)

20200424-6*

Coronavirus in pregnancy and delivery: rapid review. Mullins E, Evans D, Viner RM, et al (2020), Ultrasound in Obstetrics and Gynecology vol 55, no 5, May 2020, pp 586-592

Full URL: https://doi.org/10.1002/uog.22014

OBJECTIVES:
Person-to-person spread of COVID-19 in the UK has now been confirmed. There are limited case series reporting the impact on women affected by coronavirus during pregnancy. In women affected by severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS), the case fatality rate appeared higher in those affected in pregnancy compared with non-pregnant women. We conducted a rapid review to guide health policy and management of women affected by COVID-19 during pregnancy, which was used to develop the Royal College of Obstetricians and Gynaecologists' (RCOG) guidelines on COVID-19 infection in pregnancy.
METHODS:
Searches were conducted in PubMed and MedRxiv to identify primary case reports, case series, observational studies and randomized controlled trials describing women affected by coronavirus in pregnancy. Data were extracted from relevant papers. This review has been used to develop guidelines with representatives of the Royal College of Paediatrics and Child Health (RCPCH) and RCOG who provided expert consensus on areas in which data were lacking.
RESULTS:
From 9965 search results in PubMed and 600 in MedRxiv, 23 relevant studies, all of which were case reports or case series, were identified. From reports of 32 women to date affected by COVID-19 in pregnancy, delivering 30 babies (one set of twins, three ongoing pregnancies), seven (22%) were asymptomatic and two (6%) were admitted to the intensive care unit (ICU), one of whom remained on extracorporeal membrane oxygenation. No maternal deaths have been reported to date. Delivery was by Cesarean section in 27 cases and by vaginal delivery in two, and 15 (47%) delivered preterm. There was one stillbirth and one neonatal death. In 25 babies, no cases of vertical transmission were reported; 15 were reported as being tested with reverse transcription polymerase chain reaction after delivery.

Case fatality rates for SARS and MERS were 15% and 27%, respectively. SARS was associated with miscarriage or intrauterine death in five cases, and fetal growth restriction was noted in two ongoing pregnancies affected by SARS in the third trimester.
CONCLUSIONS:
Serious morbidity occurred in 2/32 women with COVID-19, both of whom required ICU care. Compared with SARS and MERS, COVID-19 appears less lethal, acknowledging the limited number of cases reported to date and that one woman remains in a critical condition. Preterm delivery affected 47% of women hospitalized with COVID-19, which may put considerable pressure on neonatal services if the UK's reasonable worst-case scenario of 80% of the population being affected is realized. Based on this review, RCOG, in consultation with RCPCH, developed guidance for delivery and neonatal care in pregnancies affected by COVID-19, which recommends that delivery mode be determined primarily by obstetric indication and recommends against routine separation of affected mothers and their babies. We hope that this review will be helpful for maternity and neonatal services planning their response to COVID-19. (Author)

20200424-28*

Coronavirus: Uncertainty over maternity care causing distress. Collinson A (2020), BBC News 24 April 2020
Full URL: https://www.bbc.co.uk/news/health-52356067
Reports that the uncertainly caused by a reduction in maternity services owing to the coronavirus pandemic is causing anxiety and stress among pregnant women, who are not sure if they will be allowed to have a home birth, or if their partner will be allowed to stay with them while they are in labour. States that there is variation between Trusts, and the Royal College of Midwives (RCM) states that staff shortages owing to sickness and self-isolation are impacting resources. Includes comments from pregnant women, new mothers, and RCM Chief Executive Officer Gill Walton. (JSM)

20200422-43*

SOGC Committee Opinion - COVID-19 in Pregnancy. Elwood C, Boucoiran I, VanSchalkwyk J, et al (2020), JOGC [Journal of Obstetrics and Gynaecology Canada] 31 March 2020, online
Full URL: https://doi.org/10.1016/j.jogc.2020.03.012
Society of Obstetricians and Gynaecologists of Canada (SOGC) guidelines on COVID-19 in pregnancy. Includes recommendations on the antepartum, intrapartum and postpartum periods. Discusses appointments, protective equipment, fetal monitoring, caesarean delivery, skin-to-skin contact and breastfeeding. (LDO)

20200422-35*

Operating Room Guide for Confirmed or Suspected COVID-19 Pregnant Patients Requiring Cesarean Delivery.
Gonzalez-Brown VM, Reno J, Lortz H, et al (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 825-828
Full URL: https://doi.org/10.1055/s-0040-1709683
We sought to provide a clinical practice protocol for our labor and delivery (L&D) unit, to care for confirmed or suspected COVID-19 patients requiring cesarean delivery. A multidisciplinary team approach guidance was designed to simplify and streamline the flow and care of patient with confirmed or suspected COVID-19 requiring cesarean delivery. A protocol was designed to improve staff readiness, minimize risks, and streamline care processes. This is a suggested protocol which may not be applicable to all health care settings but can be adapted to local resources and limitations of individual L&D units. Guidance and information are changing rapidly; therefore, we recommend continuing to update the protocol as needed. (Author)

20200421-18*

Specialty guides for patient management during the coronavirus pandemic: Clinical guide for the temporary reorganisation of intrapartum maternity care during the coronavirus pandemic. NHS England (2020), London: NHS England

9 April 2020
Explains that The COVID-19 pandemic has presented a significant challenge for the NHS: the provision of high quality care for those experiencing serious symptoms of the virus needs to be balanced with the safe delivery of core non-elective services, such as maternity, a service strongly focused on safety and with very limited opportunities to reduce demand. This challenge will inevitably mean that some clinical staff are deployed to areas of hospitals they do not usually work in. At the same time, many midwives, obstetricians, anaesthetists and support staff are in self-isolation, temporarily reducing the available maternity workforce, with varying and sometimes significant impacts felt locally. This document sets out how safe services in the provision of intrapartum maternity care should be maintained and how decisions about reorganisation of services should be taken. The appendix provides a template for communicating changes in the services to local women and their families. It has been produced in consultation with the Royal College of Midwives (RCM), Royal College of Obstetricians and Gynaecologists (RCOG), the Royal College of Anaesthetists, the Obstetric Anaesthetists Association and maternity service user representatives. (Author, edited)

20200420-31*

Expert consensus for managing pregnant women and neonates born to mothers with suspected or confirmed novel coronavirus (COVID-19) infection. Chen D, Yang H, Cao Y, et al (2020), International Journal of Gynecology & Obstetrics vol 149, no 2, May 2020, pp 130-136

Objective
To provide clinical management guidelines for novel coronavirus (COVID-19) in pregnancy.
Methods
On February 5, 2020, a multidisciplinary teleconference comprising Chinese physicians and researchers was held and medical management strategies of COVID-19 infection in pregnancy were discussed.
Results
Ten key recommendations were provided for the management of COVID-19 infections in pregnancy.
Conclusion
Currently, there is no clear evidence regarding optimal delivery timing, the safety of vaginal delivery, or whether cesarean delivery prevents vertical transmission at the time of delivery; therefore, route of delivery and delivery timing should be individualized based on obstetrical indications and maternal-fetal status. (Author) [Erratum: International Journal of Gynecology & Obstetrics, 12 May 2020, online: https://doi.org/10.1002/ijgo.13181]

20200417-9*

Novel corona virus disease (COVID-19) in pregnancy: What clinical recommendations to follow?. Liang H, Acharya G (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 4, April 2020, pp 439-442

This editorial discusses the prevention, diagnosis and management of COVID-19 in pregnancy. The authors also highlight the importance of mode of delivery and care of the newborn. (LDO)

20200416-17*

Intrapartum care of women with COVID-19: a practical approach. Sichitiu J, Desseauve D (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 249, June 2020, pp 94-95
Full URL: https://doi.org/10.1016/j.ejogrb.2020.04.018

The authors present a comprehensive bulletin for caregivers to access the latest information on COVID-19. The bulletin is based on recommendations from four international bodies, including the Royal College of Obstetricians and Gynaecologists. (LDO)

20200415-31*

Freebirth, Unassisted Childbirth and Unassisted Pregnancy. Association for Improvements in the Maternity Services (2020), London: AIMS 30 March 2020

Full URL: https://www.aims.org.uk/information/item/freebirth

Consumer information from AIMS on freebirth, also known as unassisted or unattended childbirth. Includes sections on legal issues, freebirth in the COVID-19 pandemic, and information and support resources. (JSM)

20200415-26*

Care of the Pregnant Woman with COVID-19 in Labor and Delivery: Anesthesia, Emergency cesarean delivery, Differential diagnosis in the acutely ill parturient, Care of the newborn, and Protection of the healthcare personnel. Ashokka B, Loh M-H, Tan CH, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 66-74.e3

Full URL: https://doi.org/10.1016/j.ajog.2020.04.005

Coronavirus disease 2019, caused by the severe acute respiratory syndrome coronavirus 2, has been declared a pandemic by the World Health Organization. As the pandemic evolves rapidly, there are data emerging to suggest that pregnant women diagnosed as having coronavirus disease 2019 can have severe morbidities (up to 9%). This is in contrast to earlier data that showed good maternal and neonatal outcomes. Clinical manifestations of coronavirus disease 2019 include features of acute respiratory illnesses. Typical radiologic findings consists of patchy infiltrates on chest radiograph and ground glass opacities on computed tomography scan of the chest. Patients who are pregnant may present with atypical features such as the absence of fever as well as leukocytosis. Confirmation of coronavirus disease 2019 is by reverse transcriptase-polymerized chain reaction from upper airway swabs. When the reverse transcriptase-polymerized chain reaction test result is negative in suspect cases, chest imaging should be considered. A pregnant woman with coronavirus disease 2019 is at the greatest risk when she is in labor, especially if she is acutely ill. We present an algorithm of care for the acutely ill parturient and guidelines for the protection of the healthcare team who is caring for the patient. Key decisions are made based on the presence of maternal and/or fetal compromise, adequacy of maternal oxygenation (SpO2 >93%) and stability of maternal blood pressure. Although vertical transmission is unlikely, there must be measures in place to prevent neonatal infections. Routine birth processes such as delayed cord clamping and skin-to-skin bonding between mother and newborn need to be revised. Considerations can be made to allow the use of screened donated breast milk from mothers who are free of coronavirus disease 2019. We present management strategies derived from best available evidence to provide guidance in caring for the high-risk and acutely ill parturient. These include protection of the healthcare workers caring for the coronavirus disease 2019 gravida, establishing a diagnosis in symptomatic cases, deciding between reverse transcriptase-polymerized chain reaction and chest imaging, and management of the unwell parturient. (Author)

20200414-6*

Coronavirus and your maternity care. AIMS (2020), Association for Improvements in Maternity Services (AIMS) 11 April 2020

Full URL: https://www.aims.org.uk/information/item/coronavirus

Information from the Association for Improvements in the Maternity Services (AIMS) for pregnant women concerned about their maternity care in the current coronavirus (COVID-19) pandemic. (JSM)

20200413-1*

Coronavirus while pregnant or giving birth: here's what you need to know. Dahlen H, Ellwood D (2020), The Conversation 16 March 2020

Full URL: https://theconversation.com/coronavirus-while-pregnant-or-giving-birth-heres-what-you-need-to-know-133619

Summarises the key messages for pregnant women in the current coronavirus (COVID-19) pandemic, from trusted health sources such as the World Health Organization, the Royal College of Obstetricians and Gynaecologists etc. (JSM)

20200408-13*

Maternal and neonatal outcomes of pregnant women with COVID-19 pneumonia: a case-control study. Li N, Han L, Peng M, et al (2020), Clinical Infectious Diseases vol 71, no 16, 15 October 2020, pp 2035–2041

Full URL: https://doi.org/10.1093/cid/ciaa352

Background
The ongoing pandemic of coronavirus disease 2019 (COVID-19) has caused serious concerns about its potential adverse effects on pregnancy. There are limited data on maternal and neonatal outcomes of pregnant women with COVID-19 pneumonia.

Methods
We conducted a case-control study to compare clinical characteristics and maternal and neonatal outcomes of pregnant women with and without COVID-19 pneumonia.

Results
During the period 24 January–29 February 2020, there were 16 pregnant women with confirmed COVID-19 pneumonia and 18 suspected cases who were admitted to labor in the third trimester. Two had vaginal delivery and the rest were cesarean delivery. Few patients presented respiratory symptoms (fever and cough) on admission, but most had typical chest computed tomographic images of COVID-19 pneumonia. Compared to the controls, patients with COVID-19 pneumonia had lower counts of white blood cells (WBCs), neutrophils, C-reactive protein (CRP), and alanine aminotransferase on admission. Increased levels of WBCs, neutrophils, eosinophils, and CRP were found in postpartum blood tests of pneumonia patients. Three (18.8%) of the mothers with confirmed COVID-19 pneumonia and 3 (16.7%) with suspected COVID-19 pneumonia had preterm delivery due to maternal complications, which were significantly higher than in the control group. None experienced respiratory failure during their hospital stay. COVID-19 infection was not found in the newborns, and none developed severe neonatal complications.

Conclusions
Severe maternal and neonatal complications were not observed in pregnant women with COVID-19 pneumonia who had vaginal or cesarean delivery. Mild respiratory symptoms of pregnant women with COVID-19 pneumonia highlight the need of effective screening on admission. (Author)

20200407-14*

Coronavirus Disease 2019 (COVID-19) Pandemic and Pregnancy. Dashraath P, Wong JLJ, Lim MXK, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 222, no 6, June 2020, pp 521-531
Full URL: https://doi.org/10.1016/j.ajog.2020.03.021

The current coronavirus disease 2019 (COVID-19) pneumonia pandemic, caused by the severe acute respiratory syndrome 2 (SARS-CoV-2) virus, is spreading globally at an accelerated rate, with a basic reproduction number (R0) of 2 - 2.5, indicating that 2 - 3 persons will be infected from an index patient. A serious public health emergency, it is particularly deadly in vulnerable populations and communities in which healthcare providers are insufficiently prepared to manage the infection. As of March 16, 2020, there are more than 180,000 confirmed cases of COVID-19 worldwide, with over 7,000 related deaths. The SARS-CoV-2 virus has been isolated from asymptomatic individuals, and affected patients continue to be infectious two weeks after cessation of symptoms. The substantial morbidity and socioeconomic impact have necessitated drastic measures across all continents, including nationwide lockdowns and border closures.
Pregnant women and their fetuses represent a high-risk population during infectious disease outbreaks. To date, the outcomes of 55 pregnant women infected with COVID-19 and 46 neonates have been reported in the literature, with no definite evidence of vertical transmission. Physiological and mechanical changes in pregnancy increase susceptibility to infections in general, particularly when the cardiorespiratory system is affected, and encourage rapid progression to respiratory failure in the gravida. Furthermore, the pregnancy bias towards T-helper 2 (Th2) system dominance which protects the fetus, leaves the mother vulnerable to viral infections, which are more effectively contained by the Th1 system. These unique challenges mandate an integrated approach to pregnancies affected by SARS-CoV-2.
Here we present a review of COVID-19 in pregnancy, bringing together the various factors integral to the understanding of pathophysiology and susceptibility, diagnostic challenges with real-time reverse transcriptase polymerase chain reaction (RT-PCR) assays, therapeutic controversies, intrauterine transmission and maternal-fetal

complications. We discuss the latest options in antiviral therapy and vaccine development, including the novel use of chloroquine in the management of COVID-19. Fetal surveillance, in view of the predisposition to growth restriction and special considerations during labor and delivery are addressed. Additionally, we focus on keeping frontline obstetric care providers safe while continuing to provide essential services. Our clinical service model is built around the principles of workplace segregation, responsible social distancing, containment of cross-infection to healthcare providers, judicious use of personal protective equipment and telemedicine. Our aim is to share a framework which can be adopted by tertiary maternity units managing pregnant women in the flux of a pandemic while maintaining the safety of the patient and healthcare provider at its core. (Author)

20200403-11*

Birth in a pandemic: 'You are stronger than you think'. Brewer K (2020), BBC News 1 April 2020

Full URL: https://www.bbc.co.uk/news/stories-52098036

Reports that the coronavirus crisis is affecting many pregnant women's birth plans and leading some health trusts to increase home births. Includes personal experiences of women who have given birth under the current health guidance and restrictions imposed due to the COVID-19 pandemic. (JSM)

20200402-47*

Maternity services: Coronavirus (COVID-19) [written answer]. Scottish Parliament (2020), Official Report Written question S5W-27969, 16 March 2020

Full URL: https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Advance&ReferenceNumbers=S5W-27969

Jeane Freeman responds to a written question from Jackie Baillie to the Scottish Government, regarding plans for maternity services and home births during the COVID-19 outbreak. (LDO)

20200402-32*

Pregnancy and coronavirus: information for pregnant women and new mums. Anon (2020), Tommy's Pregnancy Hub 1 April 2020

Full URL: https://www.tommys.org/pregnancy-information/im-pregnant/pregnancy-and-coronavirus-information-pregnant-women-and-new-mums

Consumer information from Tommy's presented in a question and answer format, aimed at pregnant women and new mothers, based on the latest guidance on coronaivirus (COVID-19), from the Royal College of Obstetricians and Gynaecologists (RCOG). (JSM)

20200323-111*

Pregnancy and Perinatal Outcomes of Women With Coronavirus Disease. Liu D, Li L, Wu X, et al (2020), American Journal of Roentgenology 18 March 2020, online

OBJECTIVE. The purpose of this study was to describe the clinical manifestations and CT features of coronavirus disease (COVID-19) pneumonia in 15 pregnant women and to provide some initial evidence that can be used for guiding treatment of pregnant women with COVID-19 pneumonia.

MATERIALS AND METHODS. We reviewed the clinical data and CT examinations of 15 consecutive pregnant women with COVID-19 pneumonia in our hospital from January 20, 2020, to February 10, 2020. A semiquantitative CT scoring system was used to estimate pulmonary involvement and the time course of changes on chest CT. Symptoms and laboratory results were analyzed, treatment experiences were summarized, and clinical outcomes were tracked.

RESULTS. Eleven patients had successful delivery (10 cesarean deliveries and one vaginal delivery) during the study period, and four patients were still pregnant (three in the second trimester and one in the third trimester) at the end of the study period. No cases of neonatal asphyxia, neonatal death, stillbirth, or abortion were reported. The most common early finding on chest CT was ground-glass opacity (GGO). With disease progression, crazy paving pattern and consolidations were seen on CT. The abnormalities showed absorptive changes at the end of the study period for all patients. The most common onset symptoms of COVID-19 pneumonia in pregnant women were fever (13/15 patients)

and cough (9/15 patients). The most common abnormal laboratory finding was lymphocytopenia (12/15 patients). CT images obtained before and after delivery showed no signs of pneumonia aggravation after delivery. The four patients who were still pregnant at the end of the study period were not treated with antiviral drugs but had achieved good recovery. CONCLUSION. Pregnancy and childbirth did not aggravate the course of symptoms or CT features of COVID-19 pneumonia. All the cases of COVID-19 pneumonia in the pregnant women in our study were the mild type. All the women in this study-some of whom did not receive antiviral drugs-achieved good recovery from COVID-19 pneumonia. (Author)

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