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Coronavirus (COVID-19) in pregnancy

Updated 26 April 2021

Records on Coronavirus (COVID-19) in pregnancy. Includes choice and accessibility of maternal health services.

2021-02605
Depression, Anxiety, Resilience, and Coping: The Experience of Pregnant and New Mothers During the First Few Months of the COVID-19 Pandemic. Kinser PA, Jallo N, Amstadter AB, et al (2021), Journal of Women's Health 12 April 2021, online
Background: It is well-documented that the mental health of pregnant and postpartum women is essential for maternal, child, and family well-being. Of major public health concern is the perinatal mental health impacts that may occur during the ongoing COVID-19 pandemic. It is essential to explore the symptom experience and predictors of mental health status, including the relationship between media use and mental health.

Materials and Methods: The purpose of this study is to evaluate the experiences of pregnant and postpartum women (n = 524) in the United States in the early phase of the COVID-19 pandemic. This cross-sectional online observational study collected psychosocial quantitative and qualitative survey data in adult pregnant and postpartum (up to 6 months postdelivery) women in April–June 2020.

Results: Multivariable linear regression models were used to evaluate predictors of depressive symptoms, anxiety, and post-traumatic stress disorder. The most common predictors were job insecurity, family concerns, eating comfort foods, resilience/adaptability score, sleep, and use of social and news media. Qualitative themes centered on pervasive uncertainty and anxiety; grief about losses; gratitude for shifting priorities; and use of self-care methods including changing media use.

Conclusions: This study provides information to identify risk for anxiety, depression, and PTSD symptoms in perinatal women during acute public health situations. Women with family and job concerns and low resilience/adaptability

scores seem to be at high risk of psychological sequelae. Although use of social media is thought to improve social connectedness, our results indicate that increased media consumption is related to increased anxiety symptoms. (Author)
Available from: https://doi.org/10.1089/jwh.2020.8866
Full URL: https://doi.org/10.1089/jwh.2020.8866

2021-02565
Impact of mitigation measures against the COVID 19 pandemic on the perinatal results of the reference maternity hospital in Uruguay. Briozzo L, Tomasso G, Viroga S, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 17 January 2021, online
Introduction
Social consequences of pandemics, impacts on perinatal results, especially those who are the most vulnerable.

Objective
Determine effect of mitigation measures of the COVID 19 pandemic on perinatal results in the maternity hospital of the Pereira Rossell Hospital Center (CHPR)

Methods
A retrospective cross-sectional cohort study, with a comparative analysis of the semesters of March 15–30 September 2019 versus the same period in 2020 based on three variables low birth weight (LBW), preterm birth (PB), and small for gestational age (SGA).

Results
Incidence of PB (14.5%), LBW (12%) and SGA (6.9%) was higher in the 2020 semester during COVID 19 pandemic compared to the same period of 2019 (12.2%; 9.8%; 5.5%). PB showed a statistically significant increase of 21% in our hospital.

Conclusion
Mitigation measures of the COVID 19 pandemic, aggravate the effects of the global syndemic on the reproductive process of the social sectors most violated in their rights. (Author)
Available from: https://doi.org/10.1080/14767058.2021.1874911
Full URL: https://doi.org/10.1080/14767058.2021.1874911

2021-02511
SOGC Statement on the COVID-19 vaccines and rare adverse outcomes of thrombosis associated with low platelets. Society of Obstetricians and Gynaecologists of Canada (2021), Ottowa, Canada: SOGC 20 April 2021
Statement from the Society of Obstetricians and Gynaecologists of Canada (SOGC) on COVID-19 vaccination in pregnancy and rare adverse outcomes. SOGC supports the use of all available COVID-19 vaccines approved in Canada in any pregnancy trimester and during breastfeeding in accordance with regional eligibility. (LDO)
Available from: https://sogc.org/common/Uploaded%20files/Latest%20News/EN_Statement-COVID-19_vaccines_rare_adverse_thrombosis.pdf
Full URL: https://sogc.org/common/Uploaded%20files/Latest%20News/EN_Statement-COVID-19_vaccines_rare_adverse_thrombosis.pdf

2021-02488

Maternal, neonatal and placental characteristics of SARS-CoV-2 positive mothers. Zhang P, Heyman T, Greechan M, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 28 February 2021, online

Background

COVID19 is caused by a newly identified severe acute respiratory syndrome coronavirus 2 (SARS-CoV2) that affects pregnant women equally to the general population. How SARS-CoV2 affects the mothers, the neonates and the placental pathology remain controversial.

Objective

To explore the effects of maternal SARS-CoV2 infection on the neonates and placental pathology in comparison to those from the normal pregnancies.

Study design

Maternal, neonatal and placental pathology data were collected from medical records between March and August 2020 from New York Presbyterian- Brooklyn Methodist Hospital. The data from a total 142 neonates and 101 placentas from SARS-CoV2 positive mothers were compared with those from SARS-CoV2 negative mothers.

Results

There were 142 SARS-CoV2 positive mothers within the study group, and 43 (36%) of them showed various degrees of COVID19 related clinical symptoms including fever (13.8%), cough (5.7%), loss of taste/smell (anosmia)(5.6%), shortness of breath (2.4%), muscle ache (2.4%), headache (1.6%) and pneumonia (0.8%). A total 142 neonates were born to the SARS-CoV-2 positive mothers, and only 1 neonate tested positive for SARS-CoV2 in the first 24 h. Two additional neonates were initially tested negative in first 24 h, and later tested positive on day 7 and the 1 month visit, and all these neonates were asymptomatic and had no sequelae. There was no increase of pre-term labor and delivery or NICU admissions from SARS-CoV2 positive mothers. Examination of 101 placentas from SARS-CoV2 positive mothers and 121 placentas from SARS-CoV2 negative mothers revealed no increase of placental pathologic features. There were more vaginal deliveries and more meconium stain of fetal membranes from the SARS-CoV2 positive mothers. Previous reports of more maternal vascular malperfusion and fetal vascular malperfusion were not demonstrated in our current data.

Conclusion

Although SARS-CoV2 is a significant risk to the pregnant women (mothers) and general population, there is no increased risk for neonates. Vertical transmission is rare, and perinatal transmission can also occur. There is no increased frequency of placental abnormalities in both maternal and fetal circulation. (Author)

2021-02477

The first Italian COVID-19 lockdown reduced births and voluntary terminations by just under a fifth. Trombetta A, Travan L, Elefante P, et al (2021), Acta Paediatrica 29 March 2021, online

Brief report exploring whether the COVID-19 pandemic and lockdown reduced the number of pregnancies in Italy. (LDO)

Available from: https://doi.org/10.1111/apa.15862

Full URL: https://doi.org/10.1111/apa.15862

2021-02472

Perinatology clinic in the coronavirus disease-2019 pandemic: what harms, often teaches. Eyi EGY, Tekin OM, Buglagil A, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 28 February 2021, online

Background

Compartmental models simplify the mathematical modeling of infectious diseases based on reported cases. In the absence of precautions, personal protective equipment, quarantine and social distancing, a Susceptible–Exposed–Infectious–Recovered (SuEIR) model with Unscented Kalman Filter for coronavirus disease-19 (COVID-19) Forecasts in Turkey has revealed 174 641 infected people on August 15, 2020, whilst the reported case was 12 216. Through numerical experiments, the effects of quarantine, social distancing, and COVID-19 testing on the dynamics of the outbreak varies. We herein present the documentation of the work in a perinatology clinic during COVID-19 pandemic to find the reflection in a pandemic hospital as even in the pandemic, pregnancy complications and fetal diagnosis/therapy are time-sensitive and cannot be delayed. During the prevention of the horizontal transmission to the health-care workers (HCWs), testing all pregnant women with nasopharyngeal/oropharyngeal swabs for severe acute respiratory syndrome coronavirus (SARS-COV-2) undergoing birth, ultrasound examinations, invasive procedures appear to be the gold standard so that appropriate precautions can be taken if the screen is positive. Though it is logical, it may be incompatible with a busy obstetric practise as a pending polymerase chain reaction (PCR) result should never delay any emergent procedure.

Objective

We aim to describe the development of COVID-19 disease of 408 HCW out of 1462 by the exposure to pregnant women while providing obstetric care in a single tertiary perinatology unit under strict clinical triage, recommended precautions and wearing personal protective equipment and compare the maternal and perinatal outcome with those of the preceding three months.

Study design

A prospective cohort study involving the pregnant women and the HCW with positive PCR for SARS-COV-2 were carried out to correlate with the horizontal transmission while documenting the perinatal work.

Results

25 HCW, including nurses/midwives: 11, doctors: 7 and health technicians: 3 and support staff: 4 developed positive PCR for SARS-COV-2 while providing healthcare to 162 cases: mild-moderate (n = 146), severe (n = 12) and critical (n = 1) and asymptomatic (n = 3) in obstetric population. 22 out of 25 HCW were working in the perinatology unit. COVID-19 clinic was asymptomatic (n = 8), mild-moderate (13) or severe (n = 2) in HCW. However, “Exposed” group in the SuEIR model, both the pregnant women and the HCW that have already been infected and have not been tested, which have been also capable of infecting the “Susceptible” group could not be determined. Some of the HCW and the pregnant women in the “Exposed” group were tested and transferred to the “Infectious” group (which were reported to be PCR positive), while the rest of them who recovered, transitted to the so-called “Unreported Recovered” group. The ratio of the women with severe pre-eclampsia admitted to intensive care unit increased significantly during the lockdown (p = .01).

Conclusions

In a nonstop pandemic perinatology clinic, exposure to 162 PCR positive pregnant women may be correlated with a 5.4% (22/408) documented horizontal transmission in the frontline HCW despite clinical triage and personal protective equipment. (Author)

2021-02429

Perinatal outcomes in pregnant women with COVID-19 in Siberia and the Russian Far East. Artymuk NV, Belokrinitskaya TE, Filippov OS, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 2 February 2021, online

Objective

To assess the incidence and perinatal outcomes of COVID-19 in pregnant women in the Far Eastern and Siberian Federal Districts of Russian Federation over 10 months of a pandemic.

Materials and methods

This was secondary analysis of Public Data basis on 25 Dec 2020. Statistics included descriptive statistics, analysis of contingency tables, which assessed the value of χ 2, the achieved significance level (p).

Results

During the first year of the SARS-CoV-2 pandemic, 8485 cases of COVID-19 were registered in pregnant women in the Far Eastern Federal District and the Siberian Federal District, accounting for 5.9% of registered pregnant women and 1.71% of the total affected population. The morbidity rate in pregnant women was 3.02 times higher than in the general population: 5933.2 vs 1960.8 per 100 thousand population. 27.4% of mothers had asymptomatic disease; 52.7% – mild; 16.6% – moderate, 2.5% – severe, 0.5% – critical disease. The incidence of hospitalization in ICU of pregnant women was higher relative to the general population (3.57% vs 2.24%, p < .001), but the frequency of mechanical ventilation was lower (0.48% vs 1.05%, p < .001). Preterm delivery had 18.3% (p < .001 CS – 42.0%. The mortality rate in pregnant women was 0.14% vs 1.95% – in the general population (p < .001). Perinatal mortality was 37 cases (1.56%), of which there were 31 stillbirths (1.26%), and 6 (0.25%) cases of early neonatal mortality. 148 (6.2%) COVID-19(+) newborns were identified, despite anti-epidemic measures.

Conclusion

The incidence of COVID-19 in pregnant women in Siberia and the Far East is higher than in the general population, but the disease is characterized by a milder. Women with COVID-19 have a high rate of preterm birth and CS. 148 (6.2%) newborns isolated COVID-19. (Author)

2021-02423

Risk factors for severe and critical Covid-19 in pregnant women in a single center in Brazil. Tutiya C, Mello F, Chaccur G, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 3 February 2021, online

Background

Risk factors for severe SARS-CoV2 infection in pregnancy have not been extensively studied. This information can help guide the management of pregnant women with COVID-19.

Objective

Examine risk factors for severe COVID-19 in pregnant women.

Methods

We reviewed the records of all pregnant women with positive SARS-CoV2 tests (qRT-PCR) managed at a single tertiary private maternity in Sao Paulo, Brazil. We categorized women as having non-severe (mild or moderate) or severe (severe or critical) COVID-19. We conducted multivariable analyses to identify differences in sociodemographic and clinical characteristics of the two groups as risk factors for severe COVID-19.

Results

Between March 13 and June 7 2020, 114 women tested positive for SARS-CoV-2; 80.7% (n = 92) had non-severe disease (69 mild, 23 moderate), 15.7% (n = 18) had severe, and 3.5% (n = 4) had critical COVID-19. Women with severe/critical

COVID-19 (n = 22) were significantly older (35.0 ± 5.9 × 31.8 ± 5.1 years, p = 0.011), more likely to have at least one medical comorbidity (81.8% × 52.2%, p = .011) or a history of asthma (18.2% × 3.3%, p = .025), and tended to have a higher median body mass index (30.1 kg/m2, IQR 28.1–33.9 × 28.6, IQR 26.2–32.0, p = .056) than women with non-severe disease. Multivariate logistic regression analysis identified four factors as independent predictors of severe/critical COVID-19: asthma (OR 34.469, 95% CI 1.151–78.030, p = .026), non-white ethnicity (OR 7.932, 95% CI 1.311–47.973, p = .024), maternal age with a best cutoff of ≥ 34 years (OR 1.195, 95% CI 1.001–1.427, p = .048) and gestational age at diagnosis with a best cut-off of ≥ 35 weeks (OR 0.876, 95% CI 0.780–0.983, p = .025). The predictive value of the model including all variables was 0.823 (p < .001).

Conclusion
A history of asthma, non-white ethnicity, and older maternal age were risk factors for, while higher gestational age was protective against severe/critical COVID-19 in pregnant Brazilian women. (Author)

2021-02414
Clinical features and risk factors associated with acute respiratory distress syndrome in pregnant women diagnosed with COVID-19: a multi-center case-control study. Aski SK, Norooznezhad AH, Shamshirsaz AA, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 8 February 2021, online
Objectives
The aim of this study was to evaluate differences in clinical features and laboratory parameters in critically ill pregnant women with acute respiratory distress syndrome (ARDS) compared to moderate and severe pregnant women with coronavirus disease-2019 (COVID-19) but without ARDS.

Methods
This was a retrospective multicenter study of all pregnant women with COVID-19 diagnosed with ARDS between February 15, and May 1, 2020 in nine level III maternity centers in Iran (ARDS group). The control COVID-19 pregnant women were selected from 3 of 9 level III maternity centers between March 15 and April 20, 2020. Univariate statistics were used to look at differences between groups. Cluster dendrograms were used to look at the correlations between clinical and laboratory findings in the groups. A value of p <.05 was considered statistically significant.

Results
Fifteen COVID-19 infected women with ARDS were compared to 29 COVID-19 positive and ARDS negative control (moderate: (n = 26) 89.7% and severe: (n = 3)10.3%). The mean maternal age (35.6 vs. 29.4 years; p = .002) and diagnosis of chronic hypertension (20.0% vs. 0%, p = .034) were significantly higher in the ARDS group. There was no significant difference between the two groups in their presenting symptoms. The ARDS group had a significantly higher prevalence of tachypnea (66.6% vs. 10.3%, p = .042) and blood oxygen saturation (SpO2) <93% (66.6% vs. 10.3%, p = .004) at presentation. Relative lymphopenia (lymphocyte ratio < 10.5%, 66.6% vs. 17.2%, p = .002), lymphocytes to leukocytes ratio (11.3% vs. 17.7%, p = .010), and neutrophils to lymphocytes ratio (NLR) >7.5 were significantly different between the two groups (all p < .05).

Conclusion
Our data demonstrate that symptom-based strategies for identifying the critically ill pregnant women with SARS-CoV-2 are insufficient; however, vital signs and laboratory data might be helpful to predict ARDS in critically ill COVID-19 pregnant patients. (Author)

2021-02349

GESTACOVID project: psychological and perinatal effects in Spanish pregnant women subjected to confinement due to the COVID-19 pandemic. de Arriba-Garcia M, Diaz-Martinez A, Monfort-Ortiz R, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 21 February 2021, online

Introduction

COVID-19 was declared a pandemic and confinement with movement restriction measures were applied in Spain. Postnatal mental disorders are common but frequently undiagnosed, being a risk period to develop anxiety and depression symptoms. The aim of this study is to evaluate the impact of confinement as depressive and anxiety symptoms in pregnant women (PrW) and puerperal women (PuW) mental health, as well as obstetric and perinatal outcomes during this period.

Materials and methods

The self-administered survey consists of a total of 28 questions, the first 16 providing contextual information and the following ones corresponding to the GHQ-12 that has been evaluated in a binomial form. A logistic regression model has been used to assess whether the contextual variables acted as a protective or risk factor and its fitting has been represented by a receiver operating curve.

Results

Of the 754 PrW interviewed, 58.22% were screened positive. Confinement time for these was 54.93 ± 9.75 days. The risk factors that were identified after the refinement have been to have a worse general state of health, to be sadder and to be more nervous. Among the protectors have been found to have a higher Apgar 10 score and induction of labor. The area under the adjusted regression adjustment curve was 0.8056.

Conclusions

Our results show a high prevalence of depression and anxiety symptoms with strict confinement measures. PrW and PuW must be considered a risk group to develop mental health disorders during disruption circumstances. Using a mental health screening tool could help to identify a group of patients with more risk and to carry out a careful monitoring to allow adequate management.

2021-02317

Maternal, neonatal and placental characteristics of SARS-CoV-2 positive mothers. Zhang P, Heyman T, Greechan M, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 28 February 2021, online

Background

COVID19 is caused by a newly identified severe acute respiratory syndrome coronavirus 2 (SARS-CoV2) that affects pregnant women equally to the general population. How SARS-CoV2 affects the mothers, the neonates and the placental pathology remain controversial.

Objective

To explore the effects of maternal SARS-CoV2 infection on the neonates and placental pathology in comparison to those from the normal pregnancies.

Study design

Maternal, neonatal and placental pathology data were collected from medical records between March and August 2020 from New York Presbyterian- Brooklyn Methodist Hospital. The data from a total 142 neonates and 101 placentas from SARS-CoV2 positive mothers were compared with those from SARS-CoV2 negative mothers.

Results
There were 142 SARS-CoV2 positive mothers within the study group, and 43 (36%) of them showed various degrees of COVID19 related clinical symptoms including fever (13.8%), cough (5.7%), loss of taste/smell (anosmia)(5.6%), shortness of breath (2.4%), muscle ache (2.4%), headache (1.6%) and pneumonia (0.8%). A total 142 neonates were born to the SARS-CoV-2 positive mothers, and only 1 neonate tested positive for SARS-CoV2 in the first 24 h. Two

additional neonates were initially tested negative in first 24 h, and later tested positive on day 7 and the 1 month visit, and all these neonates were asymptomatic and had no sequelae. There was no increase of pre-term labor and delivery or NICU admissions from SARS-CoV2 positive mothers. Examination of 101 placentas from SARS-CoV2 positive mothers and 121 placentas from SARS-CoV2 negative mothers revealed no increase of placental pathologic features. There were more vaginal deliveries and more meconium stain of fetal membranes from the SARS-CoV2 positive mothers. Previous reports of more maternal vascular malperfusion and fetal vascular malperfusion were not demonstrated in our current data.

Conclusion
Although SARS-CoV2 is a significant risk to the pregnant women (mothers) and general population, there is no increased risk for neonates. Vertical transmission is rare, and perinatal transmission can also occur. There is no increased frequency of placental abnormalities in both maternal and fetal circulation.

2021-02312
Obstetrical and Newborn Outcomes among Patients with SARS-CoV-2 during Pregnancy. Trahan M-J, Malhamé I, O'Farrell P, et al (2021), JOGC [Journal of Obstetrics and Gynaecology Canada] 27 March 2021, online
We report on the perinatal outcomes of pregnant patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) from 2 hospitals in Montréal, Québec. Outcomes of 45 patients with SARS-CoV-2 during pregnancy were compared with those of 225 patients without infection. Sixteen percent of patients with SARS-CoV-2 delivered preterm, compared with 9% of patients without (P = 0.28). Median gestational age at delivery (39.3 (interquartile range [IQR] 37.7–40.4) wk vs. 39.1 [IQR 38.3-40.1] wk) and median birthweight (3250 [IQR 2780-3530] g vs. 3340 [IQR 3025-3665] g) were similar between groups. The rate of cesarean delivery was 29% for patients with SARS-CoV-2. Therefore, we did not find important differences in outcomes associated with SARS-CoV-2. Our findings may be limited to women with mild COVID-19 diagnosed in the third trimester. (Author)
Available from: https://doi.org/10.1016/j.jogc.2021.03.012
Full URL: https://doi.org/10.1016/j.jogc.2021.03.012

2021-02306
Perinatology clinic in the coronavirus disease-2019 pandemic: what harms, often teaches. Eyi EGY, Tekin OM, Buglagil A, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 28 February 2021, online
Background
Compartmental models simplify the mathematical modeling of infectious diseases based on reported cases. In the absence of precautions, personal protective equipment, quarantine and social distancing, a Susceptible–Exposed–Infectious–Recovered (SuEIR) model with Unscented Kalman Filter for coronavirus disease-19 (COVID-19) Forecasts in Turkey has revealed 174 641 infected people on August 15, 2020, whilst the reported case was 12 216. Through numerical experiments, the effects of quarantine, social distancing, and COVID-19 testing on the dynamics of the outbreak varies. We herein present the documentation of the work in a perinatology clinic during COVID-19 pandemic to find the reflection in a pandemic hospital as even in the pandemic, pregnancy complications and fetal diagnosis/therapy are time-sensitive and cannot be delayed. During the prevention of the horizontal transmission to the health-care workers (HCWs), testing all pregnant women with nasopharyngeal/oropharyngeal swabs for severe acute respiratory syndrome coronavirus (SARS-COV-2) undergoing birth, ultrasound examinations, invasive procedures appear to be the gold standard so that appropriate precautions can be taken if the screen is

positive. Though it is logical, it may be incompatible with a busy obstetric practise as a pending polymerase chain reaction (PCR) result should never delay any emergent procedure.

Objective
We aim to describe the development of COVID-19 disease of 408 HCW out of 1462 by the exposure to pregnant women while providing obstetric care in a single tertiary perinatology unit under strict clinical triage, recommended precautions and wearing personal protective equipment and compare the maternal and perinatal outcome with those of the preceding three months.

Study design
A prospective cohort study involving the pregnant women and the HCW with positive PCR for SARS-COV-2 were carried out to correlate with the horizontal transmission while documenting the perinatal work.

Results
25 HCW, including nurses/midwives: 11, doctors: 7 and health technicians: 3 and support staff: 4 developed positive PCR for SARS-COV-2 while providing healthcare to 162 cases: mild-moderate (n = 146), severe (n = 12) and critical (n = 1) and asymptomatic (n = 3) in obstetric population. 22 out of 25 HCW were working in the perinatology unit. COVID-19 clinic was asymptomatic (n = 8), mild-moderate (13) or severe (n = 2) in HCW. However, “Exposed” group in the SuEIR model, both the pregnant women and the HCW that have already been infected and have not been tested, which have been also capable of infecting the “Susceptible” group could not be determined. Some of the HCW and the pregnant women in the “Exposed” group were tested and transferred to the “Infectious” group (which were reported to be PCR positive), while the rest of them who recovered, transitted to the so-called “Unreported Recovered” group. The ratio of the women with severe pre-eclampsia admitted to intensive care unit increased significantly during the lockdown (p = .01).

Conclusions
In a nonstop pandemic perinatology clinic, exposure to 162 PCR positive pregnant women may be correlated with a 5.4% (22/408) documented horizontal transmission in the frontline HCW despite clinical triage and personal protective equipment.

2021-02279
The effect of real-time polymerase chain reaction cycle threshold values on perinatal outcomes of pregnant women with COVID-19. Tanacan A, Anuk AT, Erol SA, et al (2021), Journal of Maternal-Fetal & Neonatal Medicine 11 March 2021, online

Objective
To evaluate the effect of cycle threshold (Ct) values on the pregnancy outcomes of women with coronavirus disease 2019 (COVID-19).

Materials and methods
This prospective cohort study was conducted on pregnant women with COVID-19. A real-time polymerase chain reaction (RT-PCR) assay of a nasopharyngeal and oropharyngeal specimen was used for the diagnosis. Initial Ct values for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RT-PCR tests were recorded. 22.9 was the 50th percentile Ct value of the study population. The study population was divided into two groups based on their Ct values: (1) Cases with Higher Ct values (Ct > 22.9)(n = 50) and (2) Cases with lower Ct values (Ct ≤ 22.9)(n = 55). Demographic features, clinical characteristics, disease progression, laboratory test results and pregnancy outcomes

were compared between the groups. A receiver operating characteristic (ROC) curve was used to assess the performance of Ct values in predicting obstetric complications.

Results
Obstetric complication rate was significantly higher in cases with lower Ct values ($p < .001$). A significantly lower lymphocyte count together with higher ESR, procalcitonin and IL-6 values were observed in the cases with lower Ct values ($p > .05$). Additionally, a significantly higher NICU admission rate and longer hospital stays were present in the cases with lower Ct values ($p > .05$). The value in ROC curves with the best balance of sensitivity/specificity was 22.5 (85.7% sensitivity, 63.6% specificity).

Conclusion
Lower Ct values may be associated with an increased rate of obstetric complications in pregnant women with COVID-19. Physicians should be cautious in the management of cases with Ct levels below 22.5.

2021-02257

Fetal Diagnosis and Therapy during the COVID-19 Pandemic: Guidance on Behalf of the International Fetal Medicine and Surgery Society. Deprest J, Choolani M, Chervenak F, et al (2020), Fetal Diagnosis and Therapy vol 47, no 9, September 2020, pp 689-698

The COVID-19 pandemic has stressed patients and healthcare givers alike and challenged our practice of antenatal care, including fetal diagnosis and therapy. This document aims to review relevant recent information to allow us to optimize prenatal care delivery. We discuss potential modifications to obstetric management and fetal procedures in SARS-CoV2-negative and SARS-CoV2-positive patients with fetal anomalies or disorders. Most fetal therapies are time sensitive and cannot be delayed. If personnel and resources are available, we should continue to offer procedures of proven benefit, acknowledging any fetal and maternal risks, including those to health care workers. There is, to date, minimal, unconfirmed evidence of spontaneous vertical transmission, though it may theoretically be increased with some procedures. Knowing a mother's preoperative SARS-CoV-2 status would enable us to avoid or defer certain procedures while she is contagious and to protect health care workers appropriately. Some fetal conditions may alternatively be managed neonatally. Counseling regarding fetal interventions which have a possibility of additional intra- or postoperative morbidity must be performed in the context of local resource availability. Procedures of unproven benefit should not be offered. We encourage participation in registries and trials that may help us to understand the impact of COVID-19 on pregnant women, their fetuses, and neonates. © 2020 S. Karger AG, Basel (Author)

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2021-02256

Coronavirus Disease 2019 in Pregnancy: A Clinical Management Protocol and Considerations for Practice. López M, Gonce A, Meler E, et al (2020), Fetal Diagnosis and Therapy vol 47, no 7, July 2020, pp 519-528

The coronavirus disease 2019 (COVID-19) pandemic has represented a major impact to health systems and societies worldwide. The generation of knowledge about the disease has occurred almost as fast as its global expansion. The mother and fetus do not seem to be at particularly high risk. Nevertheless, obstetrics and maternal-fetal medicine practice have suffered profound changes to adapt to the pandemic. In addition, there are aspects specific to COVID-19 and gestation that should be known by specialists in order to correctly diagnose the disease, classify the severity, distinguish specific signs of COVID-19 from those of obstetric complications, and take the most appropriate management decisions. In this review we present in a highly concise manner an evidence-based protocol for the management of COVID-19 in pregnancy. We briefly contemplate all relevant aspects that we believe a specialist in obstetrics and maternal medicine should know, ranging from basic concepts about the disease and protection

measures in the obstetric setting to more specific aspects related to maternal-fetal management and childbirth. © 2020 S. Karger AG, Basel (Author)
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Full URL: https://doi.org/10.1159/000508487

2021-02254
Maternal mortality from COVID 19 among South African pregnant women. Basu JK, Chauke L, Magoro T (2021), Journal of
Maternal-Fetal & Neonatal Medicine 22 March 2021, online
Objective
To determine the COVID 19 related maternal deaths among South African pregnant women at Ekurhuleni health district in South Africa and to compare with similar studies.

Study design
Retrospective review of all maternal deaths from all health care facilities from April to September 2020 were conducted using COVID registers and maternity case records. Human Research Ethics Committee of the University of Witwatersrand approved the study. Data included total live births, maternal mortality ratio (MMR), age, ethnicity, place of admission, parity, pregnancy status, antenatal complications, gestational age (GA) at delivery, GA at COVID 19 diagnosis, GA at death, symptoms, comorbidity, investigations (HIV, platelets, lymphocytes and LDH), and fetal outcome. Descriptive statistics (mean ± standard deviation, number and percentages) were calculated.

Results
Six women died from COVID. All were African. Mean age was 33.5 (SD ± 4.3) years majority (83%) were multiparous. The mean GA at the time of diagnosis was 35 (± 5.8) weeks. All had dyspnea at presentation. All had hypertension. HIV rate (50%) was higher than the national rate. High lactic dehydrogenase was the commonest laboratory abnormality. Rate of macerated stillborn (66%) was very high.

Conclusion
To date, there are no African studies reporting on maternal mortality from COVID 19. This study provided valuable insight into maternal deaths due to COVID among South African women. COVID 19 is a novel cause of maternal death that has increased the death rate among South African pregnant women. Hypertensive women are at increased risk of death. They should be routinely tested for COVID. Women are at risk of death during the third trimester of pregnancy. High rate of stillborn is a concern. Decision to deliver earlier should be an option. High HIV rate and LDH count should alert health care workers to perform these tests among all COVID positive mothers.

2021-02234
Racial/Ethnic Disparities in Very Preterm Birth and Preterm Birth Before and During the COVID-19 Pandemic. Janevic T, Glazer KB, Vieira L, et al (2021), JAMA Network Open vol 4, no 3, March 2021, e211816

Importance The coronavirus disease 2019 (COVID-19) pandemic may exacerbate existing racial/ethnic inequities in preterm birth.

Objective To assess whether racial/ethnic disparities in very preterm birth (VPTB) and preterm birth (PTB) increased during the first wave of the COVID-19 pandemic in New York City.

Design, Setting, and Participants This cross-sectional study included 8026 Black, Latina, and White women who gave birth during the study period. A difference-in-differences (DID) analysis of Black vs White disparities in VPTB or PTB in

a pandemic cohort was compared with a prepandemic cohort by using electronic medical records obtained from 2 hospitals in New York City.

Exposures Women who delivered from March 28 to July 31, 2020, were considered the pandemic cohort, and women who delivered from March 28 to July 31, 2019, were considered the prepandemic cohort. Reverse transcription–polymerase chain reaction tests for the presence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) were performed using samples obtained via nasopharyngeal swab at the time of admission.

Main Outcomes and Measures Clinical estimates of gestational age were used to calculate VPTB (<32 weeks) and PTB (<37 weeks). Log binomial regression was performed to estimate Black vs White risk differences, pandemic cohort vs prepandemic cohort risk difference, and an interaction term representing the DID estimator. Covariate-adjusted models included age, insurance, prepregnancy body mass index, and parity.

Results Of 3834 women in the pandemic cohort, 492 (12.8%) self-identified as Black, 678 (17.7%) as Latina, 2012 (52.5%) as White, 408 (10.6%) as Asian, and 244 (6.4%) as other or unspecified race/ethnicity, with approximately half the women 25 to 34 years of age. The prepandemic cohort comprised 4192 women with similar sociodemographic characteristics. In the prepandemic cohort, VPTB risk was 4.4% (20 of 451) and PTB risk was 14.4% (65 of 451) among Black infants compared with 0.8% (17 of 2188) VPTB risk and 7.1% (156 of 2188) PTB risk among White infants. In the pandemic cohort, VPTB risk was 4.3% (21 of 491) and PTB risk was 13.2% (65 of 491) among Black infants compared with 0.5% (10 of 1994) VPTB risk and 7.0% (240 of 1994) PTB risk among White infants. The DID estimators indicated that no increase in Black vs White disparities were found (DID estimator for VPTB, 0.1 additional cases per 100 [95% CI, −2.5 to 2.8]; DID estimator for PTB, 1.1 fewer case per 100 [95% CI, −5.8 to 3.6]). The results were comparable in covariate-adjusted models when limiting the population to women who tested negative for SARS-CoV-2. No change was detected in Latina vs White PTB disparities during the pandemic.

Conclusions and Relevance In this cross-sectional study of women who gave birth in New York City during the COVID-19 pandemic, no evidence was found for increased racial/ethnic disparities in PTB, among women who tested positive or tested negative for SARS-CoV-2.
Available from: https://doi.org/10.1001/jamanetworkopen.2021.1816
Full URL: https://doi.org/10.1001/jamanetworkopen.2021.1816

2021-02227
Gestational diabetes. Winter GF (2021), British Journal of Midwifery vol 29, no 4, April 2021, p 234
Revisiting the risks associated with gestational diabetes mellitus in pregnancy during COVID-19. (Author)

2021-02224
Part 1: COVID-19 and knowledge for midwifery practice—impact and care of pregnant women. Green J, Jones L, Petty J, et al (2021), British Journal of Midwifery vol 29, no 4, April 2021, pp 224-231
The emergence of viral diseases, such as COVID-19, represents a global public health threat, particularly the high-impact animal viruses that have switched hosts and are able to be transmitted within human populations. Pandemics threaten the general population; however, there are special groups, such as pregnant women and their babies, which may be at a higher risk of, or more severely affected by infection. Pregnancy is considered a unique immunological condition; therefore, current challenges include decisions on preventing and treating infections during pregnancy and the possible implications for the fetus and newborn infant. This integrative review, the first of a two-part series, analyses selected literature on COVID-19 within maternal and newborn care, drawing on key themes relating to the impact on the pregnant woman. The themes discussed are: the nature of the immune system in

pregnant and newly birthed mothers, maternal risk, mode and timing of birth, care during pregnancy and childbirth, and the transition to parenthood including the implications for practice for maternal mental wellbeing. (Author)

2021-02222
Women's views on the visiting restrictions during COVID-19 in an Irish maternity hospital. Cullen S, Doherty J, Brosnan M (2021), British Journal of Midwifery vol 29, no 4, April 2021, pp 216-223

Background
Due to the coronavirus infection, visitors to all hospitals were greatly restricted in the UK. In maternity hospitals, only partners of women in labour were permitted to attend the hospital.

Aims
This study aimed to gain an understanding of women's experiences of visiting restrictions imposed due to COVID-19.

Methods
Women who attended the hospital for outpatient appointments and who were inpatients on the antenatal or postnatal ward during a two-week period were asked to complete an anonymous survey.

Findings
A total of 422 surveys were completed. The majority of women (97.6%) agreed that the hospital made adequate preparations for them to feel safe. Most women reported that the restrictions are a good thing and several advantages were identified. Women cited not having their partner with them as the main negative consequence to the restrictions.

Conclusions
Although women miss having their partner for support during scans and to help after the baby is born, during the COVID-19 pandemic, the safety aspect of the restrictions and the support received from staff is considered by women when making recommendations to a maternity hospital about whether, or how, to ease restrictions on visiting. (Author)

2021-02187
Assessment of Maternal and Neonatal SARS-CoV-2 Viral Load, Transplacental Antibody Transfer, and Placental Pathology in Pregnancies During the COVID-19 Pandemic. Edlow AG, Li JZ, Collier A-RY, et al (2020), JAMA Network Open vol 3, no 12, December 2020, e2030455

Importance Biological data are lacking with respect to risk of vertical transmission and mechanisms of fetoplacental protection in maternal severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.

Objective To quantify SARS-CoV-2 viral load in maternal and neonatal biofluids, transplacental passage of anti–SARS-CoV-2 antibody, and incidence of fetoplacental infection.

Design, Setting, and Participants This cohort study was conducted among pregnant women presenting for care at 3 tertiary care centers in Boston, Massachusetts. Women with reverse transcription–polymerase chain reaction (RT-PCR) results positive for SARS-CoV-2 were recruited from April 2 to June 13, 2020, and follow-up occurred through July 10, 2020. Contemporaneous participants without SARS-CoV-2 infection were enrolled as a convenience sample from pregnant women with RT-PCR results negative for SARS-CoV-2.

Exposures SARS-CoV-2 infection in pregnancy, defined by nasopharyngeal swab RT-PCR.

Main Outcomes and Measures The main outcomes were SARS-CoV-2 viral load in maternal plasma or respiratory fluids and umbilical cord plasma, quantification of anti–SARS-CoV-2 antibodies in maternal and cord plasma, and presence of SARS-CoV-2 RNA in the placenta.

Results Among 127 pregnant women enrolled, 64 with RT-PCR results positive for SARS-CoV-2 (mean [SD] age, 31.6 [5.6] years) and 63 with RT-PCR results negative for SARS-CoV-2 (mean [SD] age, 33.9 [5.4] years) provided samples for analysis. Of women with SARS-CoV-2 infection, 23 (36%) were asymptomatic, 22 (34%) had mild disease, 7 (11%) had moderate disease, 10 (16%) had severe disease, and 2 (3%) had critical disease. In viral load analyses among 107 women, there was no detectable viremia in maternal or cord blood and no evidence of vertical transmission. Among 77 neonates tested in whom SARS-CoV-2 antibodies were quantified in cord blood, 1 had detectable immunoglobuilin M to nucleocapsid. Among 88 placentas tested, SARS-CoV-2 RNA was not detected in any. In antibody analyses among 37 women with SARS-CoV-2 infection, anti–receptor binding domain immunoglobin G was detected in 24 women (65%) and anti-nucleocapsid was detected in 26 women (70%). Mother-to-neonate transfer of anti–SARS-CoV-2 antibodies was significantly lower than transfer of anti-influenza hemagglutinin A antibodies (mean [SD] cord-to-maternal ratio: anti–receptor binding domain immunoglobin G, 0.72 [0.57]; anti-nucleocapsid, 0.74 [0.44]; anti-influenza, 1.44 [0.80]; P < .001). Nonoverlapping placental expression of SARS-CoV-2 receptors angiotensin-converting enzyme 2 and transmembrane serine protease 2 was noted.

Conclusions and Relevance In this cohort study, there was no evidence of placental infection or definitive vertical transmission of SARS-CoV-2. Transplacental transfer of anti-SARS-CoV-2 antibodies was inefficient. Lack of viremia and reduced coexpression and colocalization of placental angiotensin-converting enzyme 2 and transmembrane serine protease 2 may serve as protective mechanisms against vertical transmission.
Available from: https://doi.org/10.1001/jamanetworkopen.2020.30455
Full URL: https://doi.org/10.1001/jamanetworkopen.2020.30455

2021-02147
The lived experiences of pregnant women during COVID-19 pandemic: a descriptive phenomenological study.
Mortazavi F, Ghardashi F (2021), BMC Pregnancy and Childbirth vol 21, no 193, 8 March 2021
Background
With the onset of the COVID-19 epidemic, pregnancy and childbirth for women are taking place in unusual circumstances. We explored the lived experiences of pregnant women during the COVID-19 pandemic to better understand their experience of pregnancy so that better support could be provided.

Methods
We used a descriptive phenomenological approach to understand the lived experience of pregnant women in COVID-19 pandemic. We collected data using a purposive sampling method through in-depth interviews in cyberspace with a semi-structured questionnaire. We used Colaizzi's seven-step content analysis method to analyze the research data with the help of MAXQDA software version 2020.

Results
We conducted this descriptive phenomenology study on 19 pregnant women in a period between the 10th to the 20th of May, 2020. The participating women were already pregnant when the first signs of the epidemic appeared in the country and at the time of the interview. We acquired four themes including disruption of the tranquility and regular

routines of daily life, new challenges caused by the epidemic, resilience and strength in facing the crisis, and adaptation with new conditions.

Conclusions
The pregnant women were under intense stress during the COVID-19 outbreak. The general mobilization the health system is necessary for alleviating pregnant women's difficulties in situations like the COVID-19 epidemic. Virtual training classes and virtual counseling may enhance the peace and tranquility of pregnant women.
Available from: https://doi.org/10.1186/s12884-021-03691-y
Full URL: https://doi.org/10.1186/s12884-021-03691-y

2021-02136
Infection precautions for severe acute respiratory syndrome coronavirus 2 in assisted reproduction centers: dodging an invisible bullet. Sparks AET, Kresowik JD (2021), Fertility and Sterility vol 115, no 4, April 2021, pp 831-839
The coronavirus disease 2019 pandemic has resulted in many changes in how we interact in society, requiring that we protect ourselves and others from an invisible, airborne enemy called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Until a vaccine is developed, and it reaches high levels of distribution, everyone must continue to be diligent to limit the viral spread. The practice of assisted reproduction during this pandemic presents unique challenges in addition to the risks identified in general clinical care. The established good tissue practices employed in laboratories are not designed to protect gametes and embryos from an airborne virus, particularly one that may be shed by an asymptomatic staff member. Armed with theoretical risks but lacking direct evidence, assisted-reproduction teams must examine every aspect of their practice, identify areas at a risk of exposure to SARS-CoV-2, and develop a mitigation plan. Several professional fertility societies have created guidelines for the best practices in patient care during the coronavirus disease 2019 pandemic. As we learn more about SARS-CoV-2, updates have been issued to help adapt infection-control and -prevention protocols. This review discusses what is currently known about SARS-CoV-2 infection risks in assisted reproductive centers and recommends the implementation of specific mitigation strategies. (Author)
Available from: https://doi.org/10.1016/j.fertnstert.2021.01.016
Full URL: https://doi.org/10.1016/j.fertnstert.2021.01.016

2021-02131
The effects of COVID-19 on pregnancy and implications for reproductive medicine. Joseph NT, Rasmussen SA, Jamieson DJ (2021), Fertility and Sterility vol 115, no 4, April 2021, pp 824-830
COVID-19 was officially declared a pandemic in March 2020. Since then, our understanding of its effects on pregnancy have evolved rapidly. Emerging surveillance data and large cohort studies suggest that pregnancy is associated with an increased risk of intensive care unit hospitalization, invasive ventilation, and death. Pregnancies complicated by SARS-CoV-2 infection are associated with increased likelihood of cesarean delivery and preterm birth. Intrauterine transmission occurs, but seems to be rare. Critical gaps remain, and rigorous high-quality data are needed to better ascertain pregnancy risks and to inform antenatal and obstetrical management. Since the first reported cases of coronavirus disease 2019 (COVID-19) in December 2019 and the official declaration of the outbreak as a pandemic by the World Health Organization (WHO) in March 2020 (1), there has been an explosion of cases and exponential growth in our understanding of the virulence, epidemiology, and clinical characteristics of this disease. In this review, we summarize and synthesize rapidly evolving knowledge regarding COVID-19 in pregnancy and reproductive medicine, as well as discuss critical gaps in the literature. (Author)
Available from: https://doi.org/10.1016/j.fertnstert.2020.12.032
Full URL: https://doi.org/10.1016/j.fertnstert.2020.12.032

2021-02129

The impact of SARS-CoV-2 and COVID-19 on male reproduction and men's health. Patel DP, Punjani N, Guo J, et al (2021), Fertility and Sterility vol 115, no 4, April 2021, pp 813-823

Many couples initially deferred attempts at pregnancy or delayed fertility care due to concerns about coronavirus disease 2019 (COVID-19). One significant fear during the COVID-19 pandemic was the possibility of sexual transmission. Many couples have since resumed fertility care while accepting the various uncertainties associated with severe acute respiratory syndrome coronavirus 2, including the evolving knowledge related to male reproductive health. Significant research has been conducted exploring viral shedding, tropism, sexual transmission, the impact of male reproductive hormones, and possible implications to semen quality. However, to date, limited definitive evidence exists regarding many of these aspects, creating a challenging landscape for both patients and physicians to obtain and provide the best clinical care. This review provides a comprehensive assessment of the evolving literature concerning COVID-19 and male sexual and reproductive health, and guidance for patient counseling. (Author)

Available from: https://doi.org/10.1016/j.fertnstert.2020.12.033

Full URL: https://doi.org/10.1016/j.fertnstert.2020.12.033

2021-02110

Reproductive sequelae of parental severe illness before the pandemic: implications for the COVID-19 pandemic. Kasman AM, Bhambhvani HP, Shufeng Li MS, et al (2020), Fertility and Sterility vol 114, no 6, December 2020, pp 1242-1249

Objective

To investigate, with pre–COVID-19 data, whether parental exposure to severe systemic infections near the time of conception is associated with pregnancy outcomes.

Design

Retrospective cohort study.

Setting

Population-based study covering births within the United States from 2009 to 2016.

Participants

The IBM MarketScan Research database covers reimbursed health care claims data on inpatient and outpatient encounters that are privately insured through employment-sponsored health insurance. Our analytic sample included pregnancies to paired fathers and mothers.

Interventions(s)

Parental preconception exposure (0–6 months before conception) to severe systemic infection (e.g., sepsis, hypotension, respiratory failure, critical care evaluation).

Main Outcome Measure(s)

Preterm birth (i.e., live birth before 37 weeks) and pregnancy loss.

Result(s)

A total of 999,866 pregnancies were recorded with 214,057 pregnancy losses (21.4%) and 51,759 preterm births (5.2%). Mothers receiving intensive care in the preconception period had increased risk of pregnancy loss, as did fathers. Mothers with preconception sepsis had higher risk of preterm birth and pregnancy loss, and paternal sepsis exposure was associated with an increased risk of pregnancy loss. Similar results were noted for hypotension. In addition, a dose response was observed for both mothers and fathers between preconception time in intensive care and the risk of preterm birth and pregnancy loss.

Conclusion(s)

In a pre–COVID-19 cohort, parental preconception severe systemic infection was associated with increased odds of preterm birth and pregnancy loss when conception was soon after the illness. (Author)

2021-02083

Pregnant women should be offered Covid vaccine. Anon (2021), BBC News 17 April 2021

Pregnant women should be offered a Covid jab when other people their age get one, the UK's vaccine advisers say. (Author)

Available from: https://www.bbc.co.uk/news/health-56778146
Full URL: https://www.bbc.co.uk/news/health-56778146

2021-02064

Pregnant People's Paradox—Excluded From Vaccine Trials Despite Having a Higher Risk of COVID-19 Complications. Rubin R (2021), JAMA (Journal of the American Medical Association) Vol 325, no 11, 16 March 2021, pp 1027-1028

This Medical News Quick Uptake discusses the evidence in favor of administering COVID-19 vaccines to pregnant individuals.

Available from: https://doi.org/10.1001/jama.2021.2264
Full URL: https://doi.org/10.1001/jama.2021.2264

2021-02063

Involving Pregnant Individuals in Clinical Research on COVID-19 Vaccines. Bianchi DW, Kaeser L, Cernich AN (2021), JAMA (Journal of the American Medical Association) Vol 325, no 11, 16 March 2021, pp 1041-1042

This Viewpoint from the National Institute of Child Health and Human Development emphasizes the need to use existing data sources and develop partnerships, infrastructure, and ethical and regulatory standards to generate data about the safety and efficacy of COVID-19 vaccination in pregnant individuals.

Available from: https://doi.org/10.1001/jama.2021.1865
Full URL: https://doi.org/10.1001/jama.2021.1865

2021-02062

Pregnancy, Postpartum Care, and COVID-19 Vaccination in 2021. Rasmussen SA, Jamieson DJ (2021), JAMA (Journal of the American Medical Association) Vol 325, no 11, 16 March 2021, pp 1099-1100

This JAMA Insights review summarizes the epidemiology of SARS-CoV-2 infection in pregnant and lactating women, its effects on perinatal outcomes, and compiles guidance from the CDC, FDA, and obstetrics-gynecology specialty organizations on the safety of coronavirus vaccines during pregnancy and while breastfeeding.

Available from: https://doi.org/10.1001/jama.2021.1683
Full URL: https://doi.org/10.1001/jama.2021.1683

2021-02061

COVID-19 Vaccination in Pregnant and Lactating Women. Adhikari EH, Spong CY (2021), JAMA (Journal of the American Medical Association) Vol 325, no 11, 16 March 2021, pp 1039-1040

This Viewpoint discusses the need for shared decision-making when counseling pregnant and nursing women about the unstudied benefits and risks COVID-19 vaccination, calling for rigorously designed studies with real-time, proactive data collection to establish evidence as quickly as possible about coronavirus vaccine safety in mothers and their infants.

Available from: https://doi.org/10.1001/jama.2021.1658
Full URL: https://doi.org/10.1001/jama.2021.1658

2021-02060

Changes in Abortion in Texas Following an Executive Order Ban During the Coronavirus Pandemic. White K, Kumar B, Goyal V, et al (2021), JAMA (Journal of the American Medical Association) Vol 325, no 7, 16 February 2021, pp 691-693

This study assesses changes in abortions performed and at what gestational age following a Texas order postponing

non–medically necessary surgeries due to the COVID-19 pandemic compared with abortions performed during the same months in 2019.
Available from: https://doi.org/10.1001/jama.2020.24096
Full URL: https://doi.org/10.1001/jama.2020.24096

2021-02051
Generation COVID-19 – Should the foetus be worried?. Iqbal AM, Burrin C, Aydin E, et al (2021), Acta Paediatrica vol 110, no 3, March 2021, pp 759-764
Aim
The aim of this narrative review was to evaluate the risks, both direct and indirect, to the foetus from the COVID-19 pandemic.

Methods
Direct and indirect risks were defined as (a) vertical infection (congenital or intrapartum), (b) maternal infection and its sequelae, and (c) sources of maternal stress during lockdown, including social isolation and altered healthcare provision.

Results
Early studies suggest that vertical viral transmission is low; however, there may be an important effect of maternal infection on foetal growth and development. The impact of various degrees of lockdown on prospective mothers' health, habits and healthcare provision is of concern. In particular, increased maternal stress has been shown to have a significant effect on foetal brain development increasing the risk of mental health, and cognitive and behavioural disorders in later life.

Conclusion
From the evidence available to date, direct risks to the foetus from the SARS-CoV-2 virus are low. Indirect effects of the pandemic, particularly resulting from the effect of maternal stress on the developing brain, can have lifelong detrimental impacts for this generation of children.
Available from: https://doi.org/10.1111/apa.15693
Full URL: https://doi.org/10.1111/apa.15693

2021-02008
Anxieties and apprehensions among women waiting for fertility treatments during the COVID-19 pandemic. Gupta M, Jaiswal P, Bansiwal R, et al (2021), International Journal of Gynecology & Obstetrics vol 152, no 3, March 2021, pp 441-443
During the COVID-19 pandemic, delays to fertility treatments and advancing age remain a major stressor for infertile women seeking treatment, thus necessitating the need to triage these patients.

2021-01879
Delayed presentation of ectopic pregnancy during the COVID-19 pandemic: A retrospective study of a collateral effect.
Barg M, Rotem R, Mor P, et al (2021), International Journal of Gynecology & Obstetrics 18 February 2021, online
Objective
We aimed to assess the rates of overall diagnosis of ectopic pregnancy (EP), treatment modality and associated complications during the COVID-19 pandemic compared to the exact time period in the previous year (pre-COVID-19).

Methods
A retrospective cohort study was conducted at a single referral regional center (Shaare Zedek Medical Center, Jerusalem, Israel). Prevalence of the diagnosis of EP, treatment modality and associated complications during the COVID-19 lockdown period in the state of Israel (March 10–May 12, 2020) was compared to patients receiving the same diagnosis during the parallel timeframe in the previous year (2019).

Results
Overall there were 29 and 43 cases of EP during the COVID-19 and pre COVID-19 epoch, respectively. COVID-19 period patients presented to the emergency room with significantly higher β-human chorionic gonadotrophin level; median of 1364 versus 633 IU, P = 0.001. The rate of ruptured EP was; 20.7% versus 4.3% P = 0.031, and surgical approach; 55.2% versus 27.9%, P = 0.001. Significantly higher median volume of blood loss; median volume 852 versus 300 ml, P = 0.042 were observed in patients during the COVID-19 epoch.

Conclusion
The COVID-19 pandemic led to delayed presentation of patients with EP, and the requirement of subsequent emergency surgical management and excessive blood loss. Special attention should be given to the decline in routine medical care during the pandemic.
Available from: https://doi.org/10.1002/ijgo.13647
Full URL: https://doi.org/10.1002/ijgo.13647

2021-01878
The impact of the COVID-19 pandemic on maternal mortality in Brazil: 523 maternal deaths by acute respiratory distress syndrome potentially associated with SARS-CoV-2. Nakamura-Pereira M, Knobel R, Menezes MO, et al (2021), International Journal of Gynecology & Obstetrics vol 153, no 2, May 2021, pp 360-362
During the study period, 523 pregnant or postpartum women died in Brazil due to confirmed COVID-19 or undetermined etiology. This results in a projected COVID-19 MMR of 17.5/100 000 or potentially even higher.
Full URL: https://doi.org/10.1002/ijgo.13632

2021-01829
Pregnant under the pressure of a pandemic: a large-scale longitudinal survey before and during the COVID-19 outbreak. Naurin E, Markstedt E, Stolle D, et al (2021), European Journal of Public Health vol 31, no 1, February 2021, pp 7-13
Background
One of the groups that is most vulnerable to the COVID-19 pandemic is pregnant women. They cannot choose to refrain from care; they and their children are at risk of severe complications related to the virus; and they lose comfort and support as clinics prohibit their partners and as societal restrictions demand isolation from friends and relatives. It is urgent to study how this group is faring during the pandemic and we focus here on their health-related worries.

Methods
A longitudinal survey at a Swedish hospital starting 6 months before (16 September 2019) and continuing during the COVID-19 outbreak (until 25 August 2020). A total of 6941 pregnant women and partners of diverse social backgrounds were recruited. Ninety-six percent of birth-giving women in the city take early ultrasounds where recruitment took place. Sixty-two percent of the women with an appointment and fifty-one percent of all partners gave consent to participate.

Results
Pregnant women experienced dramatically increased worries for their own health, as well as for their partner's and their child's health in the beginning of the pandemic. The worries remained at higher than usual levels throughout the pandemic. Similar, but less dramatic changes were seen among partners.

Conclusions
There is a need for heightened awareness of pregnant women's and partners' health-related worries as a consequence of the COVID-19 pandemic. Related feelings, such as anxiety, have been linked to adverse pregnancy outcome and might have long-term effects. The healthcare system needs to prepare for follow-up visits with these families. (Author)
Available from: https://doi.org/10.1093/eurpub/ckaa223
Full URL: https://doi.org/10.1093/eurpub/ckaa223

2021-01744
What is driving the decreased incidence of preterm birth during the coronavirus disease 2019 pandemic?. Lemon L, Edwards RP, Simhan HN (2021), American Journal of Obstetrics & Gynecology MFM vol 3, no 3, May 2021, 100330
BACKGROUND
Institutions across the world have observed a decrease in the incidence of preterm births during the coronavirus disease 2019 pandemic. The reason for this reduction remains unknown.

OBJECTIVE
We sought to explore potential causes for the decrease in preterm births by exploring the following 3 hypotheses: (1) do women who are more likely to be able to work from home incur less physical/or emotional stress resulting in longer gestation? (2) Does the effect of the coronavirus disease 2019 pandemic on the incidence of preterm births vary by race? (3) Is this change provider driven?

STUDY DESIGN
Using a retrospective cohort of all singleton deliveries at a single tertiary care center, we compared the deliveries for the period before the coronavirus disease 2019 pandemic (January 1, 2018–January 31, 2020) with those occurring during the pandemic (April 1, 2020–October 27, 2020). Comparisons between the period before and during the pandemic were made using Pearson chi-square or t tests as appropriate. The overall incidence of preterm birth, defined as delivery at <37 weeks' gestation, was analyzed and then further classified into spontaneous or indicated preterm births. The population was then stratified by the following categories: (1) insurance type and neighborhood disadvantage; (2) race; and (3) provider type. The provider type was classified as delivery occurring within an outpatient care facility, a clinic that provides prenatal care to those eligible for medical assistance, or a nonoutpatient care facility.

RESULTS
In a population of 17,687 pre–coronavirus disease 2019 deliveries, and 5396 deliveries occurring during the coronavirus disease 2019 pandemic, there was a significant decrease in the overall incidence of preterm births (11.1 vs 10.1%; P=.039). Both spontaneous and indicated preterm deliveries decreased across the entire population. When stratified, decreases in the incidence of spontaneous preterm birth before vs during the coronavirus disease 2019 pandemic were limited to deliveries to women from more advantaged neighborhoods (most advantaged, 4.4 vs 3.8%; least advantaged, 7.2 vs 7.4%), white mothers (white, 5.6 vs 4.7%; black, 6.6 vs 7.1%), and those receiving care from nonoutpatient care providers (nonoutpatient care providers, 5.5 vs 4.8%; outpatient care providers, 6.3 vs 6.7%).

CONCLUSION
The incidence of preterm births has decreased during the coronavirus disease 2019 pandemic. Decreases in the rate of spontaneous preterm births were limited to deliveries to white women, living in more advantaged neighborhoods, and deliveries at nonoutpatient care facilities. The coronavirus disease 2019 response regulations may have benefited women with more indicators of advantage disproportionately more.
Available from: https://doi.org/10.1016/j.ajogmf.2021.100330
Full URL: https://doi.org/10.1016/j.ajogmf.2021.100330

2021-01742
Maternal and perinatal outcomes in high vs low risk-pregnancies affected by SARS-COV-2 infection (Phase-2): The WAPM (World Association of Perinatal Medicine) working group on COVID-19. D'Antonio F, Sen C, Di Mascio D, et al (2021), American Journal of Obstetrics & Gynecology MFM 23 February 2021, 100329
Objectives
To evaluate maternal and perinatal outcomes in high compared to low-risk pregnancies complicated by SARS-COV-2 infection.

Methods
This was a multinational retrospective cohort study including women with laboratory-confirmed SARS-COV-2 from 76 centers from 25 different countries in Europe, United States, South America, Asia and Australia from 04 April 2020 till 28 October 2020. The primary outcome was a composite measure of maternal mortality and morbidity including admission to intensive care unit (ICU), use of mechanical ventilation, or death. Secondary outcome was a composite measure of adverse perinatal outcome, including miscarriage, fetal loss, neonatal (NND) and perinatal (PND) death, and admission to neonatal intensive care unit. All these outcomes were assessed in high-risk compared to low-risk pregnancies. Pregnancies were considered as high risk in case of either pre-existing chronic medical conditions pre-existing pregnancy or obstetric disorders occurring in pregnancy. Fisher-test and logistic regression analysis were used to analyze the data.

Results
887 singleton pregnancies tested positive to SARS-COV-2 at RT-PCR nasal and pharyngeal swab were included in the study. The risk of composite adverse maternal outcome was higher in high compared to low risk-pregnancies with an OR of 1.52 (95% CU 1.03-2.24; p= 0.035). Likewise, women carrying a high risk-pregnancies were also at higher risk of hospital admission (OR: 1.48, 95% CI 1.07-2.04; p= 0.002), presence of severe respiratory symptoms (OR: 2.13, 95% CI .41-3.21; p= 0.001), admission to ICU (OR: 2.63, 95% CI 1.42-4.88) and invasive mechanical ventilation (OR: 2.65, 95% CI 1.19- 5.94; p= .002). When exploring perinatal outcomes, high-risk pregnancies were also at high risk of adverse perinatal outcome with an OR 0f 1.78 (95% CI .15-2.72; p= 0.009). However, such association was mainly due to the higher incidence of miscarriage in high risk compared to low risk pregnancies (5.3% vs 1.6%, p= 0.008), while there was no difference as regard as the other explored outcomes between the two study groups. At logistic regression analysis, maternal age (OR: 1.12, 95% CI 1.02-1.22, p= 0.023) and the presence of a high-risk pregnancies (OR: 4.21, 95% CI 3.90-5.11, p<0.001) were independently associated with adverse maternal outcome.

Conclusions
High-risk pregnancies complicated by SARS-COV-2 infection are at higher risk of adverse maternal outcome compared to low-risk gestations.
Available from: https://doi.org/10.1016/j.ajogmf.2021.100329
Full URL: https://doi.org/10.1016/j.ajogmf.2021.100329

2021-01713

The association between SARS-CoV-2 infection and preterm delivery: a prospective study with a multivariable analysis. Martinez-Perez O, Rodriguez PP, Hernandez MM, et al (2021), BMC Pregnancy and Childbirth vol 21, no 273, 1 April 2021

Background

To determine whether severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2, the cause of COVID-19 disease) exposure in pregnancy, compared to non-exposure, is associated with infection-related obstetric morbidity.

Methods

We conducted a multicentre prospective study in pregnancy based on a universal antenatal screening program for SARS-CoV-2 infection. Throughout Spain 45 hospitals tested all women at admission on delivery ward using polymerase-chain-reaction (PCR) for COVID-19 since late March 2020. The cohort of positive mothers and the concurrent sample of negative mothers was followed up until 6-weeks post-partum. Multivariable logistic regression analysis, adjusting for known confounding variables, determined the adjusted odds ratio (aOR) with 95% confidence intervals (95% CI) of the association of SARS-CoV-2 infection and obstetric outcomes. Main outcome measures: Preterm delivery (primary), premature rupture of membranes and neonatal intensive care unit admissions.

Results

Among 1009 screened pregnancies, 246 were SARS-CoV-2 positive. Compared to negative mothers (763 cases), SARS-CoV-2 infection increased the odds of preterm birth (34 vs 51, 13.8% vs 6.7%, aOR 2.12, 95% CI 1.32–3.36, p = 0.002); iatrogenic preterm delivery was more frequent in infected women (4.9% vs 1.3%, p = 0.001), while the occurrence of spontaneous preterm deliveries was statistically similar (6.1% vs 4.7%). An increased risk of premature rupture of membranes at term (39 vs 75, 15.8% vs 9.8%, aOR 1.70, 95% CI 1.11–2.57, p = 0.013) and neonatal intensive care unit admissions (23 vs 18, 9.3% vs 2.4%, aOR 4.62, 95% CI 2.43–8.94, p < 0.001) was also observed in positive mothers.

Conclusion

This prospective multicentre study demonstrated that pregnant women infected with SARS-CoV-2 have more infection-related obstetric morbidity. This hypothesis merits evaluation of a causal association in further research.

Available from: https://doi.org/10.1186/s12884-021-03742-4

Full URL: https://doi.org/10.1186/s12884-021-03742-4

2021-01701

Pregnancy-related anxiety and its associated factors during COVID-19 pandemic in Iranian pregnant women: a web-based cross-sectional study. Hamzehgardeshi Z, Omidvar S, Amoli AA, et al (2021), BMC Pregnancy and Childbirth vol 21, no 208, 15 March 2021

Background

Pregnancy is a risk factor for coronavirus disease 2019 (COVID-19). Pregnant women suffer from varying levels of pregnancy-related anxiety (PRA) which can negatively affect pregnancy outcomes. The aim of this study was to assess PRA and its associated factors during the COVID-19 pandemic.

Methods

This web-based cross-sectional study was conducted in 2020 on 318 pregnant women purposively recruited from primary healthcare centers in Sari and Amol, Iran. Data were collected using questionnaires (PRAQ, Edinburg, KAP of COVID-19, CDA-Q and Demographic questionnaire), which were provided to participants through the social media or

were completed for them over telephone. Data were analyzed with the linear regression and the logistic regression analysis, at the significance level of 0.05 using the SPSS software (v. 21).

Results
Around 21% of participants had PRA, 42.1% had depression, and 4.4% had COVID-19 anxiety. The significant predictors of PRA were number of pregnancies (P = 0.008), practice regarding COVID-19 (P < 0.001), COVID-19 anxiety (P < 0.001), depression (P < 0.001), and social support (P = 0.025) which explained 19% of the total variance. Depression and COVID-19 anxiety increased the odds of PRA by respectively four times and 13%, while good practice regarding COVID-19 decreased the odds by 62%.

Conclusion
Around 21% of pregnant women suffer from PRA during the COVID-19 pandemic and the significant predictors of PRA during the pandemic include number of pregnancies, practice regarding COVID-19, COVID-19 anxiety, depression, and social support. These findings can be used to develop appropriate strategies for the management of mental health problems during pregnancy in the COVID-19 pandemic.
Available from: https://doi.org/10.1186/s12884-021-03694-9
Full URL: https://doi.org/10.1186/s12884-021-03694-9

20210127-4*
Lessons learnt in transitioning from universal screening to universal testing of pregnant patients for SARS-CoV-2 at the largest municipal health system in America. Wilcox W, Bajaj K, Rossberg MC, et al (2021), Journal of Perinatology 18 January 2021, online
Available from: https://doi.org/10.1038/s41372-020-00889-4
Full URL: https://doi.org/10.1038/s41372-020-00889-4
Provides a definition of universal SARS-CoV-2 testing for pregnant patients and discusses how testing was scaled up across 11 different obstetrics departments in New York City. (LDO)

20210127-1*
Covid: Being alone in pregnancy due to hospital rules. Thomas E (2021), BBC News 26 January 2021
Available from: https://www.bbc.co.uk/news/uk-england-55810079
Full URL: https://www.bbc.co.uk/news/uk-england-55810079
Pregnancy can be hard enough without a pandemic to complicate things. But when Covid rules meant some expectant mothers faced appointments, scans or delivery alone, the experience could be traumatic. What follows are the accounts of two women, including one who was on her own when she was given the worst news. (Author)

20210125-73*
COVID-19 pandemic and maternal mental health: a systematic review and meta-analysis. Hessami K, Romanelli C, Chiurazzi M, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 1 November 2020, online
Available from: https://doi.org/10.1080/14767058.2020.1843155
Full URL: https://doi.org/10.1080/14767058.2020.1843155
Objective
To evaluate the effect of the COVID-19 pandemic on anxiety and depression of women during pregnancy and perinatal period.

Methods
We systematically searched online databases to identify any report on maternal depression during pregnancy or postpartum using the Edinburgh Postnatal Depression Survey (EPDS) and maternal anxiety using the State-Trait Anxiety Inventory (STAI) until 5th July 2020. The random-effects model was used to pool the effect sizes and standardized mean differences (SMDs) and the corresponding 95% confidence intervals (CIs).
Results
Eight studies reported depressive and anxiety states of 7750 women, either pregnant or postpartum were included. The overall pooled EPDS score was higher among women during pandemic (SMD= 0.40, 95% CI: −0.05 − 0.86, p = .083) compared to previous non-pandemic times, without reaching a statistically significant difference. However, the overall pooled STAI score was significantly higher during pandemic (SMD= 0.82, 95% CI: 0.49 − 1.16, p < .001). No significant publication bias existed in selected studies (p > .05).
Conclusion
The present meta-analysis provides evidence that the COVID-19 pandemic significantly increases the risk of anxiety among women during pregnancy and perinatal period. Support measures should be considered for women during pregnancy or perinatal period to guarantee mental health for this susceptible population. (Author)

20210125-49*
The COVID-19 stress may influence on the sex ratio at birth. Abdoli A (2020), The Journal of Maternal-Fetal and Neonatal Medicine 12 November 2020, online

The ratio of boys to girls (sex ratio) at birth (SRB) is about 1.01-1.05 in most populations and is influenced by various factors, such as maternal stress, maternal inflammation, and endocrine disruption. Male fetus is biologically weaker and more vulnerable to prenatal events than female fetuses. Hence, premature death (and consequently decline the SRB) is higher in boys than girls. The recent coronavirus disease 2019 (COVID-19) has been known to have a variety of stressful and psychological impacts. This stress may consequently enhance maternal inflammation, pregnancy complication, and fetal loss. Also, male fetuses have more adverse outcomes than female fetuses among asymptomatic pregnant women with SARS-Cov-2 infection. Inasmuch as the male fetus are more vulnerable to prenatal events and premature death, it is proposed that the SRB can decline in pregnant women following the COVID-19 stress. However, future studies are needed to define the impact of the COVID-19 on SRB rate. (Author)

20210125-41*
Changes in the obstetrical emergency department profile during the COVID-19 pandemic. Kugelman N, Lavie O, Assaf W, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 16 November 2020, online
Available from: https://doi.org/10.1080/14767058.2020.1847072
Full URL: https://doi.org/10.1080/14767058.2020.1847072
Background
The COVID-19 outbreak caused persons to be reluctant to seek medical care due to fear of contracting the infection.
Objectives
To evaluate the effect of the COVID-19 pandemic on admission rates to the delivery room and the feto-maternal unit, and to assess the effect on the nature of presenting obstetrical complaints to the emergency department.
Study Design
A retrospective cohort study in one medical center. The population was women > 20 weeks pregnant who presented to the obstetrical emergency department with self-complaints during 29 days at the peak of the pandemic outbreak, and a matched group during the exact period in the previous year. We compared between the groups: clinical, obstetrical, and demographic data, including age, area of residence, gravidity, parity, previous cesarean deliveries, high-risk pregnancy follow-up, the last 30 days admissions to the obstetrical emergency department, gestational age,

chief complaints, cervical dilatation, cervical effacement, admissions to the delivery room or feto-maternal unit, time from admissions to the delivery room to birth, if applicable, and acute obstetrical complications diagnosed at the emergency department.
Results
During the pandemic outbreak, 398 women met study inclusion criteria, compared to 544 women in the matched period of the previous year. During the COVID-19 period, women visited the obstetrical emergency department at a more advanced mean gestational age (37.6 ± 3.7 vs. 36.7 ± 4.6, p = .001). Higher proportions of women in the COVID-19 cohort presented in active labor, defined by cervical dilation of at least 5 cm on admission to the labor ward [37 (9.3%) vs 28 (5.1%), p = .013)] and with premature rupture of membranes [82 (20.6%) vs 60 (11.0%), p < .001)], and consequently with more admissions to the delivery room [198 (49.7%) vs 189 (34.7%), p < .001)]. We also recorded a significant increase in urgent obstetrical events in the emergency department during the recorded COVID-19 pandemic [23 (5.8%) vs 12 (2.2%)), p = .004]. However, the rates of neonatal and maternal morbidity did not change. During the outbreak the proportion of visits during the night was higher than during the matched period of the previous year: [138 (34.7%) vs 145 (26.6%)), p = .008]. In a multivariate logistic regression, the higher rates of admission to the delivery room during active labor and of urgent events during the pandemic outbreak compared to the matched period in the previous year remained statistically significant.
Conclusions
The pandemic outbreak of COVID-19 caused a behavioral change among women who presented to the obstetrical emergency department. This was characterized by delayed arrival to the obstetrical emergency department and the delivery room, which led to a significant increase in urgent and acute interventions. The change in behavior did not affect the rates of maternal and neonatal morbidity. (Author)

20210122-35*

Pregnancy and Breastfeeding During the COVID-19 Pandemic: Your Workplace Rights. American College of Nurse-Midwives (2020), Journal of Midwifery and Women's Health vol 65, no 6, November/December 2020, pp 835-836
Available from: https://doi.org/10.1111/jmwh.13199
Full URL: https://doi.org/10.1111/jmwh.13199

Provides an overview of the reasonable adjustments employers should make for pregnant and breastfeeding women during the COVID-19 pandemic. (LDO)

20210122-34*

Coronavirus Disease 2019 (COVID-19). American College of Nurse-Midwives (2020), Journal of Midwifery and Women's Health vol 65, no 6, November/December 2020, pp 833-834
Available from: https://doi.org/10.1111/jmwh.13196
Full URL: https://doi.org/10.1111/jmwh.13196

Provides an overview of how pregnant women can protect themselves and their babies against COVID-19. (LDO)

20210120-21*

The impact of the COVID-19 pandemic on depression and stress levels in pregnant women: a national survey during the COVID-19 pandemic in Mexico. Medina-Jimenez V, Bermudez-Rojas ML, Murillo-Bargas H, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 26 November 2020, online

Background
COVID-19 outbreak has been associated with a wide variety of psychiatric manifestations such as panic, anxiety, and depression. We aim to assess the impact of the COVID − 19 pandemic on the levels of stress and depression of pregnant women in Mexico.

Methods
A cross-sectional web survey was carried out in pregnant women in 10 states of the Mexican Republic during the COVID-19 pandemic among public and private hospitals. The perception of stress was assessed using the Perceived Stress Scale, while depressive symptoms were evaluated using the Edinburgh Postnatal Depression Scale.
Results
A total of 549 surveys were applied, of which 96.1% (n = 503) were included in the data analysis. The mean participant's age was 28.1 years old. The mean perceived stress scale score was 24. 33.2% (n = 167) of participants had a score equal to 27 points or more and were considered highly stressed. The mean depression score was 9. A total of 17.5% (n = 88) participants had more than 14 points on the Edinburgh's depression scale, and were considered depressed. Stress levels were higher at later gestational ages (p = .008).
Conclusions
COVID-19 pandemic has caused mental health issues in pregnant women reflected by high perceived stress levels and depression. (Author)

20210120-16*
Perinatal COVID-19 outcomes: evaluating the strength of current evidence. Sulentic RO, Seferovic MD, Aagaard KM, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 29 November 2020, online
Available from: https://doi.org/10.1080/14767058.2020.1849101
Full URL: https://doi.org/10.1080/14767058.2020.1849101
Purpose of the Study: Viral respiratory diseases, like those caused by novel strains of influenza and Coronaviridae, have historically disproportionately affected pregnant women and conferred increased risk of adverse perinatal outcomes. Initial reports published from Wuhan, China identified only limited symptoms in pregnant women and no cases of mortality, but more recent reports from other regions of the world have reported contrasting information. The purpose of the study was to evaluate initially published cases of SARS-CoV-2 infection in pregnant women in China and compare them to subsequently published studies from the remainder of the world.
Materials and Methods: This review curates 199 maternal published cases of SARS-CoV-2 infection and COVID-19 initially reported in the literature from China and contrasts them to more recent literature reporting clinical findings and outcomes of 729 selected cases from the rest of the world, including the United States.
Results: Overall, initial case reports and series from China reported no cases of maternal mortality, which contrasts with subsequent reports from other regions of the world demonstrating significant morbidity and mortality can and does occur in pregnant women infected with SARS-CoV-2.
Conclusion: While initial reports suggest limited risks of infection in pregnancy with SARS-CoV-2, subsequent findings have demonstrated pregnant women are at risk for severe morbidity and mortality. Case studies and series that are imperative in the early stages of a pandemic to provide data on a novel pathogen cannot be used to provide generalizable information predicting group risks. (Author)

20210120-15*
Clinical course of novel COVID-19 infection in pregnant women. Shmakov RG, Prikhodko A, Polushkina E, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 29 November 2020, online
Available from: https://doi.org/10.1080/14767058.2020.1850683
Full URL: https://doi.org/10.1080/14767058.2020.1850683

Objectives
Evaluation of clinical course of COVID-19 during pregnancy and maternal and perinatal outcomes of this pregnancy.

Methods
66 women with polymerase chain reaction (PCR) - confirmed SARS-CoV-2 and their 42 neonates were included in the prospective observational study. Demographic, epidemiological, clinical, laboratory and instrumental data of pregnancy, delivery, postpartum period, including pharmacotherapy and neonatal outcomes were analyzed.
Results
15 (22.7%) women were asymptomatic, 25 (38%) had mild disease, while moderate and severe forms were detected in 20 (30.2%) and 6 (9.1%) cases, respectively. Additional oxygenation was required in 6 (9%) cases: 4 (6%) received CPAP therapy and 2 (3%) - mechanical ventilation. Main clinical symptoms were cough (51.5%), anosmia (34.9%), and hyperthermia (33.3%). Laboratory changes included increased levels of lactate dehydrogenase (LDH), creatinine, d-dimer, and C-reactive protein (CRP), anemia, and leukopenia. All pregnant women received low molecular weight heparin and interferon alfa-2b according to the National clinical recommendations. Antimicrobial drugs included Amoxicillin/Clavulanic acid (46%) and macrolides (28%) or carbapenems in severe cases of disease. Spontaneous abortion was reported in 6.1% of cases. Eight preterm (19%) and 34 term deliveries (81%) occurred. The mean weight of neonates was (3283 ± 477) g, 1- and 5-min Apgar score was (7.8 ± 0.6) and (8.7 ± 0.5), respectively. No cases of neonatal COVID-19 infection were reported.
Conclusions
Mostly, the manifestations of COVID-19 were mild. However, 9% of cases were severe, and could contribute to preterm delivery or maternal morbidity. Main predictors of severe COVID-19 course in pregnant women were a decrease in the levels of erythrocytes and lymphocytes and increase in the levels of alanine aminotransferase and CRP. Elimination of the virus in pregnant women required more time due to altered immunity. No evidence of vertical transmission during pregnancy and delivery was found. However, the possibility of this cannot be excluded. (Author)

20210114-20*
Pregnancy outcomes among symptomatic and asymptomatic women infected with COVID-19 in the west of Iran: a case-control study. Jenabi E, Bashirian S, Khazaei S, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 15 December 2020, online
Background
The purpose of this study was to investigate pregnancy outcomes among symptomatic and asymptomatic women infected with coronavirus disease 2019 (COVID-19) in the west of Iran.
Materials and methods
In this case-control study, 45 pregnant women infected with symptomatic COVID-19 were compared with 45 pregnant women infected with asymptomatic COVID-19. The cases included women were referred for delivery to hospitals of Hamadan Province and infected with COVID-19-related symptoms. The diagnosis of COVID-19 was based on the results of real-time reverse-transcriptase polymerase-chain-reaction (rRT-PCR) detection. The control group included asymptomatic women who were referred for delivery to hospitals in Hamadan Province infected with COVID-19. Data were collected by a checklist. For the data analysis, the Stata version 12 was used (StataCorp, College Station, TX).
Results
The odds of cesarean delivery in symptomatic women was more the fourfold higher (OR = 4.12, 95% CI (1.7, 10.05), p = .002). Moreover, the odds of LBW was significantly higher in symptomatic women (OR = 2.1, 95% CI (1.2, 6.29), p = .035).
Conclusions
Our findings showed that cesarean delivery and LBW were significantly higher in symptomatic women compared with asymptomatic women. In areas with high COVID-19 pandemics, the performance of the PCR test is recommended for all pregnant women upon admission for delivery. (Author)

20210111-17*

Changes in Preterm Birth Phenotypes and Stillbirth at 2 Philadelphia Hospitals During the SARS-CoV-2 Pandemic, March-June 2020. Handley SC, Mullin AM, Elovitz MA, et al (2021), JAMA (Journal of the American Medical Association) vol 325, no 1, 5 January 2021, pp 87-89
Available from: https://doi.org/10.1001/jama.2020.20991
Full URL: https://doi.org/10.1001/jama.2020.20991

Research letter exploring whether preterm birth, spontaneous preterm birth, medically indicated preterm birth and stillbirth rates changed during the SARS-CoV-2 pandemic. Results from two hospitals in Philadelphia indicate that preterm and stillbirth rates did not change. (LDO)

20210111-16*

Stillbirths During the COVID-19 Pandemic in England, April-June 2020. Stowe J, Smith H, Thurland K, et al (2021), JAMA (Journal of the American Medical Association) vol 325, no 1, 5 January 2021, pp 86-87
Available from: https://doi.org/10.1001/jama.2020.21369
Full URL: https://doi.org/10.1001/jama.2020.21369

Research letter exploring the risk of stillbirth during the COVID-19 pandemic using national and regional hospitalisation data between April and June 2020. Results indicate that there was no increase in stillbirth compared with the same months in the previous year. (LDO)

20210108-2*

Coronavirus latest: Young women are the unlikely new face of vaccine resistance. Speed B (2020), iNews 6 January 2020
Available from:
https://inews.co.uk/news/health/coronavirus-latest-experts-debunk-vaccine-fertility-myths-women-819783
Full URL:
https://inews.co.uk/news/health/coronavirus-latest-experts-debunk-vaccine-fertility-myths-women-819783

News item reporting that young women between the ages of 18 and 34 are the most likely population group to refuse the Pfizer/BioNTech COVID-19 vaccine, amid fears sparked by misinformation concerning damage to their fertility. States that no study has been undertaken to support this claim, and Dr Victoria Male, a a lecturer in reproductive immunology at Imperial College London, has said that it is not usual for full fertility studies to be undertaken before vacines and medications are rolled out because of the length of time this would take. States that this vaccine could be particularly important for women who are planning a pregnancy, because pregnancy and COVID-19 put pressure on the lungs and heart. (JSM**)**

20210106-27*

Exercise routine change is associated with prenatal depression scores during the COVID-19 pandemic among pregnant women across the United States. Gildner TE, Laugier EJ, Thayer ZM (2020), PLoS ONE vol 15, no 12, 21 December 2020, e0243188
Available from: https://doi.org/10.1371/journal.pone.0243188
Full URL: https://doi.org/10.1371/journal.pone.0243188

Background: The COVID-19 pandemic has negatively affected physical and mental health worldwide. Pregnant women already exhibit an elevated risk for depression compared to the general public, a pattern expected to be exacerbated by the pandemic. Certain lifestyle factors, including moderate exercise, may help support mental health during pregnancy, but it is unclear how the pandemic may impact these associations across different locations. Here, we test whether: (i) reported exercise routine alterations during the pandemic are associated with depression scores; and, (ii)

the likelihood of reporting pandemic-related exercise changes varies between women living in metro areas and those in non-metro areas.
Methods: This cross-sectional study used data from the COVID-19 And Reproductive Effects (CARE) study, an online survey of pregnant women in the United States. Participants were recruited April-June 2020 (n = 1,856). Linear regression analyses assessed whether reported COVID-19-related exercise change was associated with depression score as measured by the Edinburgh Postnatal Depression Survey. Logistic regression analyses tested whether a participant's Rural-Urban Continuum Code classification of 'metro' was linked with higher odds of reporting exercise changes compared to a 'non-metro' classification.
Results: Women who reported exercise changes during the pandemic exhibited significantly higher depression scores compared to those reporting no changes. Moreover, individuals living in metro areas of all sizes were significantly more likely to report exercise changes compared to women living in non-metro areas.
Conclusions: These results suggest that the ability to maintain an exercise routine during the pandemic may help support maternal mental health. It may therefore be prudent for providers to explicitly ask patients how the pandemic has impacted their exercise routines and consider altered exercise routines a potential risk factor for depression. An effort should also be made to recommend exercises that are tailored to individual space restrictions and physical health. (Author)

20210106-21*
President's Corner: Introduction to ABM's Statement on Considerations for COVID-19 Vaccination in Lactation. Stuebe A (2020), Breastfeeding Medicine 23 December 2020, online

The recent emergency use authorization of novel mRNA vaccines to prevent COVID-19 is a triumph for science. Less than a year after the SARS-CoV-2 virus was first identified, we have a 95% effective vaccine in production. There is much to celebrate, and there is also a yawning gap: phase 3 trials of these novel mRNA-based vaccines excluded pregnant and lactating women. This void is the product of decisions made >40 years ago to exclude pregnant and lactating women from research, with the goal of avoiding any risk to the fetus or nursing child. In the short term, this strategy avoided liability; in the long term, it has left providers and patients without clinical data to make informed decisions. Without clinical data, the Academy of Breastfeeding Medicine relied on biological plausibility and expert opinion to craft a statement on considerations for mRNA COVID-19 vaccines during lactation. The available information is reassuring; however, pregnant and lactating people deserve better than plausibility to guide medical decisions. Henceforward, phase 3 clinical trials should routinely include pregnant and lactating participants. It is time to protect pregnant and breastfeeding individuals through research, not from research. (Author)

20210105-34*
Coronavirus disease 2019 vaccines in pregnancy. Craig AM, Hughes BL, Swamy GK (2021), American Journal of Obstetrics & Gynecology MFM vol 3, no 2, March 2021, 100295
Available from: https://doi.org/10.1016/j.ajogmf.2020.100295
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100295
As of December 1, 2020, nearly 64 million people have been infected with COVID-19 worldwide with nearly 1.5 million global deaths. The impact of this virus has continued to overwhelm hospital infrastructure and demanded remodeling of healthcare systems. With rising concerns for a third, and possibly the largest, wave of infected individuals, national leaders are continuing to seek avenues by which we can further limit disease transmission and prevent infection with the use of vaccination. To our knowledge, no clinical trial evaluating vaccines to prevent COVID-19 has included pregnant women. By December 2020, it's anticipated that the FDA will approve at least one or two mRNA-based COVID-19 vaccine under emergency use authorization (EUA) based on Phase 3 clinical trial efficacy data. Both Pfizer

and Moderna have manufactured mRNA-based vaccines with 95% and 94.1% efficacy against COVID-19. [1, 2] AstraZeneca has manufactured a vaccine using a viral-vector demonstrating early efficacy as well and this next generation platform has previously been utilized with the Ebola vaccine and safely administered during pregnancy with an acceptable safety profile [3]. Approval of these vaccines will have a tremendous impact on the ongoing pandemic, yet there remains a lack of data for use of COVID-19 vaccine in pregnant women. In this article we seek to discuss the available data regarding treatment and prevention of COVID-19 in pregnancy and address the growing questions regarding how best to approach vaccine access and administration in the pregnant population. (Author)

20210105-3*

Young pregnant women are also at an increased risk of mortality and severe illness due to COVID-19: Analysis of the Mexican National Surveillance Program. Portilla RJM, Smith ER, He S, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) 17 December 2020, online

Available from: https://doi.org/10.1016/j.ajog.2020.12.1197

Full URL: https://doi.org/10.1016/j.ajog.2020.12.1197

Research letter evaluating whether pregnant women are at increased risk of death or severe illness due to COVID-19 compared to non-pregnant women and whether this risk varies by age. Results indicate that risk of death and pneumonia increases with age for both pregnant and non-pregnant women, and pregnant women had a consistently higher risk of death and pneumonia compared with similarly aged non-pregnant women. (LDO)

20210104-6*

Coronavirus (COVID-19): advice for pregnant employees [Last updated 26 February 2021]. Department of Health and Social Care, Health and Safety Executive (2020), London: DHSC 23 December 2020

Available from:
https://www.gov.uk/government/publications/coronavirus-covid-19-advice-for-pregnant-employees

Full URL: https://www.gov.uk/government/publications/coronavirus-covid-19-advice-for-pregnant-employees

Advice for pregnant employees on risk assessments in the workplace and occupational health during the coronavirus (COVID-19) pandemic. (Author)

20210104-2*

Covid-19: The Philippines and its lockdown baby boom. Johnson H, Simonette V, Drury F (2020), BBC News 23 December 2020

Available from: https://www.bbc.co.uk/news/world-asia-55299912

Full URL: https://www.bbc.co.uk/news/world-asia-55299912

Reports on the baby boom in the Philippines as a result of the lack of contraception and family planning services during COVID-19. (LDO)

20210104-1*

Coronavirus doctor's diary: 'Close to death from Covid, I asked them to save my baby'. Wright J (2020), BBC News 31 December 2020

Available from: https://www.bbc.co.uk/news/health-55490440

Full URL: https://www.bbc.co.uk/news/health-55490440

When a young woman was brought to hospital struggling to breathe and seven months pregnant, staff at Bradford Royal Infirmary knew they had two lives to save, writes Dr John Wright. (Author)

2021-00736

Baby loss in lockdown, the loneliest of times. Does social media help?. Wall J (2020), AIMS Journal vol 32, no 4, December 2020

Available from: https://www.aims.org.uk/journal/item/lockdown-miscarriage
Full URL: https://www.aims.org.uk/journal/item/lockdown-miscarriage

Julie Wall describes her experience of baby loss during lockdown and how she found support, information, and empathy on social media. (Author)

2021-00732

A (Mother's) Visual Diary on Social Media: Pregnancy and Motherhood during the Covid-19 Pandemic. Allen J (2020), AIMS Journal vol 32, no 4, December 2020

Available from: https://www.aims.org.uk/journal/item/allen-visual-diary
Full URL: https://www.aims.org.uk/journal/item/allen-visual-diary

Jocelyn Allen explores pregnancy and the transition to motherhood in her art and writing through the lens of social media. (Author)

2021-00731

The Use of Social Media in Pregnancy and Early Parenthood. Handel K, Izzi L, Smith A (2020), AIMS Journal vol 32, no 4, December 2020

Available from: https://www.aims.org.uk/journal/item/editorial-social-media
Full URL: https://www.aims.org.uk/journal/item/editorial-social-media

Editorial discussing the theme of 'the use of social media in pregnancy and beyond' for the December 2020 issue. (LDO)

2021-00729

COVID-19 Infection During Pregnancy and Risk of Neurodevelopmental Disorders in Offspring: Time for Collaborative Research. López-Díaz A, Ayesa-Arriola R, Crespo-Facorro B, et al (2021), Biological Psychiatry vol 89, no 5, 1 March 2021, pp E29-E30

Available from: https://doi.org/10.1016/j.biopsych.2020.09.011
Full URL: https://doi.org/10.1016/j.biopsych.2020.09.011

Correspondence drawing on studies which have shown an association between acute respiratory virus infections and long-term neurological and neuropsychiatric problems, and further evidence suggesting that prenatal exposure to respiratory infections can lead to neurodevelopmental disorders in offspring. Raises concern for the offspring of women who are currently pregnant and the risk of COVID-19 exposure. Highlights the need for collaborative research in order to determine the prenatal effects of COVID-19 on neuropsychiatric outcomes. (JSM)

2021-00709

Anxious in a pandemic. Powell L (2020), AIMS Journal vol 32, no 2, June 2020

Available from: https://www.aims.org.uk/journal/item/covid-19-louisa-powell
Full URL: https://www.aims.org.uk/journal/item/covid-19-louisa-powell

Louisa Powell writes how supportive her midwives have been as the Covid-19 pandemic made her pregnancy-related anxiety even worse. (Author)

2021-00694

Stressors, coping, and resources needed during the COVID-19 pandemic in a sample of perinatal women. Barbosa-Leiker C, Smith CL, Crespi EJ, et al (2021), BMC Pregnancy and Childbirth vol 21, no 171, 1 March 2021
Available from: https://doi.org/10.1186/s12884-021-03665-0

Background

Psychological stress and coping experienced during pregnancy can have important effects on maternal and infant health, which can also vary by race, ethnicity, and socioeconomic status. Therefore, we assessed stressors, coping behaviors, and resources needed in relation to the COVID-19 pandemic in a sample of 162 perinatal (125 pregnant and 37 postpartum) women in the United States.

Methods

A mixed-methods study captured quantitative responses regarding stressors and coping, along with qualitative responses to open-ended questions regarding stress and resources needed during the COVID-19 pandemic. Logistic and linear regression models were used to analyze differences between pregnant and postpartum participants, as well as differences across key demographic variables. Qualitative content analysis was used to analyze open-ended questions.

Results

During the COVID-pandemic, food scarcity and shelter-in-place restrictions made it difficult for pregnant women to find healthy foods. Participants also reported missing prenatal appointments, though many reported using telemedicine to obtain these services. Financial issues were prevalent in our sample and participants had difficulty obtaining childcare. After controlling for demographic variables, pregnant women were less likely to engage in healthy stress-coping behaviors than postpartum women. Lastly, we were able to detect signals of increased stressors induced by the COVID-19 pandemic, and less social support, in perinatal women of racial and ethnic minority, and

lower-income status. Qualitative results support our survey findings as participants expressed concerns about their baby contracting COVID-19 while in the hospital, significant others missing the delivery or key obstetric appointments, and wanting support from friends, family, and birthing classes. Financial resources, COVID-19 information and research as it relates to maternal-infant health outcomes, access to safe healthcare, and access to baby supplies (formula, diapers, etc.) emerged as the primary resources needed by participants.

Conclusions

To better support perinatal women's mental health during the COVID-19 pandemic, healthcare providers should engage in conversations regarding access to resources needed to care for newborns, refer patients to counseling services (which can be delivered online/via telephone) and virtual support groups, and consistently screen pregnant women for stressors.

2021-00614

Pregnant women's well-being and worry during the COVID-19 pandemic: a cross-sectional study. Mortazavi F, Mehrabadi M, KiaeeTabar R, et al (2021), BMC Pregnancy and Childbirth vol 21, no 59, 15 January 2021
Available from: https://doi.org/10.1186/s12884-021-03548-4
Full URL: https://doi.org/10.1186/s12884-021-03548-4

Background

COVID-19 caused some worries among pregnant women. Worries during pregnancy can affect women's well-being.

We investigated worry and well-being and associated factors among pregnant women during the COVID-19 pandemic.

Methods
This descriptive cross-sectional study was conducted on 484 pregnant women using an online questionnaire. Sampling was performed in a period between May 5 and Aug 5, 2020. Inclusion criteria were having a single healthy fetus and having no significant psychological disorder. We collected the data using the Persian versions of the World Health Organization's Well-Being Index (WHO-5 Well-Being Index) and the Cambridge Worry Scale. We used univariate and multivariate logistic regression analyses to identify predictors of women's worry and well-being.

Results
The mean total scores of the WHO-5 Well-Being Index and the percentage of WHO-5 score < 50 were 64.9 ± 29.0 and 24.4%, respectively. Predictors of women's worry are the increased level of fear of COVID-19 (OR = 6.40, p < 0.001), a low family income (OR = 3.41, p < 0.001), employment status (OR = 1.86, p = 0.019), nulliparity (OR = 1.68, p = 0.024), having a COVID-19 infected person among relatives (OR = 2.45, p = 0.036), having a history of abortion (OR = 1.86, p = 0.012), having participated in the study after the first wave of COVID-19 outbreak (OR = 2.328, p = 0.003), and women's age < 30 year (OR = 2.11, p = 0.002). Predictors of low level of well-being in pregnant women are worry about their own health and relationships (OR = 1.789, p = .017), worry about fetus health (OR = 1.946, p = 0.009), and having at least one infected person with COVID-19 among relatives (OR = 2.135, p = 0.036).

Conclusions
The percentage of women experiencing a low well-being state was relatively high. This result is worthy of attention by health care providers and policy makers. Providing care and support to pregnant women should have high priority during the COVID-19 pandemic.

2021-00584
Gestation and COVID-19: clinical and microbiological observational study (Gesta-COVID19). Suy A, Garcia-Ruiz I, Carbonell M, et al (2021), BMC Pregnancy and Childbirth vol 21, no 78, 22 January 2021
Available from: https://doi.org/10.1186/s12884-021-03572-4
Full URL: https://doi.org/10.1186/s12884-021-03572-4

Background
The Coronavirus Disease 2019 (COVID-19) is a novel disease which has been having a worldwide affect since December 2019. Evidence regarding the effects of SARS-CoV-2 during pregnancy is conflicting. The presence of SARS-CoV-2 has been demonstrated in biological samples during pregnancy (placenta, umbilical cord or amniotic fluid); however, maternal and fetal effects of the virus are not well known.

Methods
Descriptive, multicentre, longitudinal, observational study in eight tertiary care hospitals throughout Spain, that are referral centres for pregnant women with COVID-19. All pregnant women with positive SARS-CoV-2 real-time reverse transcriptase polymerase chain reaction during their pregnancy or 14 days preconception and newborns born to mothers infected with SARS-CoV-2 will be included. They will continue to be followed up until 4 weeks after delivery. The aim of the study is to investigate both the effect of COVID-19 on the pregnancy, and the effect of the pregnancy status with the evolution of the SARS-CoV-2 disease. Other samples (faeces, urine, serum, amniotic fluid, cord and peripheral blood, placenta and breastmilk) will be collected in order to analyse whether or not there is a risk of

vertical transmission and to describe the behaviour of the virus in other fluids. Neonates will be followed until 6 months after delivery to establish the rate of neonatal transmission. We aim to include 150 pregnant women and their babies. Ethics approval will be obtained from all the participating centres.

Discussion
There is little information known about COVID-19 and its unknown effects on pregnancy. This study will collect a large number of samples in pregnant women which will allow us to demonstrate the behaviour of the virus in pregnancy and postpartum in a representative cohort of the Spanish population.

2021-00555
Respiratory illness, pneumonia and pregnancy: facilitating complex childbirth. Sherriff SL (2021), MIDIRS Midwifery Digest vol 31, no 1, March 2021, pp 73-78

The purpose of this work is to explore the promotion of normality and advocacy for women with additional complex needs resulting from respiratory illnesses, primarily pneumonia. Pre-existing literature will be examined in order to identify how both physiological and psychological implications may arise in response to the condition and the care provided. (Author)

2021-00461
Pandemic-related pregnancy stress assessment–Psychometric properties of the Polish PREPS and its relationship with childbirth fear. Ilska M, Kołodziej-Zaleska A, Brandt-Salmeri A, et al (2021), Midwifery vol 96, May2021, 102940
Purpose
The aim of the study was to create and to validate the Polish version of the original English version of the Pandemic-Related Pregnancy Stress Scale (PREPS) developed by Preis and colleagues (2020a; 2020b) We additionally investigated the association of maternal obstetrical and pandemic related factors with the PREPS in order to test its sensitivity.

Methods
A cross-sectional study design with nonrandom sampling was used. The sample consisted of a total of 1148 pregnant women in various trimesters. They were recruited via social media and completed an online study questionnaire in April-May 2020.

Results
The results of the present research indicate satisfactory psychometric properties of the Polish version of the PREPS. Our findings confirm the factor structure found by the authors of the original English version of the PREPS. The scale consists of two stress subscales: perinatal infection stress and preparedness stress and one additional positive appraisal scale. Pandemic-related pregnancy stress is significantly associated with fear of childbirth and with non-pandemic pregnancy-specific stress, which bolsters its convergent validity. Higher levels of pandemic-related pregnancy stress are experienced by primiparas, those in their second or third trimester, women who received infertility treatment, and those with a high-risk pregnancy.

Conclusions
The Polish version of the PREPS has sound psychometric properties and replicates the structure of the original English PREPS. This stress scale can be used to investigate additional impacts of the COVID-19 pandemic and to identify women at risk of high stress and those who need intervention.

2021-00452

Variations in health behaviors among pregnant women during the COVID-19 pandemic. Whitaker KM, Hung P, Alberg AJ, et al (2021), Midwifery vol 95, April 2021, 102929

Available from: https://doi.org/10.1016/j.midw.2021.102929

Full URL: https://doi.org/10.1016/j.midw.2021.102929

Purpose

To examine changes in lifestyle behaviors early in the COVID-19 pandemic among pregnant women.

Materials and methods

A cross-sectional internet-based survey was completed by 706 pregnant women (mean age 29.6 years ± 3.2) residing in the United States in May 2020 to assess self-reported changes in diet, physical activity, and sleep during the COVID-19 pandemic. Logistic regression analyses examined whether sociodemographic, clinical, and pandemic-related characteristics were associated with health behavior changes.

Results

Approximately 17% of women reported their diets worsened during the COVID-19 pandemic, 42% reported improvements, and 41% reported no change. For physical activity, 22% reported they stopped being active, 2% reported they became active, and 76% reported no change. Nearly one-third of participants reported getting less sleep. The factors consistently associated with adverse lifestyle changes (worse diet, stopped being active, and reduced sleep) were experiences of pregnancy complications, loss of income due to COVID-19, and changes in social connections due to COVID-19.

Conclusions

A substantial proportion of pregnant women reported adverse lifestyle changes during the COVID-19 pandemic. Interventions during the pandemic to optimize health behaviors in pregnant women, especially among those with pregnancy complications, should address economic disadvantages and social support.

2021-00440

Restructuring maternal services during the covid-19 pandemic: Early results of a scoping review for non-infected women. Montagnoli C, Zanconato G, Ruggeri S, et al (2021), Midwifery vol 94, March 2021, 102916

Available from: https://doi.org/10.1016/j.midw.2020.102916

Full URL: https://doi.org/10.1016/j.midw.2020.102916

Introduction and objective

The novel coronavirus outbreak has caused substantial changes in societal norms as well as adjustments in health systems worldwide. To date the impact of these pandemic-related variations has yet to be fully understood also in the field of maternal health for which continuity of care is a proven life-saving preventive measure.

Design

Following the PRISMA guidelines for reviews, a literature search was carried out to assess different approaches that combine quality of maternal care with the imposed social-distancing rules. Nine studies were included in the scoping review.

Findings

Reduction of in-person visits is the preferred overall solution. Yet, fewer consultations can still guarantee essential

services and appropriate care through integration with telemedicine. Referral to epidemic-free community centres is an alternative option and new paths need to include the interdisciplinary contribution of medical consultants and IT experts, among others. In this context, delaying access for symptomatic expectant mothers is still debated since it carries the potential risk of untimely detection of pregnancy complications.

Key conclusions
Preliminary experiences provide an overview of the different attempts put in place to reshape health services to contain the pandemic hazards.

Implications for practice
These early prototypes may inspire future innovative health solutions compatible with local resources and specific population preferences and needs.

2021-00401
Differential Uptake of Telehealth for Prenatal Care in a Large New York City Academic Obstetrical Practice during the COVID-19 Pandemic. Limaye MA, Lantigua-Martinez M, Trostle ME, et al (2020), American Journal of Perinatology 10 December 2020, online

During the coronavirus disease 2019 (COVID-19) pandemic in New York City, telehealth was rapidly implemented for obstetric patients. Though telehealth for prenatal care is safe and effective, significant concerns exist regarding equity in access among low-income populations. We performed a retrospective cohort study evaluating utilization of telehealth for prenatal care in a large academic practice in New York City, comparing women with public and private insurance. We found that patients with public insurance were less likely to have at least one telehealth visit than women with private insurance (60.9 vs. 87.3%, $p < 0.001$). After stratifying by borough, this difference remained significant in Brooklyn, one of the boroughs hardest hit by the pandemic. As COVID-19 continues to spread around the country, obstetric providers must work to ensure that all patients, particularly those with public insurance, have equal access to telehealth.

2021-00398
Impact of the COVID-19 Pandemic on Excess Perinatal Mortality and Morbidity in Israel. Mor M, Kugler N, Jauniaux E, et al (2020), American Journal of Perinatology 10 December 2020, online

Objective The 2020 COVID-19 pandemic has been associated with excess mortality and morbidity in adults and teenagers over 14 years of age, but there is still limited evidence on the direct and indirect impact of the pandemic on pregnancy. We aimed to evaluate the effect of the first wave of the COVID-19 pandemic on obstetrical emergency attendance in a low-risk population and the corresponding perinatal outcomes.

Study Design This is a single center retrospective cohort study of all singleton births between February 21 and April 30. Prenatal emergency labor ward admission numbers and obstetric outcomes during the peak of the first COVID-19 pandemic of 2020 in Israel were compared with the combined corresponding periods for the years 2017 to 2019.

Results During the 2020 COVID-19 pandemic, the mean number of prenatal emergency labor ward admissions was lower, both by daily count and per woman, in comparison to the combined matching periods in 2017, 2018, and 2019 (48.6 ± 12.2 vs. 57.8 ± 14.4, $p < 0.0001$ and 1.74 ± 1.1 vs. 1.92 ± 1.2, $p < 0.0001$, respectively). A significantly ($p = 0.0370$) higher rate of stillbirth was noted in the study group (0.4%) compared with the control group (0.1%). All study group patients were negative for COVID-19. Gestational age at delivery, rates of premature delivery at <28, 34, and 37 weeks,

pregnancy complications, postdate delivery at >40 and 41 weeks, mode of delivery, and numbers of emergency cesarean deliveries were similar in both groups. There was no difference in the intrapartum fetal death rate between the groups.

Conclusion The COVID-19 pandemic stay-at-home policy combined with patient fear of contracting the disease in hospital could explain the associated higher rate of stillbirth. This collateral perinatal damage follows a decreased in prenatal emergency labor ward admissions during the first wave of COVID-19 in Israel.

2021-00358

Knowledge, attitudes, practices, and influencing factors of anxiety among pregnant women in Wuhan during the outbreak of COVID-19: a cross-sectional study. Ding W, Lu J, Zhou Y, et al (2021), BMC Pregnancy and Childbirth vol 21, no 80, 25 January 2021

Available from: https://doi.org/10.1186/s12884-021-03561-7

Full URL: https://doi.org/10.1186/s12884-021-03561-7

Background

Prenatal anxiety has been a significant public health issue globally, leading to adverse health outcomes for mothers and children. The study aimed to evaluate the sociodemographic characteristics, knowledge, attitudes, and practices (KAP), and anxiety level of pregnant women during the coronavirus disease 2019 (COVID-19) epidemic in Wuhan and investigate the influencing factors for prenatal anxiety in this specific context.

Methods

Pregnant subjects' KAP towards COVID-19 and their sociodemographics and pregnancy information were collected using questionnaires. The Zung Self-Rating Anxiety Scale (SAS) was used to assess anxiety status. Factors associated with the level of prenatal anxiety were analyzed by Pearson's chi-square test and multivariable logistic regression analyses.

Results

The prenatal anxiety prevalence in this population was 20.8%. The mean score of knowledge was 13.2 ± 1.1 on a 0 ~ 14 scale. The attitudes and practices data showed that 580/ 817 (71.0%) were very concerned about the news of COVID-19, 455/817 (55.7%) considered the official media to be the most reliable information source for COVID-19, and 681/817 (83.4%) were anxious about the possibility of being infected by COVID-19. However, only 83/817 (10.2%) worried about contracting COVID-19 infection through the ultrasound transducer during a routing morphology scan. About two-thirds 528/817 (64.6%) delayed or canceled the antenatal visits. Approximately half of them 410/817 (50.2%) used two kinds of personal protection equipments (PPEs) during hospital visits. Logistic regression analysis revealed that the influential factors for prenatal anxiety included previous children in the family, knowledge score, media trust, worry of contracting the COVID-19 infection and worry about getting infected with COVID-19 from the ultrasound probe antenatal care (ANC) schedule.

Conclusion

Prenatal anxiety was prevalent among pregnant women in Wuhan during the outbreak of COVID-19. The current findings identified factors associated with the level of prenatal anxiety that could be targeted for psychological care.

2021-00350

Approaches to screening for hyperglycaemia in pregnant women during and after the COVID-19 pandemic. Meek CL, Lindsay RS, Scott EM, et al (2021), Diabetic Medicine vol 38, no 1, January 2021, e14380
Available from: https://doi.org/10.1111/dme.14380
Full URL: https://doi.org/10.1111/dme.14380

Aim

To evaluate the diagnostic and prognostic performance of alternative diagnostic strategies to oral glucose tolerance tests, including random plasma glucose, fasting plasma glucose and HbA1c, during the COVID-19 pandemic.

Methods

Retrospective service data (Cambridge, UK; 17 736 consecutive singleton pregnancies, 2004–2008; 826 consecutive gestational diabetes pregnancies, 2014–2019) and 361 women with ≥1 gestational diabetes risk factor (OPHELIA prospective observational study, UK) were included. Pregnancy outcomes included gestational diabetes (National Institute of Health and Clinical Excellence or International Association of Diabetes and Pregnancy Study Groups criteria), diabetes in pregnancy (WHO criteria), Caesarean section, large-for-gestational age infant, neonatal hypoglycaemia and neonatal intensive care unit admission. Receiver-operating characteristic curves and unadjusted logistic regression were used to compare random plasma glucose, fasting plasma glucose and HbA1c performance.

Results

Gestational diabetes diagnosis was significantly associated with random plasma glucose at 12 weeks [area under the receiver-operating characteristic curve for both criteria 0.81 (95% CI 0.79–0.83)], fasting plasma glucose [National Institute of Health and Clinical Excellence: area under the receiver-operating characteristic curve 0.75 (95% CI 0.65–0.85); International Association of Diabetes and Pregnancy Study Groups: area under the receiver-operating characteristic curve 0.92 (95% CI 0.85–0.98)] and HbA1c at 28 weeks' gestation [National Institute of Health and Clinical Excellence: 0.83 (95% CI 0.75–0.90); International Association of Diabetes and Pregnancy Study Groups: 0.84 (95% CI 0.77–0.91)]. Each measure predicts some, but not all, pregnancy outcomes studied. At 12 weeks, ~5% of women would be identified using random plasma glucose ≥8.5 mmol/l (sensitivity 42%; specificity 96%) and at 28 weeks using HbA1c ≥39 mmol/mol (sensitivity 26%; specificity 96%) or fasting plasma glucose ≥5.2–5.4 mmol/l (sensitivity 18–41%; specificity 97–98%).

Conclusions

Random plasma glucose at 12 weeks, and fasting plasma glucose or HbA1c at 28 weeks identify women with hyperglycaemia at risk of suboptimal pregnancy outcomes. These opportunistic laboratory tests perform adequately for risk stratification when oral glucose tolerance testing is not available. (Author)

2021-00338

Covid: Confusion over gestational diabetes advice. BBC News (2021), BBC News 20 February 2021
Available from: https://www.bbc.co.uk/news/health-56130317
Full URL: https://www.bbc.co.uk/news/health-56130317

Some pregnant women who have had gestational diabetes say a change to shielding advice in England has caused confusion. (Author)

2021-00337

Coronavirus (COVID-19) infection in pregnancy: Information for healthcare professionals [Version 13]. 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
Available from:
https://www.rcog.org.uk/globalassets/documents/guidelines/2021-02-19-coronavirus-covid-19-infection-in-pregnancy-v13.pdf

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)

2021-00335

Domestic violence and its relationship with quality of life in pregnant women during the outbreak of COVID-19 disease. Naghizadeh S, Mirghafourvand M, Mohammadirad R (2021), BMC Pregnancy and Childbirth vol 21, no 88, 28 January 2021
Available from: https://doi.org/10.1186/s12884-021-03579-x
Full URL: https://doi.org/10.1186/s12884-021-03579-x

Background
During the COVID-19 pandemic, pregnant women bear considerable physical and psychological stress because of their special conditions, which combined with other stress factors such as violence, makes their situation even more critical. This study aimed to investigate the prevalence of domestic violence and its relationship with quality of life in pregnant women during the COVID-19 pandemic.

Methods
This cross-sectional study was performed with the participation of 250 pregnant women in the obstetrics clinic of 29-Bahman Hospital, Tabriz city. Using a three-part questionnaire consisting of the socio-demographic and obstetrics information, the domestic violence questionnaire developed by WHO, and the SF-12 quality of life questionnaire, the required information was collected. A general linear model was then used to determine the relationship between domestic violence and quality of life, while adjusting the socio-demographic and obstetrics information.

Results
According to the data, more than one-third of pregnant women (35.2 %) had experienced domestic violence. The most common type of violence experienced was emotional violence (32.8 %), followed by sexual violence (12.4 %), and physical violence (4.8 %). The mean score of the physical health department of quality of life in the group of women exposed to violence (50.21) was lower compared to the unexposed group (53.45), though there was no significant difference between them (P = 0.25). However, the mean score of the mental health department of quality of life in women exposed to violence (46.27) was significantly lower compared to unexposed women (61.17) (P < 0.001). Based

on the general linear model, the mean score for quality of life in the mental health dimension was significantly higher among unexposed women compared to those exposed to violence (β = 9.3, 95 %CI: 3.5 to 15.0, P = 0.002).

Conclusions
The findings of this study indicate a high prevalence of domestic violence and its relationship with a low quality of life during the COVID-19 pandemic. Therefore, the findings signify the importance of screening pregnant women in terms of domestic violence in respective centers as well as the necessity of conducting proper interventions to address domestic violence to improve the quality of life in women.

2021-00318
Haemostatic and thrombo-embolic complications in pregnant women with COVID-19: a systematic review and critical analysis. Servante J, Swallow G, Thornton JG, et al (2021), BMC Pregnancy and Childbirth vol 21, no 108, 5 February 2021
Available from: https://doi.org/10.1186/s12884-021-03568-0
Full URL: https://doi.org/10.1186/s12884-021-03568-0

Background
As pregnancy is a physiological prothrombotic state, pregnant women may be at increased risk of developing coagulopathic and/or thromboembolic complications associated with COVID-19.

Methods
Two biomedical databases were searched between September 2019 and June 2020 for case reports and series of pregnant women with a diagnosis of COVID-19 based either on a positive swab or high clinical suspicion where no swab had been performed. Additional registry cases known to the authors were included. Steps were taken to minimise duplicate patients. Information on coagulopathy based on abnormal coagulation test results or clinical evidence of disseminated intravascular coagulation (DIC), and on arterial or venous thrombosis, were extracted using a standard form. If available, detailed laboratory results and information on maternal outcomes were analysed.

Results
One thousand sixty-three women met the inclusion criteria, of which three (0.28, 95% CI 0.0 to 0.6) had arterial and/or venous thrombosis, seven (0.66, 95% CI 0.17 to 1.1) had DIC, and a further three (0.28, 95% CI 0.0 to 0.6) had coagulopathy without meeting the definition of DIC. Five hundred and thirty-seven women (56%) had been reported as having given birth and 426 (40%) as having an ongoing pregnancy. There were 17 (1.6, 95% CI 0.85 to 2.3) maternal deaths in which DIC was reported as a factor in two.

Conclusions
Our data suggests that coagulopathy and thromboembolism are both increased in pregnancies affected by COVID-19. Detection of the former may be useful in the identification of women at risk of deterioration.

2021-00311
Education in Trauma-Informed Care in Maternity Settings Can Promote Mental Health During the COVID-19 Pandemic.
Hall S, White A, Ballas J, et al (2021), JOGNN: Journal of Obstetric, Gynecologic and Neonatal Nursing 16 January 2021, online
Available from: https://doi.org/10.1016/j.jogn.2020.12.005
Full URL: https://doi.org/10.1016/j.jogn.2020.12.005

Globally, the coronavirus disease 2019 pandemic has adversely affected many people's mental health, including pregnant women and clinicians who provide maternity care, and threatens to develop into a mental health pandemic. Trauma-informed care is a framework that takes into account the effect that past trauma can have on current behavior and the ability to cope and can help to minimize retraumatization during health care encounters. The purpose of this article is to highlight the pressing need for perinatal clinicians, including nurses, midwives, physicians, doulas, nurse leaders, and nurse administrators, to be educated about the principles of trauma-informed care so that they can support the mental health of pregnant women, themselves, and members of the care team during the pandemic.

2021-00259

Poor maternal–neonatal outcomes in pregnant patients with confirmed SARS-Cov-2 infection: analysis of 145 cases.

Di Guardo F, Di Grazia FM, Di Gregorio LM, et al (2021), Archives of Gynecology and Obstetrics 3 January 2021, online

Available from: https://doi.org/10.1007/s00404-020-05909-4

Full URL: https://doi.org/10.1007/s00404-020-05909-4

Purpose

The coronavirus 2 (SARS-CoV-2) infection has recently spread causing millions of individuals affected globally. The raising mortality rate highlighted the necessity to identify the most susceptible populations, such as pregnant women and their fetuses, in order to protect them. Few studies have been conducted trying to identify maternal-neonatal outcomes among pregnant patients affected by COVID 19. In this scenario, this study aims to analyse poor maternal–neonatal outcomes in pregnant women affected by SARS-CoV-2 infection.

Methods

This was a double-centre, 5 months retrospective analysis conducted in Italy. The study population consisted of pregnant women with confirmed SARS-CoV-2 infection assessed by Time Quantitative Reverse Transcription PCR (qRT-PCR) nasopharyngeal swabs.

Results

145 pregnant women affected by confirmed SARS-CoV-2 infection were included. Among them, 116 (80%) were symptomatic and 29 (20%) were asymptomatic. Up to half of the patients (n = 111; 76.5%) had a past history of respiratory disease. The mean gestational age at delivery was 36 weeks ± 5 days, while the mean maternal age was 31.5 ± 5.63. Reactive C protein (CRP) serum levels were higher than the normal range corresponding to a mean value of 56.93 ± 49.57 mg/L. The mean interval between the diagnosis of maternal COVID-19 infection and the delivery was 8.5 days. With regard to the type of delivery, the percentage of patients who delivered vaginally was higher than those who experienced a caesarean section. (74.4% vs 25.6%). The percentage of term birth was higher than preterm one (62% vs 38%). Finally, the percentages of maternal and neonatal death were found to be 5% and 6%, respectively; similarly, the percentage of the infection vertical transmission was 5%.

Conclusion

COVID-19 infection in pregnant women seems to negatively affect both maternal and neonatal outcomes. However, it is important to emphasize that most of the cases of maternal death occurred in patients with severe symptoms and highly altered parameters related to SARS-CoV-2 infection. In the future, larger studies are warranted in order to validate these findings.

2021-00217

Pregnancy, breastfeeding and the SARS-CoV-2 vaccine: an ethics-based framework for shared decision-making. Zipursky JS, Greenberg RA, Maxwell C, et al (2021), Canadian Medical Association Journal (CMAJ) vol 193, no 7, 16 February 2021,
202833
Available from: https://doi.org/10.1503/cmaj.202833
Full URL: https://doi.org/10.1503/cmaj.202833

Proposes that women who are pregnant or breastfeeding should be offered the SARS-CoV-2 vaccine on ethical grounds, and discusses how health care providers and patients can use a shared decision-making approach to guide these discussions. (Author, edited)

2021-00188

The Diagnosis and Management of Gestational Diabetes Mellitus in the Context of the COVID-19 Pandemic. McIntyre HD, Moses RG (2020), Diabetes Care vol 43, no 7, July 2020, pp 1433-1434
Available from: https://doi.org/10.2337/dc19-0324
Full URL: https://doi.org/10.2337/dc19-0324

Provides an overview of the advice/statements released by professional societies from the UK, Canada, and Australia for modification of GDM diagnostic pathways during the COVID-19 pandemic. (MB)

2021-00116

Pregnant women's concerns and antenatal care during COVID-19 lock-down of the Danish society. Cohen-Overbeck T, Graungaard AH, Rasmussen IS (2020), Danish Medical Journal vol 67, no 12, December 2020, A06200449
Available from:
https://ugeskriftet.dk/dmj/pregnant-womens-concerns-and-antenatal-care-during-covid-19-lock-down-danish-society
Full URL:
https://ugeskriftet.dk/dmj/pregnant-womens-concerns-and-antenatal-care-during-covid-19-lock-down-danish-society

INTRODUCTION: Pandemics are known to cause stress and anxiety in pregnant women. During the coronavirus disease 2019 (COVID-19) lockdown of the Danish society, pregnant women were considered to be at increased risk, and access to antenatal care changed.

METHODS: On 8 April 2020A, a questionnaire was sent to 332 pregnant women previously sampled by general practitioners in two Danish regions. The women were contacted via secured e-mail (e-Boks), and questionnaires were returned until 6 May.

RESULTS: The questionnaire was returned by 257 women (77%). More than half believed that they were at a high risk of infection with COVID-19, and a third of the women were concerned about the risk of serious disease – especially for their unborn child. Almost 90% isolated at home most of the time. The majority were worried about possible consequences of the pandemic for antenatal care, but very few had actually missed a scheduled preventive consultation with their general practitioner, and only 15% had missed an appointment with their midwife. The majority of the women preferred normal consultations and found no added safety in shifting the consultation from the normal clinical setting.

CONCLUSIONS: The COVID-19 pandemic and lockdown have had a major impact on Danish pregnant women. Even so, concerns were more focused on access to care than on the risk of COVID-19 infection. Contacts with the antenatal healthcare system have only been moderately affected.

FUNDING: TRYG Foundation and KEU, Region Copenhagen.

TRIAL REGISTRATION: not relevant. (Author)

2021-00048
The street with the lockdown baby boom. Anon (2021), BBC News 4 February 2021
Available from: https://www.bbc.co.uk/news/av/uk-55895735
Full URL: https://www.bbc.co.uk/news/av/uk-55895735
News item reporting how six women living on the same side of the same street in Bristol, have all become pregnant during the latest lockdown. Contains interviews with the women and their partners describing how they are supporting each other through their pregnancies and during the coronavirus pandemic. (JSM)

20201222-7*
COVID-19 is increasing Ghanaian pregnant women's anxiety and reducing healthcare seeking. Moyer CA, Sakyi KS, Sacks E, et al (2020), International Journal of Gynecology & Obstetrics 21 November 2020, online
Available from: https://doi.org/10.1002/ijgo.13487
Full URL: https://doi.org/10.1002/ijgo.13487
Pregnant women in Ghana report skipping antenatal care and reconsidering facility delivery due to concerns about COVID-19. (Author)

20201222-6*
Management of gestational diabetes in women with a concurrent severe acute respiratory syndrome coronavirus 2 infection, experience of a single center in Northern Italy. D'Ambrosi F, Rossi G, Soldavini CM, et al (2020), International Journal of Gynecology & Obstetrics 25 October 2020, online
Available from: https://doi.org/10.1002/ijgo.13434
Full URL: https://doi.org/10.1002/ijgo.13434

Objective
In this study we describe the management of women with gestational diabetes (GD) and an ongoing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. The aim of the study is to evaluate whether coronavirus disease 2019 (COVID-19) can further complicate pregnancies, and if the protocol we usually use for GD pregnancies is also applicable to patients who have contracted a SARS-CoV-2 infection.
Methods
This is a retrospective study analyzing all pregnant women with GD and concomitant COVID-19 admitted to our institution for antenatal care between March 1 and April 30, 2020.
Results
Among pregnant women with GD and a concomitant SARS-CoV-2 infection, the mean age was 32.9 (SD 5.6) years. Two patients (33%) were of white racial origin and four (67%) were of non-white racial origin. All patients were diagnosed with COVID-19 during the third trimester of pregnancy. Two women were asymptomatic and four were symptomatic. Only two (33.3%) women received treatment with insulin. None of the patients required intensive care or mechanical ventilation. No complications were found among the neonates.

Conclusion
COVID-19 was not found to worsen the prognosis of patients with GD or of their offspring. Glycemic monitoring, diet therapy, and insulin, when needed, are sufficient for good metabolic control and favorable maternal and fetal outcomes. (Author)

20201222-4*

Updated experience of a tertiary pandemic center on 533 pregnant women with COVID-19 infection: A prospective cohort study from Turkey. Sahin D, Tanacan A, Erol SA, et al (2020), International Journal of Gynecology & Obstetrics 1 November 2020, online

Available from: https://doi.org/10.1002/ijgo.13460
Full URL: https://doi.org/10.1002/ijgo.13460

Objective
To investigate the clinical course and impact of coronavirus disease 2019 (COVID-19) infection on pregnant women.
Methods
A prospective cohort study was conducted on pregnant women with confirmed COVID-19 infection. Demographic features, clinical characteristics, and perinatal outcomes were prospectively evaluated.
Results
Of the 533 cases, 161 (30.2%) had co-morbidities and 165 (30.9%) were asymptomatic. Cough (n = 178, 33.4%) and myalgia (n = 168, 31.5%) were the leading symptoms. In total, 261 patients (48.9%) received COVID-19 therapy, 509 (95.5%) had mild disease, 7 (1.3%) were admitted to the intensive care unit (ICU), and invasive mechanical ventilation was necessary in 2 (0.4%) patients. Maternal mortality was observed in 2 (0.4%) cases. Of the patients, 297 (55.7%) were hospitalized, 39 (7.3%) had suspicious radiologic imaging findings, 66 (12.4) had pregnancy complications (preterm delivery [n =22, 4.1%] and miscarriage [n =12, 2.2%] were the most common pregnancy complications), 131 births occurred, and the cesarean section rate was 66.4%. All neonates were negative for COVID-19. The rate of admission to the neonatal ICU was 9.9%. One specimen of breast milk was positive for the infection.
Conclusion
The course of COVID-19 was mild in the majority of cases. However, increased rates of pregnancy complications and cesarean delivery were observed.
Synopsis
Management of pregnant women with COVID-19 infection should be conducted by a multidisciplinary team within the framework of an individualized patient approach for favorable outcomes. (Author)

20201222-19*

Clinical characteristics of COVID-19 in pregnant women: A retrospective descriptive single-center study from a tertiary hospital in Muscat, Oman. Santhosh J, Al Salmani M, Khamis F, et al (2020), International Journal of Gynecology & Obstetrics 19 October 2020, online

The risk of preterm labor, pre-eclampsia, lower segment cesarean section, thromboembolic complications, and ICU admissions are increased for pregnant women with COVID-19. (Author)

20201222-17*

Assessing risk factors for severe forms of COVID-19 in a pregnant population: A clinical series from Lombardy, Italy. Di Martino D, Chiaffarino F, Patane L, et al (2020), International Journal of Gynecology & Obstetrics 24 October 2020, online

Available from: https://doi.org/10.1002/ijgo.13435
Full URL: https://doi.org/10.1002/ijgo.13435

In 250 pregnant women with either asymptomatic, non-severe, or severe SARS-CoV-2 infection, obesity turned out to be the main determinant of severe COVID-19 illness. (Author)

20201222-16*

Utilization cost of maternity services for childbirth among pregnant women with coronavirus disease 2019 in Nigeria's epicenter. Banke-Thomas A, Makwe CC, Balogun M, et al (2020), International Journal of Gynecology & Obstetrics 24 October 2020, online

Available from: https://doi.org/10.1002/ijgo.13436

Full URL: https://doi.org/10.1002/ijgo.13436

Objective

To estimate utilization costs of spontaneous vaginal delivery (SVD) and cesarean delivery (CD) for pregnant women with coronavirus disease 2019 (COVID-19) at the largest teaching hospital in Lagos, the pandemic's epicenter in Nigeria.

Methods

We collected facility-based and household costs of all nine pregnant women with COVID-19 managed at the hospital. We compared their mean facility-based costs with those paid by pregnant women pre-COVID-19, identifying cost-drivers. We also estimated what would have been paid without subsidies, testing assumptions with a sensitivity analysis.

Results

Total utilization costs ranged from US $494 for SVD with mild COVID-19 to US $4553 for emergency CD with severe COVID-19. Though 32%-66% of facility-based cost were subsidized, costs of SVD and CD during the pandemic have doubled and tripled, respectively, compared with those paid pre-COVID-19. Of the facility-based costs, cost of personal protective equipment was the major cost-driver (50%). Oxygen was the major driver for women with severe COVID-19 (48%). Excluding treatment costs for COVID-19, mean facility-based costs were US $228 (SVD) and US $948 (CD).

Conclusion

Despite cost exemptions and donations, utilization costs remain prohibitive. Regulation of personal protective equipment and medical oxygen supply chains and expansion of advocacy for health insurance enrollments are needed in order to minimize catastrophic health expenditure. (Author)

20201222-14*

Clinical features of pregnant women in Iran who died due to COVID-19. Moghadam SA, Dini P, Nassiri S, et al (2020), International Journal of Gynecology & Obstetrics 3 November 2020, online

Available from: https://doi.org/10.1002/ijgo.13461

Full URL: https://doi.org/10.1002/ijgo.13461

Background

To evaluate the clinical presentation of pregnant women in Iran who died due to COVID-19.

Methods

Data were evaluated of pregnant women who died following a laboratory diagnosis of COVID-19. The data were obtained from electronic medical records. Additionally, a questionnaire was completed for each patient, including demographic, clinical, laboratorial, imaging, and treatment data. In case of missing information, a member of the research team contacted the first-degree relatives via phone.

Results

Of 32 pregnant women who tested positive for COVID-19, 15 were enrolled into the study (mean age 30.0 ± 5.0 years). The mean time from first symptoms to death was 12 ± 7.0 days. Pre-existing comorbidities were seen in six patients.

The main presentations at admission were fatigue and coughing, but most of the women had a fever below 38 °C. Increased white blood cell count and neutrophils were noticeable. A significant drop of saturation of O2 with ground glass and consolidation seen in both lungs were prominent. The most common complications were acute respiratory distress syndrome followed by respiratory failure.
Conclusion
Computed tomography findings, O2 pressure, and regular blood assessment may be considered suitable indicators for the surveillance of patients. (Author)

20201221-60*
Clinical manifestations, prevalence, risk factors, outcomes, transmission, diagnosis and treatment of COVID-19 in pregnancy and postpartum: a living systematic review protocol. Yap M, Debenham L, Kew T, et al (2020), BMJ Open vol 10, no 12, December 2020
Available from: http://dx.doi.org/10.1136/bmjopen-2020-041868
Full URL: http://dx.doi.org/10.1136/bmjopen-2020-041868
Introduction Rapid, robust and continually updated evidence synthesis is required to inform management of COVID-19 in pregnant and postpartum women and to keep pace with the emerging evidence during the pandemic.
Methods and analysis We plan to undertake a living systematic review to assess the prevalence, clinical manifestations, risk factors, rates of maternal and perinatal complications, potential for mother-to-child transmission, accuracy of diagnostic tests and effectiveness of treatment for COVID-19 in pregnant and postpartum women (including after miscarriage or abortion). We will search Medline, Embase, WHO COVID-19 database, preprint servers, the China National Knowledge Infrastructure system and Wanfang databases from 1 December 2019. We will supplement our search with studies mapped by Cochrane Fertility and Gynaecology group, Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), COVID-19 study repositories, reference lists and social media blogs. The search will be updated every week and not be restricted by language. We will include observational cohort (≥10 participants) and randomised studies reporting on prevalence of COVID-19 in pregnant and postpartum women, the rates of clinical manifestations and outcomes, risk factors in pregnant and postpartum women alone or in comparison with non-pregnant women with COVID-19 or pregnant women without COVID-19 and studies on tests and treatments for COVID-19. We will additionally include case reports and series with evidence on mother-to-child transmission of SARS-CoV-2 in utero, intrapartum or postpartum. We will appraise the quality of the included studies using appropriate tools to assess the risk of bias. At least two independent reviewers will undertake study selection, quality assessment and data extraction every 2 weeks. We will synthesise the findings using quantitative random effects meta-analysis and report OR or proportions with 95% CIs and prediction intervals. Case reports and series will be reported as qualitative narrative synthesis. Heterogeneity will be reported as I2 and τ2 statistics.
Ethics and dissemination Ethical approval is not required as this is a synthesis of primary data. Regular updates of the results will be published on a dedicated website (https://www.birmingham.ac.uk/research/who-collaborating-centre/pregcov/index.aspx) and disseminated through publications, social media and webinars.
PROSPERO registration number CRD42020178076. (Author)

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)

20201221-20*

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 (2020), Archives of Gynecology and Obstetrics 1 December 2020, online

Available from: https://doi.org/10.1007/s00404-020-05889-5

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)

20201221-1*

SOGC Statement on COVID-19 Vaccination in Pregnancy [Reaffirmed 3 March 2021]. Society of Obstetricians and Gynaecologists of Canada (2020), Ottowa, Canada: SOGC 18 December 2020

Available from:

https://www.sogc.org/common/Uploaded%20files/Latest%20News/SOGC_Statement_COVID-19_Vaccination_in_Pregnancy.pdf

Consensus statement from the Society of Obstetricians and Gynaecologists of Canada (SOGC) on COVID-19 vaccination in pregnancy. Recommends that the COVID-19 vaccine should be offered as the documented risk of not getting the vaccine outweighs the theorised risk of being vaccinated during pregnancy or while breastfeeding. (LDO)

20201218-24*

Safety of COVID-19 vaccines when given in pregnancy [Last updated 3 March 2021]. Public Health England (2020), London: PHE 18 December 2020

Available from:

https://www.gov.uk/government/publications/safety-of-covid-19-vaccines-when-given-in-pregnancy

Full URL: https://www.gov.uk/government/publications/safety-of-covid-19-vaccines-when-given-in-pregnancy

This advice provides information on the safety of COVID-19 vaccines when given in pregnancy. It is designed for health professionals to share with women who were vaccinated before they knew they were pregnant. (Author)

20201217-55*

COVID-19 vaccination and pregnancy. Royal College of Obstetricians and Gynaecologists (2020), London: RCOG 17 December 2020

Available from: https://www.rcog.org.uk/en/news/covid-19-vaccination-and-pregnancy/
Full URL: https://www.rcog.org.uk/en/news/covid-19-vaccination-and-pregnancy/

Short news item reporting that the Royal College of Obstetricians and Gynaecologists is advising against the use of the new Pfizer-BioNTech COVID-19 vaccine in pregnancy and in breastfeeding women, unitl more information about it is available. (JSM)

20201216-5*

Pregnant women allowed support of one person 'at all times'. Anon (2020), BBC News 16 December 2020

Available from: https://www.bbc.co.uk/news/health-55330549
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)

20201207-32*

Coronavirus Disease 2019 (COVID-19)-Related Multisystem Inflammatory Syndrome in a Pregnant Woman. Gulersen M, Staszewski C, Grayver E, et al (2021), Obstetrics & Gynecology vol 137, no 3, March 2021, pp 418-422

Available from: https://doi.org/10.1097/AOG.0000000000004256
Full URL: https://doi.org/10.1097/AOG.0000000000004256

BACKGROUND:
Recent reports have described a rare but severe complication of coronavirus disease 2019 (COVID-19) in nonpregnant adults that is associated with extrapulmonary organ dysfunction and appears to be secondary to a hyperinflammatory state.
CASE:
A multiparous woman at 28 weeks of gestation, diagnosed with COVID-19 4 weeks prior, was admitted with chest pain. Evaluation indicated myocarditis and marked elevations of inflammatory markers consistent with multisystem inflammatory syndrome in adults. The patient developed cardiogenic shock and required mechanical ventilation. Treatment with intravenous immunoglobulin and high-dose corticosteroids was associated with a favorable maternal and fetal outcome.
CONCLUSION:
Multisystem inflammatory syndrome in adults associated with COVID-19 in pregnancy is a critical illness, presenting several weeks after initial infection. Treatment with intravenous immunoglobin and corticosteroids was associated with a favorable outcome. (Author)

20201207-13*

Pregnant women with severe or critical COVID-19 have increased composite morbidity compared to non-pregnant matched controls. DeBolt CA, Bianco A, Limaye MA, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) 19 November 2020, online

Background
In March 2020, as community spread of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) became

increasingly prevalent, pregnant women appeared to be equally susceptible to developing Coronavirus Disease 2019 (COVID-19). While the disease course usually appears mild, severe and critical COVID-19 appears to lead to significant morbidity including ICU admission with prolonged hospital stay, intubation, mechanical ventilation and even death. Although there are recent reports regarding the impact of COVID-19 on pregnancy, information regarding the severity of COVID-19 in pregnant versus non-pregnant women remains unknown.
Objective
We aim to describe the outcomes of severe and critical COVID-19 infection in pregnant versus non-pregnant reproductive aged women.
Study Design
This is a multi-center retrospective case-control study of women with laboratory confirmed SARS-CoV-2 infection hospitalized with severe or critical COVID-19 in four academic medical centers in NYC and one in Philadelphia between March 12 and May 5, 2020. The cases consist of pregnant women admitted specifically for severe or critical COVID-19 and not for obstetric indication. The controls consist of reproductive aged, non-pregnant women admitted for severe or critical COVID-19. The primary outcome is a composite morbidity including: death, need for intubation, extracorporeal membrane oxygenation (ECMO), non-invasive positive pressure ventilation or need for high flow nasal cannula oxygen supplementation. Secondary outcomes include ICU admission, length of stay, need for discharge to long term acute care facility and discharge with home oxygen requirement.
Results
Thirty-eight pregnant women with SARS-CoV-2 polymerase chain reaction (PCR) confirmed infection were admitted to five institutions specifically for COVID-19, 29 (76.3%) meeting criteria for severe disease and 9 (23.7%) meeting criteria for critical disease. The mean age and BMI were significantly higher in the non-pregnant control group. The non-pregnant cohort was also noted to have increased frequency of pre-existing medical comorbidities, including diabetes, hypertension and coronary artery disease. Pregnant women were more likely to experience the primary outcome when compared to the non-pregnant control group (34.2% vs. 14.9%, p=0.03, adjusted OR 4.6 [95% CI 1.2-18.2]). Pregnant patients experienced higher rates of ICU admission (39.5% vs. 17.0%, p<0.01, adjusted OR 5.2 [95% CI 1.5-17.5]). Among pregnant women that underwent delivery, 72.7% occurred via cesarean delivery and mean gestational age at delivery was 33.8 ±5.5 weeks in patients with severe disease and 35 ±3.5 weeks in patients with critical COVID-19.
Conclusions
Pregnant women with severe and/or critical COVID-19 are at increased risk for certain morbidities when compared to non-pregnant controls. Despite the higher comorbidities of diabetes and hypertension in the non-pregnant controls, the pregnant cases were at increased risk for composite morbidity, intubation, mechanical ventilation and ICU admission. These findings suggest that pregnancy may be associated with a worse outcome in women with severe and critical COVID-19. Our study suggests that similar to other viral infections such as SARS-CoV and MERS-CoV, pregnant women may be at risk for greater morbidity and disease severity. (Author)

20201207-1*

COVID-19 vaccination: a guide for all women of childbearing age, pregnant or breastfeeding [Last updated 1 March 2021]. Public Health England (2021), Public Health England 1 March 2021
Available from:
https://www.gov.uk/government/publications/covid-19-vaccination-women-of-childbearing-age-currently-pregnant-planning-a-pregnancy-or-breastfeeding/covid-19-vaccination-a-guide-for-women-of-childbearing-age-pregnant-planning-a-pregnancy-or-breastfeeding
The COVID-19 vaccines available in the UK have been shown to be effective and to have a good safety profile. The early COVID-19 vaccines do not contain organisms that can multiply in the body, so they cannot infect an unborn baby in the womb. (Author)

20201204-36*

Specialized prenatal care delivery for coronavirus disease 2019-exposed or -infected pregnant women. Dotters-Katz SK, Harris H, Wheeler SM, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) 19 November 2020, online

Available from: https://doi.org/10.1016/j.ajog.2020.11.025

Full URL: https://doi.org/10.1016/j.ajog.2020.11.025

The objective of this study is to demonstrate feasibility of a cohorted prenatal care model that isolates COVID-19 positive and quarantined COVID-19 exposed pregnant women in a separate clinic location to provide obstetrical care while minimizing exposure risk. (Author, edited)

20201204-28*

Delaying Pregnancy during a Public Health Crisis - Examining Public Health Recommendations for Covid-19 and Beyond. Rasmussen SA, Drapkin Lyerly A, Jamieson DJ (2020), New England Journal of Medicine vol 383, no 23, 3 December 2020, pp 2097-2099

Available from: https://doi.org/10.1056/NEJMp2027940

Full URL: https://doi.org/10.1056/NEJMp2027940

Commentary on whether women should avoid becoming pregnant due to potential risks during the COVID-19 pandemic. Discusses public health recommendations during the HIV epidemic, H1N1 influenza outbreak and Zika virus outbreak. Outlines suggested criteria that should be met in public health emergencies for public health agencies to make recommendations against pregnancy. (LDO)

20201203-14*

Maternal and perinatal characteristics and outcomes of pregnancies complicated with COVID-19 in Kuwait. Ayed A, Embaireeg A, Benawedh A, et al (2020), BMC Pregnancy and Childbirth vol 20, no 754, 2 December 2020

Available from: https://doi.org/10.1186/s12884-020-03461-2

Full URL: https://doi.org/10.1186/s12884-020-03461-2

Background

The effect of SARS-CoV-2 infection in pregnant women and newborns is incompletely understood. Preliminary data shows a rather fluctuating course of the disease from asymptomatic or mild symptoms to maternal death. However, it is not clear whether the disease increases the risk of pregnancy-related complications. The aim of the study is to describe the maternal and neonatal clinical characteristics and outcome of pregnancies with SARS-CoV-2 infection.

Methods

In this retrospective national-based study, we analyzed the medical records of all pregnant women infected with SARS-CoV-2 and their neonates who were admitted to New-Jahra Hospital (NJH), Kuwait, between March 15th 2020 and May 31st 2020. During the study period and as part of the public health measures, a total of 185 pregnant women infected with SARS-CoV-2, regardless of symptoms, were hospitalized at NJH, and were included. Maternal and neonatal clinical manifestations, laboratory tests and treatments were collected. The outcomes of pregnancies included miscarriage, intrauterine fetal death (IUFD), preterm birth and live birth were assessed until the end date of the outcomes follow-up (November 10th 2020).

Results

A total of 185 pregnant women infected with SARS-CoV-2 were enrolled with a median age of 31 years (interquartile range, IQR: 27.5-34), and median gestational age at diagnosis of SARS-CoV2 infection was 29 weeks (IQR: 18-34). The majority (88%) of these women had mild symptoms, with fever (58%) being the most common presenting symptom followed by cough (50.6%). At the time of the analysis, out of the 185, 3 (1.6%) of the pregnant women had a miscarriage, 1 (0.54%) had IUFD which was not related to COVID-19, 16 (8.6%) had ongoing pregnancies and 165 (89%) had a live birth. Only 2 (1.1%) of these women developed severe pneumonia and required intensive care. A total of

167 neonates with two sets of twins were born with median gestational age at birth was 38 (IQR: 36-39) weeks. Most of the neonates were asymptomatic, and only 2 of them tested positive on day 5 by nasopharyngeal swab testing. Conclusions
In this national-based study, most of the pregnant women infected with SARS-CoV-2 showed mild symptoms. Although mother-to-child vertical transmission of SARS-CoV-2 is possible, COVID-19 infection during pregnancy may not lead to unfavorable maternal and neonatal outcomes. (Author)

20201203-13*

Forced into a corner: The two-child limit and pregnancy decision making during the pandemic. British Pregnancy Advisory Service (2020), Stratford-upon-Avon: BPAS December 2020. 9 pages
Available from:
https://www.bpas.org/media/3409/forced-into-a-corner-the-two-child-limit-and-pregnancy-decision-making-during-the-pandemic.pdf

Report outlining survey responses from women with two or more existing children who terminated a pregnancy during the COVID-19 pandemic. 57% of respondents reported that the two-child policy was important in their decision-making about the continuation of their pregnancy. Four key themes emerged which were the impact of COVID-19 on family finances; the precariousness of employment during the pandemic; barriers to contraception caused by the pandemic; and being unable to continue a wanted pregnancy due to the combination of the two-child policy and pandemic. The report concludes that the two-child policy fails to protect families against unexpected life events. (LDO)

20201201-3

The midwife's role in managing confirmed moderate-to-severe COVID-19 in pregnancy. Mayo H (2020), MIDIRS Midwifery Digest vol 30, no 4, December 2020, pp 487-493

Discusses the aetiology and classification of COVID-19 and how it affects pregnant women. Highlights the role of the midwife in managing moderate-to-severe cases and reducing potential risks to the fetus. Concludes that midwives are best suited as lead co-ordinators as part of a wider multi-disciplinary team. (LDO)

20201130-9*

Maternal and perinatal outcomes in pregnant women infected by SARS-CoV-2: A meta-analysis. Bellos I, Pandita A, Panza R (2021), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 256, January 2021, pp 194-204
Available from: https://doi.org/10.1016/j.ejogrb.2020.11.038
Full URL: https://doi.org/10.1016/j.ejogrb.2020.11.038

Evidence concerning coronavirus disease-19 (covid-19) in pregnancy is still scarce and scattered. This meta-analysis aims to evaluate maternal and neonatal outcomes in covid-19 pregnancies and identify factors associated with perinatal viral transmission. Medline, Scopus, CENTRAL, Web of Science and Google Scholar databases were systematically searched to 3 June 2020. Overall, 16 observational studies and 44 case reports/series were included. Fever was the most frequent maternal symptom, followed by cough and shortness of breath, while about 15 % of infected were asymptomatic. Severe disease was estimated to occur in 11 % of women in case reports/series and in 7 % (95 % CI: 4 %-10 %) in observational studies. Two maternal deaths were reported. The rate of neonatal transmission did not differ between women with and without severe disease (OR: 1.94, 95 % CI: 0.50-7.60). Preterm birth occurred in 29.7 % and 16 % (95 % CI: 11 %-21 %) in data obtained from case series and observational studies, respectively. Stillbirth occurred in 3 cases and 2 neonatal deaths were observed. Vertical transmission was suspected in 4 cases. Fever was the most common neonatal symptom (40 %), followed by shortness of breath (28 %) and vomiting (24 %),

while 20 % of neonates were totally asymptomatic. In conclusion, the maternal and neonatal clinical course the infection is typically mild, presenting low mortality rates. The risk of vertical transmission is suggested to be low and may not be affected by the severity of maternal disease. Further large-scale studies are needed to clarify the risk factors associated with viral transmission and severe infection in the neonatal population. (Author)

20201130-87*

Screening and Testing Pregnant Patients for SARS-CoV-2: First Wave Experience of a Designated COVID-19 Hospitalization Centre in Montreal. Trahan M-J, Mitric C, Malhamé I, et al (2020), JOGC [Journal of Obstetrics and Gynaecology Canada] 4 November 2020, online

Available from: https://doi.org/10.1016/j.jogc.2020.11.001

Full URL: https://doi.org/10.1016/j.jogc.2020.11.001

Objective

Coronavirus Disease 2019 (COVID-19) may present asymptomatically in a large proportion of cases in endemic areas. Accordingly, universal testing has been suggested as a potential strategy for reducing transmission in the obstetrical setting. We describe the clinical characteristics of patients who tested positive for Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2) during pregnancy at a designated COVID-19 hospitalization centre in Montreal, Quebec.

Methods

A single-centre retrospective cohort was constructed to include all pregnant patients who tested positive for SARS-CoV-2 between March 22 and July 31, 2020, and received care at the Jewish General Hospital. Initially, testing was restricted to at-risk patients, identified through the use of a screening questionnaire. Beginning on May 15, 2020, universal testing was implemented, and all pregnant patients admitted to hospital were tested. Data were collected through chart review.

Results

Of 803 patients tested for SARS-CoV-2 during the study period, 41 (5%) tested positive. Among those patients who were symptomatic, the most commonly reported symptoms were cough (53%), fever (37%), dyspnea (30%), and anosmia and/or ageusia (20%). Prior to the implementation of universal testing, 13% (3/24) of patients with SARS-CoV-2 were asymptomatic. Following the implementation of universal testing, 80% (8/10) of patients with SARS-CoV-2 were asymptomatic.

Conclusion

Our findings suggest that most pregnant patients with SARS-CoV-2 are asymptomatic or have mild symptoms of COVID-19. Particularly in endemic areas, universal testing of pregnant patients presenting to hospital should be strongly considered as an important measure to prevent in-hospital and community transmission of COVID-19. (Author)

20201130-68*

Midwifery and Nursing Strategies to protect against COVID-19 During the Third Trimester of Pregnancy. Liu J, Cao Y, Xu

C, et al (2021), Midwifery vol 92, January 2021, 102876

Available from: https://doi.org/10.1016/j.midw.2020.102876

Full URL: https://doi.org/10.1016/j.midw.2020.102876

Objective

The rapid pace of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic (COVID-19) presents significant challenges to midwives and nurses. This study aimed to explore midwifery and nursing interventions to limit the transmission of COVID-19 among women in their third trimester of pregnancy, to reduce the incidence of nosocomial infection and promote safety of care for women and their infants.

Method
We completed a retrospective review of medical records from 35 women in their third trimester of pregnancy with SARS-CoV-2, admitted to one hospital in Wuhan, China in January and February 2020. We investigated the clinical characteristics of the COVID-19 infection in pregnancy, and the individualized midwifery and nursing care offered, including environmental protection, prevention of nosocomial infection, maternal observations, monitoring of signs and symptoms of COVID-19, and psychological care.
Result
Thirty-one women had a caesarean section, and four had vaginal births. Retrospective analysis of midwifery and nursing strategies implemented to care for these women showed no maternal complications or nosocomial infections.
Conclusions and implications for practice
The care strategies we implemented could prevent complications and nosocomial infection in the third trimester of pregnancy, thus ensuring the safety of women and their infants. Further research needs to determine treatment priorities for women infected with COVID-19 during pregnancy and the postnatal period. (Author)

20201130-65*

Pregnancy and birth planning during COVID-19: The effects of tele-education offered to pregnant women on prenatal distress and pregnancy-related anxiety. Derya YA, Altiparmak S, Akca E, et al (2021), Midwifery vol 92, January 2021, 102877
Available from: https://doi.org/10.1016/j.midw.2020.102877
Full URL: https://doi.org/10.1016/j.midw.2020.102877

Aim
This study aims to examine pregnancy and birth planning during COVID-19 and the effects of a tele-education offered to pregnant women for this planning process on prenatal distress and pregnancy-related anxiety.
Method
The population of this quasi-experimental study was composed of pregnant women who applied for the antenatal education class of a public hospital in the east of Turkey during their past prenatal follow-ups and wrote their contact details in the registration book to participate in group trainings. The sample of the study consisted of a total of 96 pregnant women, including 48 in the experiment and 48 in the control groups, who were selected using power analysis and non-probability random sampling method. The data were collected between April 22 and May 13, 2020 using a 'Personal Information Form', the 'Revised Prenatal Distress Questionnaire (NuPDQ)' and the 'Pregnancy Related Anxiety Questionnaire-Revised 2 (PRAQ-R2)'. An individual tele-education (interactive education and consultancy provided by phone calls, text message and digital education booklet) was provided to the pregnant women in the experiment group for one week. No intervention was administered to those in the control group. The data were statistically analyzed using descriptive statistics (frequency, percentage, mean, standard deviation, min-max values) and t-test in dependent and independent groups.
Results
The posttest NuPDQ total mean scores of pregnant women in the experiment and control groups were 8.75±5.10 and 11.50±4.91, respectively, whereby the difference between the groups was statistically significant (t=-2.689, p=0.008). Additionally, the difference between their mean scores on both PRAQ-R2 and its subscales of 'fear of giving birth' and 'worries of bearing a physically or mentally handicapped child' was statistically significant (p<0.05), where those in the experiment group had lower anxiety, fear of giving birth and worries of bearing a physically or mentally handicapped child.
Conclusion
The tele-education offered to the pregnant women for pregnancy and birth planning during COVID-19 decreased their prenatal distress and pregnancy-related anxiety. (Author) [Erratum: Midwifery, 27 January 2021, online, 102932]

20201130-43*

Clinical guidelines for caring for women with COVID-19 during pregnancy, childbirth and the immediate postpartum period. Pavlidis P, Eddy K, Phung L, et al (2020), Women and Birth: Journal of the Australian College of Midwives 3 November 2020, online

Available from: https://doi.org/10.1016/j.wombi.2020.10.015

Full URL: https://doi.org/10.1016/j.wombi.2020.10.015

Background

The spread of the novel coronavirus (COVID-19) was declared a pandemic by the World Health Organization on 11th March 2020. Since then there has been a rapid rise in development of maternal and perinatal health guidelines related to COVID-19. The aim of this project was to develop a database of Australian and international recommendations relating to antenatal, intrapartum and postpartum care of women during the COVID-19 pandemic, in order to identify inconsistencies in clinical guidance.

Methods

We conducted weekly web searches from 30th March to 15th May 2020 to identify recommendations pertaining to the care of women during pregnancy, labour and postpartum period from national or international professional societies, specialist colleges, Ministries of Health, Australian state and territory governments, and international guideline development organisations. Individual recommendations were extracted and classified according to intervention type, time period, and patient population. Findings were reported using descriptive analysis, with areas of consensus and non-consensus identified.

Results

We identified 81 guidelines from 48 different organisations. Generally, there was high consensus across guidelines for specific interventions. However, variable guidance was identified on the use of nitrous oxide during labour, administration of antenatal corticosteroids, neonatal isolation after birth, labour and birth companions, and the use of disease modifying agents for treating COVID-19.

Conclusion

Discrepancies between different guideline development organisations creates challenges for maternity care clinicians during the COVID-19 pandemic. Collating recommendations and keeping up-to-date with the latest guidance can help clinicians provide the best possible care to pregnant women and their babies. (Author)

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)

20201127-1*

Maternal and child healthcare in India during COVID-19 pandemic. Paul P, Mondal D (2021), Midwifery vol 92, January 2021, 102865

Available from: https://doi.org/10.1016/j.midw.2020.102865

Full URL: https://doi.org/10.1016/j.midw.2020.102865

Editorial discussing maternal and child healthcare in India during the COVID-19 pandemic. Highlights the high rates of maternal and infant mortality prior to the pandemic and outlines strategies to minimise further adverse outcomes. (LDO)

20201126-69*

Exploring modifiable risk-factors for premature birth in the context of COVID-19 mitigation measures: A discussion paper. Green J, Petty J, Whiting L, et al (2020), Journal of Neonatal Nursing 4 November 2020, online

Available from: https://doi.org/10.1016/j.jnn.2020.11.004

Full URL: https://doi.org/10.1016/j.jnn.2020.11.004

During the COVID-19 pandemic, parents with sick or premature babies have faced challenges following admission to a neonatal unit due to the imposed lock-down restrictions on social contact, hospital visitation and the wearing of personal protective equipment. The negative short-term impact on neonatal care in relation to the prevention of close proximity, contact and bonding between parents and babies is potentially significant. However, an interesting finding has been reported of a reduction in premature birth admissions to the neonatal intensive care unit during the pandemic, raising important questions. Why was this? Was it related to the effect of the modifiable risk-factors for premature birth? This discussion paper focuses on an exploration of these factors in the light of the potential impact of COVID-19 restrictions on neonatal care. After contextualising both the effect of premature birth and the pandemic on neonatal and parental short-term outcomes, the discussion turns to the modifiable risk-factors for premature birth and makes recommendations relevant to the education, advice and care given to expectant mothers. (Author)

20201126-41*

COVID-19 pandemic effect on early pregnancy: are miscarriage rates altered, in asymptomatic women?. Rotshenker-Olshinka K, Volodarsky-Perel A, Steiner N, et al (2020), Archives of Gynecology and Obstetrics 9 November 2020, online

Available from: https://doi.org/10.1007/s00404-020-05848-0

Full URL: https://doi.org/10.1007/s00404-020-05848-0

Purpose

To evaluate the effect of the COVID-19 pandemic state on early, first-trimester pregnancies.

Methods

A retrospective cohort study conducted at a university-affiliated fertility center in Montreal, Quebec, since the COVID-19 shut down, March 13 until May 6, 2020. Included: all women who came for a first-trimester viability scan during the study period (Study group) and between March 1, 2019 and May 17, 2019, approximately one year prior (Control). The study population denied symptoms of COVID-19.

We reviewed all first trimester scans. Early first-trimester pregnancy outcomes (Viable pregnancy, arrested pregnancy including biochemical pregnancy loss and miscarriage, and ectopic pregnancy) were measured as total number and percentage. A multivariate analysis was performed to control for other potentially significant variables, as was a power analysis supporting sample size.

Results

113 women came for a first-trimester viability scan in the study period, and 172 in the control period (5-11 weeks gestational age), mean maternal age 36.5 ± 4.5 and 37.2 ± 5.4 years (p = 0.28). Viable clinical pregnancy rate was not different between the two groups (76.1 vs. 80.2% in the pandemic and pre-pandemic groups p = 0.41). No significant difference was seen in the total number of arrested pregnancies (defined as the sum of biochemical, 1st trimester miscarriages, and blighted ova) (22.1 vs. 16.9% p = 0.32), or in each type of miscarriage.

Conclusion

The COVID-19 pandemic environment does not seem to affect early first-trimester miscarriage rates in asymptomatic patients. (Author)

20201126-37*

RCOG receives funding for project into COVID-19 and maternal health. Royal College of Obstetricians and Gynaecologists
(2020), London: RCOG 26 November 2020
Available from:
https://www.rcog.org.uk/en/news/rcog-receives-funding-for-project-into-covid-19-and-maternal-health/
Full URL: https://www.rcog.org.uk/en/news/rcog-receives-funding-for-project-into-covid-19-and-maternal-health/

Reports that the Health Foundation has awarded a grant to the Royal College of Obstetricians and Gynaecologists (RCOG), together with Queen Mary University of London, the Caribbean and African Health Network and the University of Bristol, for a project looking at whether changes to maternity care during the COVID-19 pandemic have affected existing inequalities. (Author, edited)

20201124-40*

Attitudes and precaution practices towards COVID-19 among pregnant women in Singapore: a cross-sectional survey.
Lee RWK, Loy SL, Yang L, et al (2020), BMC Pregnancy and Childbirth vol 20, no 675, 10 November 2020
Available from: https://doi.org/10.1186/s12884-020-03378-w
Full URL: https://doi.org/10.1186/s12884-020-03378-w

Background
COVID-19 may predispose pregnant women to higher risks of severe disease and poorer neonatal outcome. Psychological sequalae of this pandemic may pose a greater conundrum than its clinical aspects. It is currently unknown that how pregnant women cope with this global pandemic and its ramifications. The aims of the study are to understand the attitudes and precaution practices of non-infected pregnant women towards the COVID-19 outbreak in Singapore.
Methods
An online cross-sectional survey of COVID-19 awareness among pregnant women attending antenatal clinics in Singapore was conducted. An internet link was provided to complete an online electronic survey on Google platform using a quick response (QR) code on mobile devices. The online survey consists of 34 questions that were categorized into 4 main sections, namely 1) social demographics 2) attitude on safe distancing measures 3) precaution practices and 4) perceptions of COVID-19. Multiple linear regression analysis was performed to examine women's precaution practices among six independent socio-demographic variables, including age, ethnicity, education, front-line jobs, history of miscarriage and type of antenatal clinic (general, high risk).
Results
A total of 167 survey responses were obtained over 8 weeks from April to June 2020. The majority of women were aged ≤35 years (76%, n = 127), were of Chinese ethnicity (55%, n = 91), attained tertiary education (62%, n = 104) and were not working as frontline staff (70%). Using multiple linear regression models, Malay ethnicity (vs. Chinese, β 0.24; 95% CI 0.04, 0.44) was associated with higher frequency of practicing social distancing. Malay women (β 0.48; 95% CI 0.16, 0.80) and those who worked as frontline staff (β 0.28; 95% CI 0.01, 0.56) sanitized their hands at higher frequencies. Age of ≥36 years (vs. ≤30 years, β 0.24; 95% CI 0.01, 0.46), Malay (vs. Chinese, β 0.27; 95% CI 0.06, 0.48) and Indian ethnicity (vs. Chinese, β 0.41; 95% CI 0.02, 0.80), and attendance at high-risk clinic (vs. general clinic, β 0.20; 95%
CI 0.01, 0.39) were associated with higher frequency of staying-at-home.
Conclusion
Social demographical factors including age > 36 years old, Malay ethnicity, employment in front line jobs and attendance at high-risk clinics are likely to influence the attitudes and precaution practices among pregnant women towards COVID-19 in Singapore. Knowledge gained from our cross-sectional online survey can better guide clinicians to communicate better with pregnant women. Hence, it is important for clinicians to render appropriate counselling

and focused clarification on the effect of COVID-19 among pregnant women for psychological support and mental well being. (Author)

20201123-1*
Characteristics of online medical care consultation for pregnant women during the COVID-19 outbreak: cross-sectional study. Chen M, Liu X, Zhang J, et al (2020), BMJ Open vol 10, no 11, November 2020, e043461
Available from: http://dx.doi.org/10.1136/bmjopen-2020-043461
Full URL: http://dx.doi.org/10.1136/bmjopen-2020-043461

Objectives This study described the needs of pregnant women and the contents of online obstetric consultation in representative areas with various severity of the epidemic in China.
Design This was a cross- sectional study.
Setting Yue Yi Tong (YYT), a free online communication platform that allows pregnant women to consult professional obstetricians.
Participants All the pregnant women who used the YYT platform.
Intervention From 10 to 23 February, we collected data on online obstetric consultations and participants' satisfaction through the YYT platform in the mild, moderate and severe epidemic areas which were defined according to the local confirmed cases. The primary outcomes were the reasons for online consultations by the severity of the epidemic. All the comparisons were performed using χ2 test. Statistical analysis was performed using SPSS V.24.
Results A total of 2599 pregnant women participated in this study, of whom 448 (17.24%), 1332 (51.25%) and 819 (31.51%) were from the mild, moderate and severe epidemic areas, respectively. The distribution of the amount of online consultations was significantly different not only in different areas ($p<0.001$) but also in different trimesters ($p<0.001$). A total of 957 participants completed the satisfaction part of the survey. In this study, 77.95% of the participants used e-health for the first time, and 94.63% of the participants were completely or mostly satisfied with the online consultations.
Conclusions The distribution of the amount of online consultations was significantly different not only in different areas but also in different trimesters. In any trimester, the amount of consultations on the second category (obstetric care-seeking behaviour) was the highest in the severe epidemic areas. The needs for online consultations were substantial. In order to prevent irreversible obstetric adverse events, an appropriate antenatal care contingency plan with e-health services is highly recommended during the Public Health Emergency of International Concern.
 (Author)

20201119-15*
Effects of SARS Cov-2 epidemic on the obstetrical and gynecological emergency service accesses. What happened and what shall we expect now?. Dell'Utri C, Manzoni E, Cipriani S, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 254, November 2020, pp 64-68
Available from: https://doi.org/10.1016/j.ejogrb.2020.09.006
Full URL: https://doi.org/10.1016/j.ejogrb.2020.09.006

Objective
During the lockdown period, the fear about the risk of infection in hospital has reduced the admission to Emergency

Services (ES) with possible negative health effects. We have investigated the changes in the emergency flow occurred during SARS-CoV-2 pandemic in an obstetrics and gynecological ES and the short-term adverse outcomes on women's and reproductive health.
Study design
The study was conducted in the OBGYN ES of the Clinica Mangiagalli, the largest maternity clinic of Milan, Lombardy, Northern Italy. We analyzed retrospectively the records of all women consecutively admitted at the ES from February 23rd to June 24th 2019, and compared them with the admissions during the lockdown executive order from February 23rd to June 23rd, 2020. Patients were assessed in terms of demographic features, presentation times, triage classification (urgent/not urgent), reason for admission and outcome of the visit (discharge/admission to the ward). A total of 9291 data were retrieved from ES files and automation system, 5644 from 2019 and 3647 from 2020. Categorical variables were compared by the chi-square test calculating the p value and computed were percentage changes (with 95 % Confidence interval, CI).
Results
During the period February 24 th - May 31 th 2020 the admissions at the ES decreased by 35.4 % (95 % CI-34.1-36.6) compared with the corresponding period in 2019. The reduction was more marked for gynecological complaints (-63.5 %, 95 %CI -60.5 to -66.5): in particular we observed a reduction of admissions for genital infection/cystitis of 75.7 % (95 %CI -71.4 to -80.1). The admission for complaints associated with pregnancy decreased by 28.5 % (95 %CI -27.2 to-29.9). In the index period, five fetal deaths were diagnosed compared with one observed in the reference period in 2019 (chi square computed using as denominator all observed pregnancies = 4.29, p = 0.04). The frequency of admission for elective caesarean section/labor induction increased from 47.5 % in 2019 to 53.6 % in 2020: this difference was statistically significant.
Conclusion
The lockdown negatively influenced ES admissions and consequently the women's/reproductive health. As possible short-term consequences, we observed an increase of intrauterine deaths and a decrease of natural births. (Author)

20201118-24*
Changes in physiology and immune system during pregnancy and coronavirus infection: A review. Chen M, Zeng J, Liu X, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 255, December 2020, pp 124-128
Available from: https://doi.org/10.1016/j.ejogrb.2020.10.035
Full URL: https://doi.org/10.1016/j.ejogrb.2020.10.035
Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the 3rd epidemic coronavirus after severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV). Since December 2019, the outbreak of the Coronavirus Disease 2019 (COVID-19) caused by SARS-CoV-2 has aroused great attention around the world. Pregnant women and their fetuses have been concerned as a high-risk population. We explained why pregnant women are susceptible to coronavirus in terms of their adaptive changes in physiology and immune system during pregnancy, and described the associations between maternal clinical symptoms, perinatal outcomes and coronavirus infections. (Author)

20201118-20*
Does having a high-risk pregnancy influence anxiety level during the COVID-19 pandemic?. Sinaci S, Tokalioglu EO, Ocal D, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 255, December 2020, pp 190-196
Available from: https://doi.org/10.1016/j.ejogrb.2020.10.055
Full URL: https://doi.org/10.1016/j.ejogrb.2020.10.055

Objective
We aimed to analyze the changing level of anxiety during COVID-19 pandemic in pregnant women, with and without high-risk indicators separately, in a tertiary care center serving also for COVID-19 patients, in the capital of Turkey.
Study design
We designed a case-control and cross-sectional study using surveys. The Spielberger State-Trait Anxiety Scale questionnaire (STAI-T) and Beck Anxiety Inventory (BAI) which were validated in Turkish were given to outpatient women with high-risk pregnancies as study group and normal pregnancies as control group. A total of 446 women were recruited.
Results
There was a statistically significant difference between those with and without high-risk pregnancy in terms of Trait-State Anxiety scores with COVID-19 pandemic ($p < 0.05$). We found an increased prevalence of anxiety during COVID-19 pandemic in high-risk pregnant women comparing to pregnancies with no risk factors ($p < 0.05$). There was a statistically significant difference between the education level in high-risk pregnant women in terms of anxiety scores ($p < 0.05$), Beck Anxiety score was highest in high school graduates (42.75). While the level of Trait Anxiety was the highest with pandemic in those with high-risk pregnancy with threatened preterm labor and preterm ruptures of membranes (58.0), those with thrombophilia were the lowest (50.88).
The State Anxiety level and Beck Anxiety Score of those with maternal systemic disease were the highest (53.32 and 45.53), while those with thrombophilia were the lowest (46.96 and 40.08).
The scores of Trait Anxiety (56.38), State Anxiety (52.14), Beck Anxiety (43.94) were statistically higher during the pandemic in those hospitalized at least once ($p < 0.05$).
Conclusion
High-risk pregnant women require routine anxiety and depression screening and psychosocial support during the COVID-19 pandemic. High-risk pregnancy patients have comorbid conditions most of the time, hence they not only at more risk for getting infected, but also have higher anxiety scores because of the stress caused by COVID-19 pandemic. (Author)

20201117-60*

Signs suggestive of congenital SARS-CoV-2 infection with intrauterine fetal death: a case report. Rodrigues ML, Gasparinho G, Sepúlveda F, et al (2021), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 256, January 2021, pp 508-509
Available from: https://doi.org/10.1016/j.ejogrb.2020.11.042
Full URL: https://doi.org/10.1016/j.ejogrb.2020.11.042

Case report of congenital SARS-CoV-2 infection ending in stillbirth in an asymptomatic pregnant woman. An autopsy was performed and polymerase chain reaction (PCR) was positive for SARS-CoV-2 in the fetal lung samples. (LDO)

20201117-59*

Evaluation of psychological impact, depression, and anxiety among pregnant women during the COVID-19 pandemic in Lahore, Pakistan. Shahid A, Javed A, Rehman S, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 3, December 2020, pp 462-465
Available from: https://doi.org/10.1002/ijgo.13398
Full URL: https://doi.org/10.1002/ijgo.13398

Concerns about vulnerability to COVID-19 and vertical transmission of the disease led to increased incidence of psychological distress, depression, anxiety, and sleep disturbance among pregnant women in Lahore, Pakistan. (Author)

20201117-55*

The SARS-CoV-2 pandemic scenario in Africa: What should be done to address the needs of pregnant women?. Charles CM, Amoah EM, Kourouma KR, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 3, December 2020,
pp 468-470
Available from: https://doi.org/10.1002/ijgo.13403
Full URL: https://doi.org/10.1002/ijgo.13403

The need for prospective monitoring of COVID-19 cases among pregnant women, and coordinated information-sharing to inform pragmatic responses to the pandemic in the context of LMICs, is greater now than ever. (Author)

20201117-54*

COVID-19-associated diffuse leukoencephalopathy and cerebral microbleeds during puerperium. Montes-Ramirez J, Aquino-Lopez E (2020), International Journal of Gynecology & Obstetrics vol 151, no 3, December 2020, pp 466-467

Available from: https://doi.org/10.1002/ijgo.13399
Full URL: https://doi.org/10.1002/ijgo.13399

Leukoencephalopathy with cerebral microbleeds is a novel and potentially disabling neurological complication that can be present during pregnancy and puerperium in the era of COVID-19. (Author)

20201117-51*

Risk factors for adverse outcomes among pregnant and postpartum women with acute respiratory distress syndrome due to COVID-19 in Brazil. Menezes MO, Takemoto MLS, Nakamura-Pereira M, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 3, December 2020, pp 415-423
Available from: https://doi.org/10.1002/ijgo.13407
Full URL: https://doi.org/10.1002/ijgo.13407

Objective
To evaluate whether clinical and social risk factors are associated with negative outcomes for COVID-19 disease among Brazilian pregnant and postpartum women.
Methods
A secondary analysis was conducted of the official Acute Respiratory Syndrome Surveillance System database. Pregnant and postpartum women diagnosed with COVID-19 ARDS until July 14, 2020, were included. Adverse outcomes were a composite endpoint of either death, admission to the intensive care unit (ICU), or mechanical ventilation. Risk factors were examined by multiple logistic regression.
Results
There were 2475 cases of COVID-19 ARDS. Among them, 23.8% of women had the composite endpoint and 8.2% died. Of those who died, 5.9% were not hospitalized, 39.7% were not admitted to the ICU, 42.6% did not receive mechanical ventilation, and 25.5% did not have access to respiratory support. Multivariate analysis showed that postpartum period, age over 35 years, obesity, diabetes, black ethnicity, living in a peri-urban area, no access to Family Health Strategy, or living more than 100 km from the notification hospital were associated with an increased risk of adverse outcomes.
Conclusion
Clinical and social risk factors and barriers to access health care are associated with adverse outcomes among maternal cases of COVID-19 ARDS in Brazil. (Author)

20201117-50*

Co-infection of malaria and dengue in pregnant women with SARS-CoV-2. Mahajan NN, Kesarwani SN, Shinde SS, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 3, December 2020, pp 459-462
Available from: https://doi.org/10.1002/ijgo.13415
Full URL: https://doi.org/10.1002/ijgo.13415

Physicians and obstetricians should be vigilant so that they can swiftly identify co-infections of malaria and dengue in pregnant women with COVID-19. (Author)

20201117-31*

COVID-19: women with diabetes and hypertension during pregnancy. Hu J, Danielli M, Thomas RC, et al (2020), British Journal of Midwifery vol 28, no 11, November 2020, pp 800-801

Midwives should be prepared to create individualised care plans, share data and liase with other departments, to improve maternal and fetal outcomes for pregnant women with these conditions. (Author)

20201117-19*

Saving babies' lives in a pandemic. Eldridge H (2020), British Journal of Midwifery vol 28, no 11, November 2020, pp 752-753

The Mums And Midwives Awareness Academy is empowering parents to overcome their fear of attending their maternity unit. (Author)

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
Available from: 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
Available from: https://doi.org/10.1001/jama.2020.19124
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 vol 60, no 6, December 2020, pp 840-851

Available from: https://doi.org/10.1111/ajo.13270

Full URL: https://doi.org/10.1111/ajo.13270

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)

20201116-46*

Management of the mother-infant dyad with suspected or confirmed SARS-CoV-2 infection in a highly epidemic context. Pietrasanta C, Pugni L, Ronchi A, et al (2020), Journal of Neonatal-Perinatal Medicine vol 13, no 3, 2020

In the context of SARS-CoV-2 pandemic, the hospital management of mother-infant pairs poses to obstetricians and neonatologists previously unmet challenges. In Lombardy, Northern Italy, 59 maternity wards networked to organise the medical assistance of mothers and neonates with suspected or confirmed SARS-CoV-2 infection. Six 'COVID-19 maternity centres' were identified, the architecture and activity of obstetric and neonatal wards of each centre was reorganised, and common assistance protocols for the management of suspected and proven cases were formulated. Here, we present the key features of this reorganization effort, and our current management of the mother-infant dyad before and after birth, including our approach to rooming-in practice, breastfeeding and neonatal follow-up, based on the currently available scientific evidence. Considered the rapid diffusion of COVID-19 all over the world, we believe that preparedness is fundamental to assist mother-infant dyads, minimising the risk of propagation of the infection through maternity and neonatal wards. (Author)

20201116-39*

The changing landscape of SARS-CoV-2: Implications for the maternal-infant dyad. Elgin TG, Fricke EM, Hernandez Reyes ME, et al (2020), Journal of Neonatal-Perinatal Medicine vol 13, no 3, 2020

The COVID-19 pandemic represents the greatest challenge to date faced by the medical community in the 21st century. The rate of rapid dissemination, magnitude of viral contagiousness, person to person transmission at an asymptomatic phase of illness pose a unique and dangerous challenge for all patients, including neonatal and obstetric patients. Although scientific understanding of the pathophysiology of the disease, nature of transmission, and efficacy of mitigation strategies is growing, neither a cure or vaccine have been developed. While COVID-19 is primarily a disease of older patients, infection is now seen across all age demographics with reports of illness in pregnant patients and infants. Altered hormone status and predominance of Th-2 immune helper cells may result in increased predisposition to SARS-CoV-2. Case reports of pregnant patients demonstrate a clinical presentation comparable to non-pregnant adults, but evidence of vertical transmission to the fetus is controversial. Neonatal reports demonstrate an inconsistent and non-specific phenotype, and it is often difficult to separate COVID-19 from the underlying conditions of prematurity or bacterial infection. The development of international registries to enable risk profiling of COVID-19 positive pregnant mothers and/or their offspring may facilitate the development of enhanced mitigation strategies, medical treatments and effective vaccinations. (Author)

20201112-39*

New-Onset myocardial injury in COVID-19 Pregnant Patients: A Case Series of 15 Patients. Mercedes BR, Serwat A, Naffaa L, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) 21 October 2020, online

Available from: https://doi.org/10.1016/j.ajog.2020.10.031

Full URL: https://doi.org/10.1016/j.ajog.2020.10.031

Background

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the new coronavirus responsible for the coronavirus disease (COVID-19), characterized by acute respiratory distress syndrome and atypical pneumonia. In non-pregnant women, studies have shown that SARS-CoV-2 causes cardiac injury, which can result in myocardial inflammation and damage. Despite many studies investigating the extent of cardiac compromise in severely ill COVID-19 patients, little is known regarding its impact on pregnant women.

Objective

To illustrate the clinical, laboratory, radiological findings, and outcomes of COVID-19 pregnant patients who developed myocardial injury with ventricular dysfunction.

Study Design

We retrospectively reviewed the paper records of fifteen pregnant women with COVID-19, who developed myocardial injury on a single tertiary care hospital in the Dominican Republic. Patient's baseline characteristics, clinical picture, laboratory, and radiological findings were presented, and maternal and fetal outcomes were analyzed.

Results

Of 154 pregnant patients diagnosed with COVID-19 at our hospital during the study period, 15 (9.7%), developed myocardial injury. These patients' mean age and gestational age were 29.87 ± 5.83 and 32.31 ± 3.68, respectively. 66.7% of patients presented with shortness of breath and 16.3% with palpitations. All patients were admitted to the intensive care unit, and 86.6% needed intubation. Patients developed myocardial injury confirmed with highly elevated troponin (34.6 [14.4-55.5 ng/ml]), and pro-BNP concentrations (209 [184-246 pg/ml]). Additionally, all patients developed left ventricular dysfunction demonstrated by an echocardiogram with a mean left ventricular ejection fraction (LVEF) of 37.67 ± 6.4 %. Two patients that presented with palpitations passed away a few days after admission.

Conclusion

Our study showed COVID-19 induced myocardial injury and left ventricular dysfunction in pregnant women with a 13.3% mortality rate which was attributed to malignant arrhythmias. (Author)

20201112-38*

Immunity and Coagulation/Fibrinolytic Processes may Reduce the Risk of Severe Illness in Pregnant Women with COVID-19. Zhong Y, Cao Y, Zhong X, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) 21 October 2020, online

Available from: https://doi.org/10.1016/j.ajog.2020.10.032

Full URL: https://doi.org/10.1016/j.ajog.2020.10.032

Background

There are specific physiologic features regarding the immunity and coagulation among pregnant women, which may play important roles in the illness development of COVID-19.

Objective

To determine the key factors associated with the deterioration of patients with COVID-19 and the differentiating clinical characteristics of pregnant women with COVID-19, to interfere with the progression of COVID-19.

Study Design

A retrospective study of 539 Chinese Han adult patients with COVID-19 was conducted, of which 36 cases were pregnant women. 36 pregnant women without COVID-19 were recruited as the control. The characteristics of severe

and critical illness which were differentiated from mild and moderate illness in patients with COVID-19 were analyzed using a machine learning algorithm. Additionally, major differences between pregnant women with COVID-19 and age-matched non-pregnant women with severe/critical COVID-19, paired with pregnant women without COVID-19, were explored to identify specific physiological features of pregnant women with COVID-19.
Results
For the total patient population, the lymphocyte, CD3+, CD4+, CD8+, CD19+ and CD16+56+ cell counts were significantly lower, and white blood cell (WBC), neutrophil and neutrophil-to-lymphocyte ratio (NLR) were higher in those with severe/critical illness than those with mild/moderate illness (P<0.001). The plasma levels of IL-6, IL-10 and IL-6 to IL-10 ratio (IL-6/10) were significantly increased in critical patients, compared to mild, moderate and severe patients (P<0.001). The above immunological co-clusters achieved an AUC of 0.801 (95% CI: 0.764-0.838); and its combined model with the coagulation and fibrinolysis index (prothrombin time, d-dimer) achieved an AUC of 0.815 (95% CI: 0.779-0.851) using the random Forest regression model to predict severe or critical illness. For the pregnant women with COVID-19, none had pre-existing diseases. They displayed increased WBC, neutrophil count, NLR, and levels of D-dimer and fibrinogen, along with decreased lymphocyte and IL-4 level (P<0.05), compared with non-pregnant women with mild/moderate COVID-19. Although they presented similar changes of immunological markers of lymphocyte, WBC, NLR, CD3+, CD4+, CD8+, CD16+56+ cell count and IL-6/10 compared with non-pregnant women with severe/critical COVID-19, none of the pregnant women with COVID-19 deteriorated into severe or critical illness. There were no significant differences in comparison to WBC, lymphocyte, neutrophil, NLR, immunological markers or coagulation fibrinolysis markers between pregnant women with COVID-19 and pregnant women without COVID-19. As for the discrepancy of pathophysiological features between pregnant women with COVID-19 and non-pregnant women with severe/critical COVID-19, the immunological markers achieved an AUC of 0.875 (95% CI: 0.773-0.977); and its combined model with coagulation and fibrinolysis index achieved an AUC of 0.931 (95% CI: 0.850-1.000).
Conclusions
Immune dysregulation was identified as a crucial feature of COVID-19 patients which developed severe or critical illness, and pregnant women with COVID-19 presented with similar immune responses but rarer incidences of severe or critical illness. Immune dysregulation is related to the risks of deterioration into severe or critical illness. The specific coagulation/fibrinolysis system of pregnancy may reduce pregnant women with COVID-19 without pre-existing disease from the development of severe illness. (Author)

20201112-29*
Maternal-Neonatal Dyad Outcomes of Maternal COVID-19 Requiring Extracorporeal Membrane Support: A Case Series. Douglass KM, Strobel KM, Richley M, et al (2021), American Journal of Perinatology vol 38, no 1, January 2021, pp 82-87
Available from: https://doi.org/10.1055/s-0040-1718694
Full URL: https://doi.org/10.1055/s-0040-1718694
Objective This study aimed to describe two cases of acute respiratory distress syndrome (ARDS) secondary to novel coronavirus disease 2019 (COVID-19) in pregnant women requiring extracorporeal membrane oxygenation (ECMO), and resulting in premature delivery.
Study Design The clinical course of two women hospitalized with ARDS due to COVID-19 care in our intensive care (ICU) is summarized; both participants provided consent to be included in this case series.
Results Both women recovered with no clinical sequelae. Neonatal outcomes were within the realm of expected for prematurity with the exception of coagulopathy. There was no vertical transmission to the neonates.
Conclusion This case series highlights that ECMO is a feasible treatment in the pregnant woman with severe COVID-19 and that delivery can be performed safely on ECMO with no additional risk to the fetus. While ECMO carries its natural risks, it should be considered a viable option during pregnancy and the postpartum period. (Author)

20201110-49*

Differences in levels of stress, social support, health behaviours, and stress-reduction strategies for women pregnant before and during the COVID-19 pandemic, and based on phases of pandemic restrictions, in Ireland. Matvienko-Sikar K, Pope J, Cremin A, et al (2020), Women and Birth: Journal of the Australian College of Midwives 23 October 2020, online

Available from: https://doi.org/10.1016/j.wombi.2020.10.010
Full URL: https://doi.org/10.1016/j.wombi.2020.10.010

Background
The COVID-19 pandemic and related restrictions can adversely impact antenatal maternal well-being and health behaviours.
Aim
To examine antenatal stress and stress-reduction strategies, social support, and health behaviours between women pregnant before and during the pandemic in Ireland.
Methods
210 pregnant women were recruited online and in the antenatal department of a tertiary maternity hospital before the pandemic, and 235 women recruited online during the pandemic. Only women resident in Ireland were included in this study. Women completed measures of stress, social support, health-behaviours, and self-reported stress-reduction strategies. Differences in outcomes were examined between women pregnant before and during the pandemic, and between Phase 2 and Phase 3 of the Irish Government COVID-19 restrictions.
Findings
Women pregnant during the pandemic reported lower perceived social support, including support from a significant other, friends and family, than women pregnant before the pandemic. There were no significant differences in stress in health behaviours but women reported higher stress and less physical activity during the pandemic. Women reported a range of comparable stress-reduction strategies before and during the pandemic. No differences were observed between phases of pandemic-related restrictions for any outcome.
Discussion
Our findings highlight negative impacts of the pandemic on social support, stress, and physical activity, which can have implications for maternal and child health. Lack of differences between restriction phases suggests on-going negative effects for antenatal well-being and behaviours.
Conclusion
Development of supports for pregnant women during the pandemic should include social-support and stress-reduction components. (Author)

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

Available from: https://doi.org/10.1016/S2468-2667(20)30223-1
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)

20201102-50*

Pregnant women with COVID-19 and risk of adverse birth outcomes and maternal-fetal vertical transmission: a population-based cohort study in Wuhan, China. Yang R, Mei H, Zheng T, et al (2020), BMC Medicine vol 18, no 330, 19 October 2020
Available from: https://doi.org/10.1186/s12916-020-01798-1
Full URL: https://doi.org/10.1186/s12916-020-01798-1
Background
The coronavirus disease 2019 (COVID-19) outbreak is evolving rapidly worldwide. However, little is known about the association between pregnant women with COVID-19 and the risk of adverse birth outcomes.
Method
We conducted a retrospective cohort study based on the Maternal and Child Health Information System (MCHIMS) of Wuhan, China. All pregnant women with singleton live birth recorded by the system between January 13 and March 18, 2020, were included. The adverse birth outcomes were preterm birth, low birth weight, neonatal asphyxia, premature rupture of membrane (PROM), and cesarean section delivery. Multivariate logistic regression was used to evaluate the associations between maternal COVID-19 diagnosis and adverse birth outcomes.
Results
Out of 11,078 pregnant women, 65 were confirmed with coronavirus disease 2019 (COVID-19). No deaths occurred from these confirmed cases or their newborns. Compared to pregnant women without COVID-19, pregnant women with a confirmed COVID-19 diagnosis had an increased risk of preterm birth (OR 3.34, 95% CI 1.60-7.00) and cesarean section (OR 3.63, 95% CI 1.95-6.76). There was no statistical difference in low birth weight, neonatal asphyxia, and PROM between the mothers with and without COVID-19. Among these newborns that were born to mothers with confirmed COVID-19, none was tested severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) positive or had abnormal CT results. Only one had diarrhea and three had a fever.

Conclusions
This population-based cohort study suggests that COVID-19 during the later pregnancy is associated with an increased risk of adverse birth outcomes, including iatrogenic preterm birth and cesarean section delivery. Our data provide little evidence for maternal-fetal vertical transmission of SARS-CoV-2. It is important to monitor the long-term health effects of SARS-CoV-2 infection on pregnant women and their children. (Author)

20201029-17*

Clinical Profile,Viral load(E,RdRP,ORF1 gene), Fetomaternal outcomes of pregnant women with COVID-19 in a Tertiary care Hospital of India : First 4 weeks experience: retrospective, single-centre descriptive study. Bachani S, Arora R, Dabral A, et al (2020), JOGC [Journal of Obstetrics and Gynaecology Canada] 27 October 2020, online
Available from: https://doi.org/10.1016/j.jogc.2020.09.021
Full URL: https://doi.org/10.1016/j.jogc.2020.09.021

Introduction
The COVID19 pandemic raises a major concern about its severity in pregnancy, fetomaternal outcomes and risk of vertical transmission.The Cycle threshold indicating the viral load can be a contributory factor towards modifying the management of such pregnant women. We report a retrospective descriptive study regarding the clinical course, fetomaternal outcomes of pregnant women with COVID19.
Methodology
This is a single-center, retrospective study performed in a tertiary care hospital for pregnant women with COVID-19 in India. The medical records of the all women who delivered in the Covid facility from May 5th 2020 to June 5th 2020 were reviewed independently. Data extracted from the records included demography, obstetric details, co morbidities, disease severity, investigations, management and information on neonates (birthweight, Apgar score, and perinatal complications).Statistical analysis was performed by the SPSS program for Windows, version 17.0(SPSS, Chicago, Illinois)
Results
Amongst 348 women(suspects) tested for SARS-CoV-2, 57 women (57/348,16.3%) were confirmed positive based on qRT-PCR of nasopharyngeal specimen. Most women (45 /78.9 %) had mild infection with favourable fetomaternal outcomes. Three maternal mortalities were associated with co morbidities. Five neonates tested positive for SARS-CoV-2, remained haemodynamically stable and were subsequently discharged.
Conclusions
Majority of pregnant women with Covid-19 had mild disease and recovered subsequently with good perinatal outcomes. Women with co morbidities may have increased risk of severe morbidity and mortality.The Cycle threshold signifying the viral load and degree of infectivity can modify the management during pregnancy.Long-term outcomes and the potential mother-to-child vertical/horizontal transmission needs further study. (Author)

20201028-7*

Impact of changes to national UK Guidance on testing for gestational diabetes screening during a pandemic: a single-centre observational study. van-de-I'sle Y, Steer PJ, Coote IW, et al (2020), BJOG: An International Journal of Obstetrics
and Gynaecology 5 September 2020, online
Available from: https://doi.org/10.1111/1471-0528.16482
Full URL: https://doi.org/10.1111/1471-0528.16482

Objective
To examine the differences in detection rate for gestational diabetes (GDM) comparing the methodology recommended by the National Institute for Health and Clinical Excellence (NICE) compared with testing described as

appropriate during the Covid-19 pandemic by the Royal College of Obstetricians and Gynaecologists (RCOG).
Design
Cohort study of women delivering between 1 January 2016 and 1 July 2020.
Setting
London Teaching Hospital.
Population
All women delivering between 1 January 2016 and 13 May 2020 and follow up of women screening negative between 1 April 2020 and 13 May 2020.
Methods
Retrospective study of prospectively collected data.
Main outcome measures
Detection rate of gestational diabetes.
Results
Using the RCOG guidance, the overall rate of women identified as having gestational diabetes fell from 7.7% (1853/24168) to 4.2% (35/831)(P = 0.0003). Of 230 women who tested negative according to the RCOG criteria from 1 April to 13 May but who subsequently had an oral glucose tolerance test, 47 (20.4%) were diagnosed as having gestational diabetes according to the NICE criteria.
Conclusions
In our setting, the RCOG Covid-19 gestational diabetes screening regime failed to detect 47 of 82 (57%) women subsequently identified as gestational diabetics, and therefore cannot be recommended for general use.
Tweetable abstract
Screening for GDM using RCOG Covid criteria reduced detection rates. (Author)

20201028-29*
Coronavirus (COVID-19) infection in pregnancy: Information for healthcare professionals [Version 12]. 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
Available from:
https://www.rcm.org.uk/media/4383/2020-10-14-coronavirus-covid-19-infection-in-pregnancy-v12.pdf
Full URL: https://www.rcm.org.uk/media/4383/2020-10-14-coronavirus-covid-19-infection-in-pregnancy-v12.pdf
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)

20201028-22*
During the second wave of COVID-19, don't forget about influenza: a call to action. Atallah F, Minkoff H (2021), BJOG: An International Journal of Obstetrics and Gynaecology vol 128, no 1, January 2021, pp 12-13
Available from: https://doi.org/10.1111/1471-0528.16551

Full URL: https://doi.org/10.1111/1471-0528.16551

Discusses the importance of improving influenza vaccine uptake in pregnancy, in particular as co-infection with COVID-19 may increase morbidity. (MB)

20201026-27*

Legal and policy responses to the delivery of abortion care during COVID-19. Romanis EC, Parsons JA (2020), International
Journal of Gynecology & Obstetrics vol 151, no 3, December 2020, pp 479-486
Available from: https://doi.org/10.1002/ijgo.13377
Full URL: https://doi.org/10.1002/ijgo.13377

Access to abortion care has long been a global challenge, even in jurisdictions where abortion is legal. The COVID-19 pandemic has exacerbated barriers to access, thereby preventing many women from terminating unwanted pregnancies for an extended period. In this paper, we outline existing and COVID-specific barriers to abortion care and consider potential solutions, including the use of telemedicine, to overcome barriers to access during the pandemic and beyond. We explore the responses of governments throughout the world to the challenge of abortion access during the pandemic, which are an eclectic mix of progressive, neutral, and regressive policies. Finally, we call on all governments to recognize abortion as essential healthcare and act to ensure that the law does not continue to interfere with providers' ability to adapt to circumstances and to guarantee safe and appropriate care not only during the pandemic, but permanently. (Author)

20201026-26*

Respectful maternity care in the context of COVID-19: A human rights perspective. Reingold RB, Barbosa I, Mishori R (2020), International Journal of Gynecology & Obstetrics vol 151, no 3, December 2020, pp 319-321
Available from: https://doi.org/10.1002/ijgo.13376
Full URL: https://doi.org/10.1002/ijgo.13376

Pregnant women should receive respectful maternity care in the context of COVID-19 and not be subject to policies and practices that violate their human rights. (Author)

20201022-6*

Addressing Disparities in Prenatal Care via Telehealth During COVID-19: Prenatal Satisfaction Survey in East Harlem. Futterman I, Rosenfeld E, Toaff M, et al (2021), American Journal of Perinatology vol 38, no 1, January 2021, pp 88-92

Objective In the setting of an inner city, safety net hospital, patient satisfaction with prenatal care conducted via telehealth was compared with in-person visits at the height of the novel coronavirus disease 2019 (COVID-19) pandemic.

Study Design Through this cross-sectional study, patients were identified who received at least one televisit and one in-person visit during the COVID-19 pandemic. The Short Assessment of Patient Satisfaction (SAPS) survey was used to measure patient satisfaction. Surveys pertaining to in-person and televisits were conducted at the end of a telephone encounter, and overall satisfaction scores were documented. Patients were excluded if they received in-person or virtual care only and not both. The SAPS score correlated with the degree of patient satisfaction.

Results A total of 140 patients were identified who received both virtual and in-person prenatal care from March 1, 2020 to May 1, 2020. One hundred and four patients (74%) agreed to be surveyed: 77 (74%) self-identified as Hispanic and 56 (54%) stated that their primary language was Spanish. The overall median satisfaction score for televisits and in-person visits was 20 (interquartile range [IQR]: 20, 25) and 24 (IQR: 22, 26) ($p = 0.008$, Z score = 2.651). In patients who self-identified as Hispanic or identified their primary language as Spanish, there was no statistically significant difference in their satisfaction scores.

Conclusion While there were lower scores in patient satisfaction for televisits in every category, there were no

clinically significant differences since all medians were in the 'satisfied' range. By lowering patient exposure to severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2), especially for those at risk for reduced access to care and higher COVID-19 cases by zip code, telehealth allowed for appropriate continuation of satisfactory prenatal care with no impact on patient perceived satisfaction of care. (Author)

20201022-55*

First follow-up of art pregnancies in the context of the COVID-19 outbreak. Mayeur A, Binois O, Gallot V, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 253, October 2020, pp 71-75
Available from: https://doi.org/10.1016/j.ejogrb.2020.07.050
Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.050

Objective
The aims of this study were to follow up the monitoring, health and anxiety from women who became pregnant after an embryo transfer or a intrauterine insemination during the COVID-19 epidemic in France
Study Design
This is a single centre, retrospective study from December 2019 to March 2020 based on a phone call interview using a specific questionnaire sheet specially developed for this study. Questionnaires from 104 pregnant women were completed and descriptive data are then analyzed.
Results
Women with ongoing pregnancies (n = 88) did not change their physician visits. The COVID-19 outbreak has created no or few additional stresses for 77 % of pregnant women since the lockdown started. We report a miscarriage rate of 14.4 % (n = 15) and documented 10 patients (11.3 %) who had symptoms related to COVID-19. No severe symptoms and no hospitalization in intensive care unit were identified.
Conclusion
The epidemic context did not disrupt the medical monitoring of pregnancies and we did not recover an increased rate of miscarriage after ART. None of the patients who had COVID-related symptoms presented with severe clinical manifestations. Surprisingly, pregnant women were psychologically able to experience the lockdown. (Author)

20201022-44*

The impact of the Covid-19 pandemic on maternity services: a review of maternal and neonatal outcomes before, during and after the pandemic. McDonnell S, McNamee E, Lindow SW, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 255, December 2020, pp 172-176
Available from: https://doi.org/10.1016/j.ejogrb.2020.10.023

Objective
To explore any apparent trends in maternal or neonatal outcomes during the Covid-19 pandemic by comparing the maternity outcomes before, during and after the pandemic.
Study design
A retrospective review was performed of maternity statistics recorded on the hospital database of a large tertiary referral centre in Dublin with over 8,000 deliveries per annum from 1 st January to 31 st July 2020. This time period represented the months prior to, during the peak and following the pandemic in Ireland.
Results
There was no correlation between the monthly number of Covid deaths and the monthly number of perinatal deaths (r = 0.465, NS), preterm births (r = 0.339, NS) or hypertensive pregnancies (r = 0.48, NS).
Compared to the combined numbers for the same month in 2018 and 2019, there were no significant changes in perinatal deaths or preterm births in the months when Covid deaths were at their height. The rate of preterm birth was significantly less common in January-July 2020 compared to January-July in 2018/2019 (7.4% v 8,6%, chi-sq 4.53,

P = 0.03)
Conclusion
The was no evidence of a negative impact of the Covid-19 pandemic on maternity services, as demonstrated by maternal and neonatal outcomes. (Author)

20201021-96*
Adherence and acceptability of telehealth appointments for high-risk obstetrical patients during the coronavirus disease 2019 pandemic. Jeganathan S, Prasannan L, Blitz MJ, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100233
Available from: https://doi.org/10.1016/j.ajogmf.2020.100233
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100233

Background
Telehealth has been successfully implemented for the delivery of obstetrical care. However, little is known regarding the attitudes and acceptability of patients and providers in high-risk obstetrics and whether the implementation of a telehealth model improves access to care in nonrural settings.
Objective
This study aimed to describe patient and provider attitudes toward telehealth for the delivery of high-risk obstetrical care in a large healthcare system with both urban and suburban settings and to determine whether the implementation of a telehealth model improves patient adherence to scheduled appointments in this patient population.
Study Design
Two self-administered surveys were designed. The first survey was sent to all high-risk obstetrical patients who received a telehealth visit between March 1, 2020, and May 30, 2020. The second survey was designed for providers who participated in these visits. We also compared the attended, cancelled, and no-show visit rates before (March 1 to May 30, 2019) and after (March 1 to May 30, 2020) the telehealth implementation and telehealth vs in-person visits in 2020. We reviewed scheduled high-risk prenatal care appointments, diabetes mellitus education sessions, and genetic counseling and Maternal-Fetal Medicine consultations.
Results
A total of 91 patient surveys and 33 provider surveys were analyzed. Overall, 86.9% of patients were satisfied with the care they received and 78.3% would recommend telehealth visits to others. Notably, 87.8% of providers reported having a positive experience using telehealth, and 90.9% believed that telehealth improved patients' access to care. When comparing patient and provider preference regarding future obstetrical care after experiencing telehealth, 73.8% of patients desired a combination of in-person and telehealth visits during their pregnancy. However, a significantly higher rate of providers preferred in-person than telehealth visits (56% vs 23%, P=.024, respectively). When comparing visits between 2019 and 2020, there was a significantly lower rate of no-show appointments (8.49% vs 4.61%, P<.001), patient-cancelled appointments (7.06% vs 4.96%, P<.001), and patient same-day cancellations (2.30% vs 1.35%, P<.001) with the implementation of telehealth. There was also a significantly lower rate of patient-cancelled appointments (3.82% vs 5.44%, P=.021) and patient same-day cancellations (0.60% vs 1.65%, P=.002) with those receiving telehealth visits than in-person visits in 2020.
Conclusion
The implementation of a telehealth model in high-risk obstetrics has the potential to improve access to high-risk obstetrical care, by reducing the rate of missed appointments. Both patients and providers surveyed expressed a high rate of satisfaction with telehealth visits and a desire to integrate telehealth into the traditional model of high-risk obstetrical care. (Author)

20201021-83*

Coronavirus disease 2019 pregnancy outcomes in a racially and ethnically diverse population. Grechukhina O, Greenberg V, Lundsberg LS, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100246

Available from: https://doi.org/10.1016/j.ajogmf.2020.100246

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100246

Background

Older age and medical comorbidities are identified risk factors for developing severe coronavirus disease 2019. However, there are limited data on risk stratification, clinical and laboratory course, and optimal management of coronavirus disease 2019 in pregnancy.

Objective

Our study aimed to describe the clinical course of coronavirus disease 2019, effect of comorbidities on disease severity, laboratory trends, and pregnancy outcomes of symptomatic and asymptomatic severe acute respiratory syndrome coronavirus 2-positive pregnant women.

Study Design

This is a case series of pregnant and postpartum women who received positive test results for severe acute respiratory syndrome coronavirus 2 between March 3, 2020, and May 11, 2020, within 3 hospitals of the Yale New Haven Health delivery network. Charts were reviewed for basic sociodemographic and prepregnancy characteristics, coronavirus disease 2019 course, laboratory values, and pregnancy outcomes.

Results

Of the 1567 tested pregnant and postpartum women between March 3, 2020, and May 11, 2020, 9% (n=141) had a positive severe acute respiratory syndrome coronavirus 2 result. Hispanic women were overrepresented in the severe acute respiratory syndrome coronavirus 2-positive group (n=61; 43.8%). In addition, Hispanic ethnicity was associated with a higher rate of moderate and severe diseases than non-Hispanic (18% [11/61] vs 3.8% [3/78], respectively; odds ratio, 5.5; 95% confidence interval, 1.46-20.7; P=.01). Of note, 44 women (31.2%) were asymptomatic, 37 of whom (26.2%) were diagnosed on universal screening upon admission for delivery. Moreover, 59% (n=83) were diagnosed before delivery, 36% (n=51) upon presentation for childbirth, and 5% (n=7) after delivery. Severe disease was diagnosed in 6 cases (4.3%), and there was 1 maternal death. Obese women were more likely to develop moderate and severe diseases than nonobese women (16.4% [9/55] vs 3.8% [3/79]; odds ratio, 4.96; 95% confidence interval, 1.28-19.25; P=.02). Hypertensive disorders of pregnancy were diagnosed in 22.3% of women (17/77) who delivered after 20 weeks' gestation. Higher levels of C-reactive protein during antepartum coronavirus disease 2019-related admission were more common in women with worse clinical course; however, this association did not reach statistical significance.

Conclusion

Coronavirus disease 2019 in pregnancy may result in severe disease and death. Hispanic women were more likely to receive a positive test result for severe acute respiratory syndrome 2 than other ethnic groups. Obesity and Hispanic ethnicity represent risk factors for moderate and severe diseases. (Author)

20201021-65*

Investigation on the mental health status of pregnant women in China during the Pandemic of COVID-19. Dong H, Hu R, Lu C, et al (2020), Archives of Gynecology and Obstetrics 3 October 2020, online

Available from: https://doi.org/10.1007/s00404-020-05805-x

Full URL: https://doi.org/10.1007/s00404-020-05805-x

Purpose

To evaluate the anxiety and depression in pregnant women in China, and its influencing factors during the corona virus disease 2019 (COVID-19) pandemic.

Methods
From February 22 to February 27, a questionnaire survey was conducted on 156 pregnant women, including demographic characteristics, a self-rating anxiety scale (SAS), and a self-depression rating scale (SDS).
Results
A total of 13 non-homologous end-joining (8.3%, 13/156) patients were anxious, 79 patients (50.6%, 79/156) were depressed, and 13 patients (8.3%, 13/156) suffered from both anxiety and depression. The SAS score of pregnant women was 40.55 ± 6.09, and the SDS score was 50.42 ± 11.64. For the SAS score, only 8.3% of all patients (13/156) were in a light anxiety state. For the SDS score, 46.79% (73/156) of patients was normal, 23.72% of patients (37/156) showed mild depression, 22.44% (35/156) showed moderate depression, and 4.49% (7/156) showed severe depression. No significant changes were observed in SAS and SDS scores between patients from different regions within China, health state, gestational week, educational background, and living condition ($P > 0.05$). Moreover, no significant differences were observed between diagnosed/suspected patients and the normal control group ($P > 0.05$), and between pregnant women in Wuhan compared to other regions ($P > 0.05$).
Conclusion
During the COVID-19 epidemic, the anxiety level of pregnant women was the same as that before the epidemic, while the level of depression was significantly higher. Pregnant women who lived in Wuhan, the epicenter of the epidemic, were not more anxious or depressed compared to pregnant women in other regions during the COVID-19 epidemic. Furthermore, the mental health status of pregnant women with COVID-19 was not more severe. (Author)

20201021-48*

Hydroxychloroquine early in pregnancy and risk of birth defects. Huybrechts KF, Bateman BT, Zhu Y, et al (2021), American Journal of Obstetrics & Gynecology vol 224, no 3, March 2021, pp 290.e1-290.e22
Available from: https://doi.org/10.1016/j.ajog.2020.09.007
Full URL: https://doi.org/10.1016/j.ajog.2020.09.007

Background
Hydroxychloroquine is generally considered safe in pregnancy for the treatment of rheumatic conditions, but studies have been too small to evaluate teratogenicity. Quantifying the risk of congenital malformations associated with early pregnancy exposure to hydroxychloroquine is important in both the context of its ongoing use for rheumatological disorders and its potential future use for coronavirus disease 2019 prophylaxis, for which a number of clinical trials are ongoing despite initial trials for coronavirus disease 2019 treatment having been negative.
Objective
The study objective was to evaluate the risk of major congenital malformations associated with exposure to hydroxychloroquine during the first trimester of pregnancy, the period of organogenesis.
Study Design
We performed a population-based cohort study nested in the Medicaid Analytic eXtract (MAX, 2000-2014) and IBM MarketScan Research Database (MarketScan, 2003-2015). The source cohort included 2045 hydroxychloroquine-exposed pregnancies and 3,198,589 pregnancies not exposed to hydroxychloroquine continuously enrolled in their respective insurance program for 3 months before the last menstrual period through at least 1 month after delivery; infants were enrolled for at least 3 months after birth. We compared the risk of congenital malformations in women using hydroxychloroquine during the first trimester of pregnancy with that of those not using hydroxychloroquine, restricting the cohort to women with rheumatic disorders and using propensity score matching to control for indication, demographics, medical comorbidities, and concomitant medications (1867 hydroxychloroquine-exposed pregnancies and 19,080 pregnancies not exposed to hydroxychloroquine). The outcomes considered included major congenital malformations diagnosed during the first 90 days after delivery and specific malformation types for which there were at least 5 exposed events: oral cleft, cardiac, respiratory, gastrointestinal, genital, urinary, musculoskeletal, and limb defects.

Results
Overall, 54.8 per 1000 infants exposed to hydroxychloroquine were born with a major congenital malformation versus 35.3 per 1000 unexposed infants, corresponding to an unadjusted relative risk of 1.51 (95% confidence interval, 1.27-1.81). Patient characteristics were balanced in the restricted, propensity score-matched cohort. The adjusted relative risk was 1.26 (95% confidence interval, 1.04-1.54); it was 1.33 (95% confidence interval, 1.08-1.65) for a daily dose of ≥400 mg and 0.95 (95% confidence interval, 0.60-1.50) for a daily dose of <400 mg. Among the different malformation groups considered, more substantial increases in the risk of oral clefts, respiratory anomalies, and urinary defects were observed, although estimates were imprecise. No pattern of malformation was identified.
Conclusion
Our findings suggest a small increase in the risk of malformations associated with first-trimester hydroxychloroquine use. For most patients with autoimmune rheumatic disorders, the benefits of treatment during pregnancy will likely outweigh this risk. If hydroxychloroquine were shown to be effective for coronavirus disease 2019 prophylaxis in ongoing trials, the risk of malformations would need to be balanced against such benefits. (Author)

20201021-37*
Epidemiology of coronavirus disease 2019 in pregnancy: risk factors and associations with adverse maternal and neonatal outcomes. Brandt JS, Hill J, Reddy A, et al (2020), American Journal of Obstetrics & Gynecology 25 September 2020, online

Background
Coronavirus disease 2019 may be associated with adverse maternal and neonatal outcomes in pregnancy, but there are few controlled data to quantify the magnitude of these risks or to characterize the epidemiology and risk factors.
Objective
This study aimed to quantify the associations of coronavirus disease 2019 with adverse maternal and neonatal outcomes in pregnancy and to characterize the epidemiology and risk factors.
Study Design
We performed a matched case-control study of pregnant patients with confirmed coronavirus disease 2019 cases who delivered between 16 and 41 weeks' gestation from March 11 to June 11, 2020. Uninfected pregnant women (controls) were matched to coronavirus disease 2019 cases on a 2:1 ratio based on delivery date. Maternal demographic characteristics, coronavirus disease 2019 symptoms, laboratory evaluations, obstetrical and neonatal outcomes, and clinical management were chart abstracted. The primary outcomes included (1) a composite of adverse maternal outcome, defined as preeclampsia, venous thromboembolism, antepartum admission, maternal intensive care unit admission, need for mechanical ventilation, supplemental oxygen, or maternal death, and (2) a composite of adverse neonatal outcome, defined as respiratory distress syndrome, intraventricular hemorrhage, necrotizing enterocolitis, 5-minute Apgar score of <5, persistent category 2 fetal heart rate tracing despite intrauterine resuscitation, or neonatal death. To quantify the associations between exposure to mild and severe or critical coronavirus disease 2019 and adverse maternal and neonatal outcomes, unadjusted and adjusted analyses were performed using conditional logistic regression (to account for matching), with matched-pair odds ratio and 95% confidence interval based on 1000 bias-corrected bootstrap resampling as the effect measure. Associations were adjusted for potential confounders.
Results
A total of 61 confirmed coronavirus disease 2019 cases were enrolled during the study period (mild disease, n=54 [88.5%]; severe disease, n=6 [9.8%]; critical disease, n=1 [1.6%]). The odds of adverse composite maternal outcome were 3.4 times higher among cases than controls (18.0% vs 8.2%; adjusted odds ratio, 3.4; 95% confidence interval, 1.2-13.4). The odds of adverse composite neonatal outcome were 1.7 times higher in the case group than to the control group (18.0% vs 13.9%; adjusted odds ratio, 1.7; 95% confidence interval, 0.8-4.8). Stratified analyses by disease severity indicated that the morbidity associated with coronavirus disease 2019 in pregnancy was largely driven by the severe or critical disease phenotype. Major risk factors for associated morbidity were black and Hispanic race,

advanced maternal age, medical comorbidities, and antepartum admissions related to coronavirus disease 2019.
Conclusion
Coronavirus disease 2019 during pregnancy is associated with an increased risk of adverse maternal and neonatal outcomes, an association that is primarily driven by morbidity associated with severe or critical coronavirus disease 2019. Black and Hispanic race, obesity, advanced maternal age, medical comorbidities, and antepartum admissions related to coronavirus disease 2019 are risk factors for associated morbidity. (Author)

20201021-30*
COVID-19 and first trimester spontaneous abortion: a case-control study of 225 pregnant patients. Cosma S, Carosso AR, Cusato J, et al (2020), American Journal of Obstetrics & Gynecology 7 October 2020, online

Background
The disease caused by the 'severe acute respiratory syndrome coronavirus 2' (SARS-CoV-2) was named Coronavirus Disease 19 (COVID-19) and classified as a global public health emergency. The evidence related to the impact of COVID-19 on pregnancy are limited to the second and the third trimester of pregnancy, while data on the first trimester are scant. Many viral infections can be harmful to the fetus during the first trimester of pregnancy, and whether SARS-CoV-2 is one of them is still unknown.
Objective(s)
With this study we evaluated SARS-CoV-2 infection as a risk factor for early pregnancy loss in first trimester of pregnancy. Furthermore, COVID-19 course in the first trimester was assessed.
Study design
Between February 22 and May 21, 2020, we conducted a case-control study at S. Anna Hospital, Turin, among first trimester pregnant women, paired for last menstruation. The cumulative incidence of COVID-19 was compared between women with spontaneous abortion (case group, n=100) and those with ongoing pregnancy (control group, n=125). Current or past infection was determined by detection of SARS-CoV-2 from nasopharingeal swab and SARS-CoV-2 IgG/IgM antibodies in blood sample. Patient demographics, COVID-19-related symptoms, and the main risk factors for abortion were collected.
Results
Twenty-three of the 225 women (23/225, 10.2%) tested positive for COVID-19 infection. There was no difference in the cumulative incidence of COVID-19 between the cases (11/100, 11%) and the controls (12/125, 9.6%) (p=0.73). Logistic regression analysis confirmed that COVID-19 was not an independent predictor of early pregnancy loss (Odd Ratio 1.28, confidence interval 0.53-3.08). COVID-19 related symptoms in the first trimester were fever, anosmia, ageusia, cough, arthralgia and diarrhea; no pneumonia or Hospital admission due to COVID-19-related symptoms were recorded. No difference in the incidence of symptoms was noted between the two groups.
Conclusion(s)
SARS-CoV-2 infection during the first trimester of pregnancy does not appear to predispose to early pregnancy loss; its cumulative incidence did not differ between women with spontaneous abortion and women with ongoing pregnancy. COVID-19 appears to have a favorable maternal course at the beginning of pregnancy, consistent with what has been observed during the second and the third trimester. (Author)

20201021-103*
Universal testing for severe acute respiratory syndrome coronavirus 2 in 2 Philadelphia hospitals: carrier prevalence and symptom development over 2 weeks. Bender WR, Hirshberg A, Coutifaris P, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100226
Available from: https://doi.org/10.1016/j.ajogmf.2020.100226
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100226

Background
The coronavirus disease 2019 pandemic caused by the severe acute respiratory syndrome coronavirus 2 has challenged obstetrical care providers. Universal testing on labor and delivery units has been implemented by many hospitals to ensure patient and staff safety. Asymptomatic carrier rates are expected to vary based on geographic differences in disease prevalence, although differences within the same city have not been reported previously. In addition, clinical follow-up of women who had a negative result for severe acute respiratory syndrome coronavirus 2 during obstetrical hospitalization has not been included in any previous reports.
Objective
This study aimed to describe the prevalence of positive severe acute respiratory syndrome coronavirus 2 test results among asymptomatic pregnant women at 2 Philadelphia obstetrical hospitals, characterize the clinical course of those who had a positive result, and report symptom development among all women tested in the 2 weeks after hospitalization.
Study Design
This is an observational study of asymptomatic pregnant women who underwent severe acute respiratory syndrome coronavirus 2 testing at 2 academic health centers (Hospital of the University of Pennsylvania and Pennsylvania Hospital) in Philadelphia, Pennsylvania, between April 13, 2020, and April 26, 2020. All women tested were contacted via telephone for symptom follow-up at 1 and 2 weeks after discharge. Asymptomatic positive test rates are reported for the overall population and by hospital. The hospital and 2-week posthospital course are described for women who had a positive result for severe acute respiratory syndrome coronavirus 2. Posthospital symptom development among women who had a negative result for severe acute respiratory syndrome coronavirus 2 is also described.
Results
A total of 318 asymptomatic women underwent severe acute respiratory syndrome coronavirus 2 testing during this 2-week period; 8 women had a positive result. The overall asymptomatic test positive rate was 2.5%. The rate at Hospital of the University of Pennsylvania was 3.8% compared with 1.3% at Pennsylvania Hospital (P=.283). Of note, 3 women (37.5%) who were initially asymptomatic developed mild symptoms in the 2 weeks after a positive test result. Repeat severe acute respiratory syndrome coronavirus 2 testing was performed in 14 of the 310 women (4.5%) who initially had a negative result; 2 women (0.6%) had a positive result on repeat testing. Moreover, 242 (78.1%) and 213 (68.7%) of the 310 women who had a negative result for severe acute respiratory syndrome coronavirus 2 at the time of the initial hospitalization were followed up via telephone at 1 and 2 weeks after admission, respectively. Viral symptoms, including fevers, chills, shortness of breath, or cough, were self-reported in 4.5% and 4.2% of these women at 1 and 2 weeks after discharge, respectively.
Conclusion
The asymptomatic positive severe acute respiratory syndrome coronavirus 2 test rate among an obstetrical population in Philadelphia differed between 2 hospitals and was lower than that described in other geographic regions. This supports the importance of institution-specific testing protocols. The development of symptomatic severe acute respiratory syndrome coronavirus 2 infection after hospitalization among women with initial negative test results is uncommon. (Author)

20201021-101*

Therapeutic options in the treatment of severe acute respiratory syndrome coronavirus 2 in pregnant patient. Lat TI, Patel CD, Ehrig JC, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100224

Available from: https://doi.org/10.1016/j.ajogmf.2020.100224
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100224

The severe acute respiratory syndrome coronavirus 2 pandemic has resulted in the development of various therapeutics to treat and prevent major complications related to the virus; pregnant patients are vulnerable to acquiring severe acute respiratory syndrome coronavirus 2 because of frequent contact with the healthcare setting. Despite the publication of a plethora of case series and randomized control trials of severe acute respiratory

syndrome coronavirus 2 therapeutics, few have addressed treatment in the pregnant population. To date, there has been no published review of therapeutic options in the treatment of pregnant patients with severe acute respiratory syndrome coronavirus 2 infection. Here, we provide a review of available treatments for severe acute respiratory syndrome coronavirus 2, various trials with inclusion and exclusion of the pregnant patients, and potential side effects of each treatment in the pregnant patient. (Author)

20201020-17*

Clinical characteristics and risk factors for mortality in obstetric patients with severe COVID-19 in Brazil: a surveillance database analysis. Takemoto MLS, Menezes MO, Andreucci CB, et al (2020), BJOG: An International Journal of Obstetrics and
Gynaecology vol 127, no 13, December 2020, pp 1618-1626
Available from: https://doi.org/10.1111/1471-0528.16470
Full URL: https://doi.org/10.1111/1471-0528.16470

Objective
To describe clinical characteristics of pregnant and postpartum women with severe COVID-19 in Brazil and to examine risk factors for mortality.
Design
Cross-sectional study based on secondary surveillance database analysis.
Setting
Nationwide Brazil.
Population or sample
978 Brazilian pregnant and postpartum women notified as COVID-19 Acute Respiratory Distress Syndrome (ARDS) cases with complete outcome (death or cure) up to 18 June 2020.
Methods
Data was abstracted from the Brazilian ARDS Surveillance System (ARDS-SS) database. All eligible cases were included. Data on demographics, clinical characteristics, intensive care resources use and outcomes were collected. Risk factors for mortality were examined by multivariate logistic regression.
Main outcome measures
Case fatality rate.
Results
We identified 124 maternal deaths, corresponding to a case fatality rate among COVID-19 ARDS cases in the obstetric population of 12.7%. At least one comorbidity was present in 48.4% of fatal cases compared with 24.9% in survival cases. Among women who died, 58.9% were admitted to ICU, 53.2% had invasive ventilation and 29.0% had no respiratory support. The multivariate logistic regression showed that the main risk factors for maternal death by COVID-19 were being postpartum at onset of ARDS, obesity, diabetes and cardiovascular disease, whereas white ethnicity had a protective effect.
Conclusions
Negative outcomes of COVID-19 in this population are affected by clinical characteristics but social determinants of health also seem to play a role. It is urgent to reinforce containment measures targeting the obstetric population and ensure high quality care throughout pregnancy and the postpartum period.
Tweetable abstract
A total of 124 COVID-19 maternal deaths were identified in Brazil. Symptoms onset at postpartum and comorbidities are risk factors. (Author)

20201016-49*

Universal screening identifies asymptomatic carriers of SARS-CoV-2 among pregnant women in India. Waghmere R, Gajbhiye R, Mahajan N, et al (2021), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 256, January 2021, pp 503-505

Available from: https://doi.org/10.1016/j.ejogrb.2020.09.030

Full URL: https://doi.org/10.1016/j.ejogrb.2020.09.030

Correspondence piece discussing the implementation of a universal screening strategy for pregnant women in several public hospitals in Maharashtra, India. (LDO)

20201016-48*

Characteristics and short-term obstetric outcomes in a case series of 67 women tested positive for SARS-CoV-2 in Stockholm, Sweden. Remaeus K, Savchenko J, Wendel SB, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no
12, December 2020, pp 1626-1631

Available from: https://doi.org/10.1111/aogs.14006

Full URL: https://doi.org/10.1111/aogs.14006

Introduction

The Stockholm region was the first area in Sweden to be hit by the pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Our national guidelines regarding care of women with positive test for SARS-CoV-2 (detection with polymerase chain reaction) recommend individualized antenatal care, mode of delivery based on obstetric considerations, and no routine separation of the mother and newborn after birth. Breastfeeding is encouraged, and although there is no specific recommendation on wearing a face mask to prevent viral transmission to the newborn while nursing, instructions are given to keep high hygiene standards. All studies based on cases tested due to hospital admittance, including our, will capture more women with pregnancy complications than in the general population. Our aim was to describe the clinical characteristics in 67 SARS-CoV-2 positive women and their 68 neonates, and to report short-term maternal and neonate outcomes.

Material and methods

A retrospective case series with data from medical records including all test-positive women (n=67) who gave birth from March 19 to April 26, 2020 in Stockholm, Sweden. Means, proportions and percentages were calculated for characteristics and outcomes.

Results

The mean age was 32 years, 40% were nulliparous, and 61% were overweight or obese. Further, 15% had diabetes and 21% a hypertensive disease. 70% of the women had a vaginal birth. Preterm delivery occurred in 19% of the women. The preterm deliveries were mostly medically indicated, including two women who were delivered preterm due to severe coronavirus disease 19 (COVID-19) illness, corresponding to 15% of the preterm births. Four women (6%) were admitted to intensive care unit postpartum. Three neonates were PCR-positive for SARS-CoV-2 after birth.

Conclusions

In this case series of 67 test-positive women with clinical presentation ranging from asymptomatic to manifest COVID-19 disease few women presented with severe COVID-19 illness, a majority had a vaginal birth at term with a healthy neonate that were test-negative for SARS-CoV-2. (Author)

20201016-43*

Perinatal mortality and morbidity of SARS-COV-2 infection during pregnancy in European countries: Findings from an international study. Di Mascio D, D'Antonio F (2021), European Journal of Obstetrics & Gynecology and Reproductive Biology vol
256, January 2021, pp 505-507

Available from: https://doi.org/10.1016/j.ejogrb.2020.10.009

Full URL: https://doi.org/10.1016/j.ejogrb.2020.10.009

Correspondence piece discussing perinatal mortality and morbidity in European and non-European pregnant women. Results show that rates of stillbirth and neonatal intensive care unit (NICU) admission is lower in European countries. (LDO)

20201015-7*

Gestational diabetes mellitus screening in pandemic times: Are there viable alternatives?. da Silva Rocha A, Rombaldi Bernadi J, de Matos S, et al (2020), Australian and New Zealand Journal of Obstetrics and Gynaecology vol 60, no 5, October 2020,
pp E14-E15
Available from: https://doi.org/10.1111/ajo.13235
Full URL: https://doi.org/10.1111/ajo.13235

Short correspondence piece discussing gestational diabetes mellitus screening during the COVID-19 pandemic. The authors recommend that maternal visceral adipose tissue measurements should be included in routine early ultrasound scans to identify risk of gestational diabetes. (LDO)

20201015-23*

Should pregnant women be in a high-risk COVID-19 category?. Alaszewski A (2020), British Journal of Midwifery vol 28, no 10, October 2020, pp 732-734

In the early stages of the pandemic, pregnant women were categorised high risk in several countries and advised to take extra precautions. This article examines the effect of this categorisation. (Author)

20201015-13*

COVID-19 and the risk to black, Asian and minority ethnic women during pregnancy. Esegbona-Adeigbe S (2020), British Journal of Midwifery vol 28, no 10, October 2020, pp 718-723

Black, Asian and minority ethnic (BAME) women in the UK have increased maternal mortality rates compared to other groups of women. Unfortunately, according to preliminary findings, the COVID-19 pandemic has contributed to mortality rates for BAME women, raising concerns that pregnant BAME women are facing greater health disparities during the pandemic. A review of 427 pregnant women admitted to hospital in the UK with confirmed COVID-19 infection found that over half (56%) were from black or other ethnic minority groups. How BAME women navigate maternity services during the COVID-19 pandemic requires a vigilant review of their needs on an individual basis. This is particularly relevant for hard-to-reach women, such as recent immigrants and asylum seekers, who may encounter difficulties accessing or engaging with maternity services. Therefore, it is imperative to reassess and highlight the challenges faced by pregnant BAME women during the pandemic. The disruption of maternity services and diversion of resources away from essential pregnancy care because of prioritising the COVID-19 response is expected to increase risks of maternal mortality. (Author)

20201014-54*

SARS-COV-2 infection during pregnancy, a risk factor for eclampsia or neurological manifestations of COVID-19? Case report. Rodriguez AG, Contreras SM, Manovel SMF, et al (2020), BMC Pregnancy and Childbirth vol 20, no 587, 6 October 2020
Available from: https://doi.org/10.1186/s12884-020-03275-2
Full URL: https://doi.org/10.1186/s12884-020-03275-2

Background

There are no published cases of tonic-clonic seizures and posterior bilateral blindness during pregnancy and Severe Acute Respiratory Syndrome (SARS) Coronavirus (COV) 2 (SARS-COV-2) infection. We do not just face new and

unknown manifestations, but also how different patient groups are affected by SARS-COV-2 infection, such as pregnant women. Coronavirus Disease 2019 (COVID-19), preeclampsia, eclampsia and posterior reversible leukoencephalopathy share endothelium damage and similar pathophysiology.
Case presentation
A 35-year-old pregnant woman was admitted for tonic-clonic seizures and SARS-COV-2 infection. She had a normal pregnancy control and no other symptoms before tonic-clonic seizures development. After a Caesarean section (C-section) she developed high blood pressure, and we initiated antihypertensive treatment with labetalol, amlodipine and captopril. Few hours later she developed symptoms of cortical blindness that resolved in 72 h with normal brain computed tomography (CT) angiography.
Conclusion
The authors conclude that SARS COV-2 infection could promote brain endothelial damage and facilitate neurological complications during pregnancy. (Author)

20201013-7*

Patient and Provider Perspectives of a New Prenatal Care Model Introduced in Response to the COVID-19 Pandemic. Peahl AF, Powell A, Berlin H, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) 8 October 2020, online
Available from: https://doi.org/10.1016/j.ajog.2020.10.008
Full URL: https://doi.org/10.1016/j.ajog.2020.10.008

Research letter exploring institution-level adoption and patient experiences of a COVID-19 prenatal care delivery model. (LDO)

20201013-6*

Women's perceptions of COVID-19 and their healthcare experiences: a qualitative thematic analysis of a national survey of pregnant women in the United Kingdom. Karavadra B, Stockl A, Prosser-Snelling E, et al (2020), BMC Pregnancy and Childbirth vol 20, no 600, 7 October 2020
Available from: https://doi.org/10.1186/s12884-020-03283-2
Full URL: https://doi.org/10.1186/s12884-020-03283-2

Background
The aim of this national survey was to explore pregnant women's perceptions of COVID-19 and their healthcare experiences.
Methods
Through patient and public involvement, a questionnaire was developed and advertised via the BBC website, Twitter and other online media during May 2020. The findings were analysed by qualitative thematic analysis. Women who are currently pregnant, or who have delivered during the COVID-19 pandemic were invited to partake in a national online survey.
Results
One thousand four hundred fifty-one participants replied to the online questionnaire. Participants provided significant insight into the perceived barriers to seeking healthcare during this pandemic. These include 'not wanting to bother anyone', 'lack of wider support from allied healthcare workers' and the influence of the media. Other concerns included the use of virtual clinics antenatally and their acceptability to patients, the presence of birthing partners, and the way in which information is communicated about rapidly changing and evolving services. The influence of the media has also had a significant impact on the way women perceive hospital care in light of COVID-19 and for some, this has shaped whether they would seek help.
Conclusions
This is the first ever reported study in the United Kingdom to explore pregnant women's perceptions of COVID-19 and their subsequent healthcare experiences. It has also provided insight into perceived barriers into seeking care as well

as maternal concerns antenatally, intrapartum and postpartum. (Author)

20201013-4*

Myocardial injury associated with coronavirus disease 2019 in pregnancy. Pachtman Shetty SL, Meirowitz N, Blitz MJ, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 2, February 2021, pp 229-232
Available from: https://doi.org/10.1016/j.ajog.2020.10.014
Full URL: https://doi.org/10.1016/j.ajog.2020.10.014

Research letter exploring the rate of bradycardia or abnormal serum cardiac biomarkers among pregnant and postpartum women admitted for treatment of COVID-19 in New York. (LDO)

20201013-16*

High Concentrations of Nitric Oxide Inhalation Therapy in Pregnant Patients With Severe Coronavirus Disease 2019 (COVID-19). Fakhr BS, Wiegand SB, Pinciroli R, et al (2020), Obstetrics and Gynecology vol 136, no 6, December 2020, pp 1109-1113
Available from: https://doi.org/10.1097/AOG.0000000000004128
Full URL: https://doi.org/10.1097/AOG.0000000000004128

BACKGROUND:
Rescue therapies to treat or prevent progression of coronavirus disease 2019 (COVID-19) hypoxic respiratory failure in pregnant patients are lacking.
METHOD:
To treat pregnant patients meeting criteria for severe or critical COVID-19 with high-dose (160-200 ppm) nitric oxide by mask twice daily and report on their clinical response.
EXPERIENCE:
Six pregnant patients were admitted with severe or critical COVID-19 at Massachusetts General Hospital from April to June 2020 and received inhalational nitric oxide therapy. All patients tested positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. A total of 39 treatments was administered. An improvement in cardiopulmonary function was observed after commencing nitric oxide gas, as evidenced by an increase in systemic oxygenation in each administration session among those with evidence of baseline hypoxemia and reduction of tachypnea in all patients in each session. Three patients delivered a total of four neonates during hospitalization. At 28-day follow-up, all three patients were home and their newborns were in good condition. Three of the six patients remain pregnant after hospital discharge. Five patients had two negative test results on nasopharyngeal swab for SARS-CoV-2 within 28 days from admission.
CONCLUSION:
Nitric oxide at 160-200 ppm is easy to use, appears to be well tolerated, and might be of benefit in pregnant patients with COVID-19 with hypoxic respiratory failure. (Author)

20201013-12*

Clinical Presentation of Coronavirus Disease 2019 (COVID-19) in Pregnant and Recently Pregnant People. Afshar Y, Gaw SL, Flaherman VJ, et al (2020), Obstetrics and Gynecology vol 136, no 6, December 2020, pp 1117-1125
Available from: https://doi.org/10.1097/AOG.0000000000004178
Full URL: https://doi.org/10.1097/AOG.0000000000004178

OBJECTIVE:
To describe the clinical presentation, symptomology, and disease course of coronavirus disease 2019 (COVID-19) in pregnancy.
METHODS:
The PRIORITY (Pregnancy CoRonavIrus Outcomes RegIsTrY) study is an ongoing nationwide prospective cohort study of

people in the United States who are pregnant or up to 6 weeks postpregnancy with known or suspected severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. We analyzed the clinical presentation and disease course of COVID-19 in participants who tested positive for SARS-CoV-2 infection and reported symptoms at the time of testing.
RESULTS:
Of 991 participants enrolled from March 22, 2020, until July 10, 2020, 736 had symptoms of COVID-19 at the time of testing; 594 tested positive for SARS-CoV-2 infection and 142 tested negative in this symptomatic group. Mean age was 31.3 years (SD 5.1), and 37% will nulliparous. Ninety-five percent were outpatients. Participants who tested positive for SARS-CoV-2-infection were a geographically diverse cohort: 34% from the Northeast, 25% from the West, 21% from the South, and 18% from the Midwest. Thirty-one percent of study participants were Latina, and 9% were Black. The average gestational age at enrollment was 24.1 weeks, and 13% of participants were enrolled after pregnancy. The most prevalent first symptoms in the cohort of patients who tested positive for SARS-CoV-2 infection were cough (20%), sore throat (16%), body aches (12%), and fever (12%). Median time to symptom resolution was 37 days (95% CI 35-39). One quarter (25%) of participants who tested positive for SARS-CoV-2 infection had persistent symptoms 8 or more weeks after symptom onset.
CONCLUSION:
COVID-19 has a prolonged and nonspecific disease course during pregnancy and in the 6 weeks after pregnancy.
CLINICAL TRIAL REGISTRATION:
ClinicalTrials.gov, NCT04323839. (Author)

20201009-4*

Excess Maternal Deaths Associated With Coronavirus Disease 2019 (COVID-19) in Mexico. Lumbreras-Marquez MI, Campos-Zamora M, Seifert SM, et al (2020), Obstetrics and Gynecology vol 136, no 6, December 2020, pp 1114-1116
Available from: https://doi.org/10.1097/AOG.0000000000004140
Full URL: https://doi.org/10.1097/AOG.0000000000004140

Research letter exploring the number of excess maternal deaths directly or indirectly linked to COVID-19 in Mexico. Results indicate that there were 86 excess maternal deaths between week 1 and week 32 in 2020. (LDO)

20201006-27*

Change in obstetric attendance and activities during the COVID-19 pandemic. Khalil A, von Dadelszen P, Kalafat E, et al (2020), The Lancet Infectious Diseases 5 October 2020, online
Available from: https://doi.org/10.1016/S1473-3099(20)30779-9
Full URL: https://doi.org/10.1016/S1473-3099(20)30779-9

Reports the findings of research investigating changes in obstetric attendance and activities at a large London teaching hospital during the first peak of the COVID-19 pandemic in the UK. (Author)

20201006-19*

Racism matters: 2. Disparities in COVID-19 outcomes. Gilbert R (2020), The Practising Midwife vol 23, no 9, October 2020, pp 17-19

This article, the second in the series 'Racism matters', looks at the impact of COVID-19 on maternity care in the UK and more specifically how this affects women from a Black, Asian and Minority Ethnic (BAME) background, with a focus on Black mothers. What are the challenges these women face in maternity daily? What can midwives learn from the findings of The Mothers and Babies Reducing Risk through Audit and Confidential Enquiries (MBRRACE) report? (Author)

20201001-1*

Covid: Woman 'heartbroken' after terminating baby alone. Jones C (2020), BBC News 1 October 2020
Available from: https://www.bbc.co.uk/news/uk-england-essex-54301564
Full URL: https://www.bbc.co.uk/news/uk-england-essex-54301564

Reports that a woman who underwent an abortion after being told at a scan that her baby boy had very little chance of survival outside the womb, has told of the heartbreak she experienced at having to go through the scan and the termination alone, as her husband was not allowed to accompany her owing to restrictions imposed due to the COVID-19 pandemic. States that the Royal College of Obstetricians and Gynaecologists (RCOG) has encouraged hospitals to be flexible, after restrictions on many maternity wards were lifted in order to allow partners to attend scans and the birth, but this does not always include terminations. (JSM)

20200929-6*

Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis. Allotey J, Stallings E, Bonet M, et al (2020), BMJ vol 370, no 8261, 1 September 2020, m3320
Available from: https://doi.org/10.1136/bmj.m3320
Full URL: https://doi.org/10.1136/bmj.m3320

Objective To determine the clinical manifestations, risk factors, and maternal and perinatal outcomes in pregnant and recently pregnant women with suspected or confirmed coronavirus disease 2019 (covid-19).
Design Living systematic review and meta-analysis.
Data sources Medline, Embase, Cochrane database, WHO COVID-19 database, China National Knowledge Infrastructure (CNKI), and Wanfang databases from 1 December 2019 to 26 June 2020, along with preprint servers, social media, and reference lists.
Study selection Cohort studies reporting the rates, clinical manifestations (symptoms, laboratory and radiological findings), risk factors, and maternal and perinatal outcomes in pregnant and recently pregnant women with suspected or confirmed covid-19.
Data extraction At least two researchers independently extracted the data and assessed study quality. Random effects meta-analysis was performed, with estimates pooled as odds ratios and proportions with 95% confidence intervals. All analyses will be updated regularly.
Results 77 studies were included. Overall, 10% (95% confidence interval 7% to14%; 28 studies, 11 432 women) of pregnant and recently pregnant women attending or admitted to hospital for any reason were diagnosed as having suspected or confirmed covid-19. The most common clinical manifestations of covid-19 in pregnancy were fever (40%) and cough (39%). Compared with non-pregnant women of reproductive age, pregnant and recently pregnant women with covid-19 were less likely to report symptoms of fever (odds ratio 0.43, 95% confidence interval 0.22 to 0.85; I2=74%; 5 studies; 80 521 women) and myalgia (0.48, 0.45 to 0.51; I2=0%; 3 studies; 80 409 women) and were more likely to need admission to an intensive care unit (1.62, 1.33 to 1.96; I2=0%) and invasive ventilation (1.88, 1.36 to 2.60; I2=0%; 4 studies, 91 606 women). 73 pregnant women (0.1%, 26 studies, 11 580 women) with confirmed covid-19 died from any cause. Increased maternal age (1.78, 1.25 to 2.55; I2=9%; 4 studies; 1058 women), high body mass index (2.38, 1.67 to 3.39; I2=0%; 3 studies; 877 women), chronic hypertension (2.0, 1.14 to 3.48; I2=0%; 2 studies; 858 women), and pre-existing diabetes (2.51, 1.31 to 4.80; I2=12%; 2 studies; 858 women) were associated with severe covid-19 in pregnancy. Pre-existing maternal comorbidity was a risk factor for admission to an intensive care unit (4.21, 1.06 to 16.72; I2=0%; 2 studies; 320 women) and invasive ventilation (4.48, 1.40 to 14.37; I2=0%; 2 studies; 313 women). Spontaneous preterm birth rate was 6% (95% confidence interval 3% to 9%; I2=55%; 10 studies; 870 women) in women with covid-19. The odds of any preterm birth (3.01, 95% confidence interval 1.16 to 7.85; I2=1%; 2 studies; 339 women) was high in pregnant women with covid-19 compared with those without the disease. A quarter of all neonates born to mothers with covid-19 were admitted to the neonatal unit (25%) and were at increased risk of admission (odds ratio

3.13, 95% confidence interval 2.05 to 4.78, I2=not estimable; 1 study, 1121 neonates) than those born to mothers without covid-19.
Conclusion Pregnant and recently pregnant women are less likely to manifest covid-19 related symptoms of fever and myalgia than non-pregnant women of reproductive age and are potentially more likely to need intensive care treatment for covid-19. Pre-existing comorbidities, high maternal age, and high body mass index seem to be risk factors for severe covid-19. Preterm birth rates are high in pregnant women with covid-19 than in pregnant women without the disease.
Systematic review registration PROSPERO CRD42020178076.
Readers' note This article is a living systematic review that will be updated to reflect emerging evidence. Updates may occur for up to two years from the date of original publication. (Author)

20200928-7*

Pandemic birth: women's own stories during COVID-19. Various (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/index/32/2
Full URL: https://www.aims.org.uk/journal/index/32/2

In this issue of AIMS Journal, women share their own personal experiences, giving a snapshot of the effects of the Covid-19 pandemic on the pregnancies and births of women and pregnant people in the UK. (Author, edited)

20200928-22*

Promotion of Maternal-Infant Mental Health and Trauma-Informed Care During the COVID-19 Pandemic. Choi KR, Records K, Low LK, et al (2020), JOGNN: Journal of Obstetric, Gynecologic and Neonatal Nursing vol 49, no 5, September 2020, pp 409-415
Available from: https://doi.org/10.1016/j.jogn.2020.07.004
Full URL: https://doi.org/10.1016/j.jogn.2020.07.004
The COVID-19 pandemic has led to disruptions in health care in the perinatal period and women's childbirth experiences. Organizations that represent health care professionals have responded with general practice guidelines for pregnant women, but limited attention has been devoted to mental health in the perinatal period during a pandemic. Evidence suggests that in this context, significant psychological distress may have the potential for long-term psychological harm for mothers and infants. For infants, this risk may extend into early childhood. In this commentary, we present recommendations for practice, research, and policy related to mental health in the perinatal period. These recommendations include the use of a trauma-informed framework to promote social support and infant attachment, use of technology and telehealth, and assessment for mental health needs and experiences of violence. (Author)

20200925-49*

Covid-19 and my IVF pregnancy. Wood G (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/item/covid-19-gemma-wood
Full URL: https://www.aims.org.uk/journal/item/covid-19-gemma-wood
Gemma Wood describes how a lack of communication from her hospital regarding changes to the services available to her as a result of the coronavirus pandemic, has caused her anxiety and distress during her pregnancy, which was achieved through assisted reproduction. (Author, edited)

20200925-47*

High risk and high and dry. Anon (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/item/covid-19-birth

Full URL: https://www.aims.org.uk/journal/item/covid-19-birth

The author, a pregnant woman with gestational diabetes, explains how the reduction in maternal health services available to her at her local hospital, owing to the coronavirus pandemic, is increasing the chances of complications in her already high-risk pregnancy, leading her to opt for private care. (JSM)

20200925-46*

Clinical characteristics, prognostic factors, and maternal and neonatal outcomes of SARS-CoV-2 infection among hospitalized pregnant women: A systematic review. Turan O, Hakim A, Dashraath P, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 1, October 2020, pp 3-6
Available from: https://doi.org/10.1002/ijgo.13329
Full URL: https://doi.org/10.1002/ijgo.13329

Background
Pregnant women represent a potentially high-risk population in the COVID-19 pandemic.
Objective
To summarize clinical characteristics and outcomes among pregnant women hospitalized with COVID-19.
Search strategy
Relevant databases were searched up until May 29, 2020.
Selection criteria
Case series/reports of hospitalized pregnant women with laboratory-confirmed COVID-19.
Data collection and analysis
PRISMA guidelines were followed. Methodologic quality was assessed via NIH assessment tools.
Main results
Overall, 63 observational studies of 637 women (84.6% in third trimester) with laboratory-confirmed SARS-CoV-2 infection were included. Most (76.5%) women experienced mild disease. Maternal fatality, stillbirth, and neonatal fatality rates were 1.6%, 1.4%, and 1.0%, respectively. Older age, obesity, diabetes mellitus, and raised serum D-dimer and interleukin-6 were predictive of poor outcomes. Overall, 33.7% of live births were preterm, of which half were iatrogenic among women with mild COVID-19 and no complications. Most women underwent cesarean despite lacking a clear indication. Eight (2.0%) neonates had positive nasopharyngeal swabs after delivery and developed chest infection within 48 hours.
Conclusions
Advanced gestation, maternal age, obesity, diabetes mellitus, and a combination of elevated D-dimer and interleukin-6 levels are predictive of poor pregnancy outcomes in COVID-19. The rate of iatrogenic preterm birth and cesarean delivery is high; vertical transmission may be possible but has not been proved. (Author)

20200925-39*

Racial and ethnic disparities in severity of COVID-19 disease in pregnancy in the United States. Onwuzurike C, Diouf K, Meadows AR, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 2, November 2020, pp 293-295
Available from: https://doi.org/10.1002/ijgo.13333
Full URL: https://doi.org/10.1002/ijgo.13333

Racial and ethnic disparities in the severity of COVID-19 in pregnant women in the United States reflect the health consequences of the structural effects of racism. (Author)

20200925-35*

Restructuring fetal medicine services in a low-resource setting during the COVID-19 pandemic: Experience from a tertiary care fetal medicine center. Rana A, Sharma KA, Dadhwal V (2020), International Journal of Gynecology &

Obstetrics vol 151, no 2, November 2020, pp 291-293
Available from: https://doi.org/10.1002/ijgo.13337
Full URL: https://doi.org/10.1002/ijgo.13337
Fetal medicine services are essential part of prenatal care. With appropriate modifications, these time-sensitive services can be continued during the COVID-19 pandemic. (Author)

20200925-30*
Pre-gestational diabetes during the COVID-19 pandemic in Bergamo, Italy. Dodesini AR, Galliani S, Ciriello E, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 2, November 2020, pp 295-296
Available from: https://doi.org/10.1002/ijgo.13306
Full URL: https://doi.org/10.1002/ijgo.13306
Effective enforcement of lockdown measures, use of technology, and implementation of telemedicine may have significantly reduced the number of diabetic pregnant women who tested positive for COVID-19 in Bergamo, Italy. (Author)

20200925-26*
Attitudes and collateral psychological effects of COVID-19 in pregnant women in Colombia. Parra-Saavedra M, Villa-Villa I, Pérez-Olivo J, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 2, November 2020, pp 203-208
Available from: https://doi.org/10.1002/ijgo.13348
Full URL: https://doi.org/10.1002/ijgo.13348

Objective
To assess clinical impact, psychological effects, and knowledge of pregnant women during the COVID-19 outbreak in seven cities in Colombia. Currently, there are uncertainty and concerns about the maternal and fetal consequences of SARS-CoV-2 infection during pregnancy.
Methods
A cross-sectional web survey was carried out including pregnant women in seven cities in Colombia. Women were evaluated during the mitigation phase of the SARS-CoV-2 pandemic between April 13 and May 18, 2020. The questions evaluated demographic, knowledge, psychological symptoms, and attitudes data regarding the COVID-19 pandemic.
Results
A total of 1021 patients were invited to participate, obtaining 946 valid surveys for analysis. The rate of psychological consequences of the pandemic was much larger than the number of patients clinically affected by the virus, with 50.4% of the entire cohort reporting symptoms of anxiety, 49.1% insomnia, and 25% reporting depressive symptoms. Poorly informed women were more likely to be younger, affiliated to the subsidized regime, and with lower levels of education.
Conclusion
The knowledge of pregnant women about SARS-CoV-2 infection is far from reality and this seems to be associated with an indirect effect on the concern and psychological stress of pregnant women in Colombia.
Synopsis
A high degree of psychological stress in pregnant women in Colombia might be associated with a gap in knowledge about the consequences of SARS-CoV-2 infection during pregnancy. (Author)

20200924-61*
Fetal heart rate changes on the cardiotocograph trace secondary to maternal COVID-19 infection. Gracia-Perez-Bonfils A, Martinez-Perez O, Llurba E, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol

252, September 2020, pp 286-293

Objective
To determine the cardiotocograph (CTG) changes in women with symptomatic COVID-19 infection.
Study design
12 anonymised CTG traces from 2 hospitals in Spain were retrospectively analysed by 2 independent assessors. CTG parameters were studied based on fetal pathophysiological responses to inflammation and hypoxia that would be expected based on the pathogenesis of COVID-19 patients. Correlation was made with perinatal outcomes (Apgar score at 5 min and umbilical cord pH).
Results
All fetuses showed an increased baseline FHR > 10 percent compared to the initial recording, in addition to absence of accelerations. 10 out of 12 CTG traces (83.3 percent) demonstrated late or prolonged decelerations and 7 out of 12 fetuses (58.3 percent) showed absence of cycling. Not a single case of sinusoidal pattern was observed. ZigZag pattern was found in 4 CTG traces (33 percent). Excessive uterine activity was observed in all CTG traces where uterine activity was monitored (10 out of 12). Apgar scores at 5 min were normal (>7) and absence of metabolic acidosis was found in the umbilical cord arterial pH (pH > 7.0) in the cases that were available (11 and 9, respectively).
Conclusion
Fetuses of COVID-19 patients showed a raised baseline FHR (>10 percent), loss of accelerations, late decelerations, ZigZag pattern and absence of cycling probably due to the effects of maternal pyrexia, maternal inflammatory response and the 'cytokine storm'. However, the perinatal outcomes appear to be favourable. Therefore, healthcare providers should optimise the maternal environment first to rectify the reactive CTG changes instead of performing an urgent operative intervention. (Author)

20200923-94*
COVID-19 and maternal, fetal and neonatal mortality: a systematic review. Hessami K, Homayoon N, Hashemi A, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 16 August 2020, online

Objective
This is the first comprehensive review to focus on currently available evidence regarding maternal, fetal and neonatal mortality cases associated with Coronavirus Disease 2019 (COVID-19) infection, up to July 2020.
Methods
We systematically searched PubMed, Scopus, Google Scholar and Web of Science databases to identify any reported cases of maternal, fetal or neonatal mortality associated with COVID-19 infection. The references of relevant studies were also hand-searched.
Results
Of 2815 studies screened, 10 studies reporting 37 maternal and 12 perinatal mortality cases (7 fetal demise and 5 neonatal death) were finally eligible for inclusion to this review. All maternal deaths were seen in women with previous co-morbidities, of which the most common were obesity, diabetes, asthma and advanced maternal age. Acute respiratory distress syndrome (ARDS) and severity of pneumonia were considered as the leading causes of all maternal mortalities, except for one case who died of thromboembolism during postpartum period. Fetal and neonatal mortalities were suggested to be a result of the severity of maternal infection or the prematurity, respectively. Interestingly, there was no evidence of vertical transmission or positive COVID-19 test result among expired neonates.

Conclusion
Current available evidence suggested that maternal mortality mostly happened among women with previous co-morbidities and neonatal mortality seems to be a result of prematurity rather than infection. However, further reports are needed so that the magnitude of the maternal and perinatal mortality could be determined more precisely. (Author)

20200923-91*

COVID-19 in pregnancy: possible mechanisms not to be discounted. Zelop CM, Bonney EA (2020), The Journal of Maternal-Fetal and Neonatal Medicine 18 August 2020, online

SARS-CoV-2 has infected more than 16 million people worldwide. Related complications and death from COVID-19 disease and their underlying pathophysiology are intensely investigated. Pregnant women are among the affected. Although the severity of disease in pregnancy does not appear to be increased, the effects of infection on pregnancy should not escape careful examination. The currently known receptor for the virus, ACE2, regulates the renin-angiotensin system and is increased during pregnancy. Virus-receptor interactions may have significant effects on placental function, fetal development, and maternal immunity. The manifestation of cardiovascular complications of infection produces the hypothesis that a significant effect of the virus may be its influence on the maternal vascular system. Interference with the vascular adaptations to pregnancy and the post-partum may have implications for concurrent and future pregnancies as well as for long-term cardiovascular health. We should not miss the opportunity to learn from this virus about the physiology of pregnancy. (Author)

20200923-68*

Effect of COVID-19 pandemic process on prenatal diagnostic procedures. Ozalp M, Demir O, Akbas H, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 1 September 2020, online

Available from: https://doi.org/10.1080/14767058.2020.1815190

Objective
To evaluate the accessibility of pregnant women to prenatal screening and diagnostic tests during the COVID-19 pandemic process and analyze the effect of the pandemic process on acceptance-rejection rates of fetal diagnostic procedures for high risk pregnancies.
Materials and methods
As part of this cross-sectional study, during the pandemic, between the dates of 11 March 2020-30 June 2020 at Karadeniz Technical University Faculty of Medicine Perinatology Clinic, fetal structural anomaly detected by ultrasonography or with increased risk in screening test in the first and second trimester of high risk pregnancies, who were therefore recommended a prenatal diagnosis test, were defined as the control group and retrospectively compared with high risk pregnancies of the same periods (11 March 2019-30 June 2019) in the previous year.
Results
A total of 267 cases were evaluated within the scope of the study. The rate of pregnant women undergoing the first and second trimester screening tests was 83% in the control group and 56% for pregnant women in the study group. When the total number of prenatal diagnostic procedures and the year each of the procedures performed are compared, a statistically significant difference was found between the study and control groups (p: .041 and $p < .001$, respectively). When evaluating the rates of performed prenatal diagnostic procedures during the first patient visit in comparison to years, a statistically significant difference was observed in the A/S group and in the total number of cases ($p = .023$, $p < .001$, respectively). Similarly, the rate of performed prenatal diagnostic procedure during the first patient visit and the patient's city of residence was similarly statistically significant from year to year ($p < .05$).
Conclusions
The decrease in number of prenatal diagnosis and screening tests during the COVID-19 pandemic draws attention.

Prenatal care services are a serious issue that cannot be overcome by any deficiencies in both maternal and fetal care. (Author)

20200922-48*

COVID-19 in pregnancy: Maintaining clarity with expanding evidence. Zipursky J, Barrett J (2020), Obstetric Medicine vol 13, no 2, June 2020, pp 53-54

The coronavirus disease 2019 (COVID-19) pandemic has led to unparalleled changes in the provision of care to obstetric patients. In spite of rapid scientific advancement, much uncertainty remains about how to care for pregnant women and their infants during the pandemic. In this editorial, we discuss three emerging topics concerning COVID-19 and pregnancy: (1) rapidly evolving guidelines for maternal and neonatal care; (2) mother to fetus transmission of Severe Acute Respiratory Syndrome associated Coronavirus-2 (SARS-CoV-2); and (3) exclusion of pregnant women from randomized trials. (Author)

20200917-5*

COVID-19 infection: ACE2, pregnancy and preeclampsia. Todros T, Masturzo B, De Francia S (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 253, October 2020, p 330

Available from: https://doi.org/10.1016/j.ejogrb.2020.08.007
Full URL: https://doi.org/10.1016/j.ejogrb.2020.08.007

Correspondence piece discussing the protective effects of angiotensin-converting enzyme 2 (ACE2) and angiotensin 1-7 (ang-1-7) against COVID-19 and pre-eclampsia in pregnant women. (LDO)

20200917-1*

Curious scenario of changes in incidence of preterm births during COVID-19 pandemic. Pointers for future research?. Babu TA, Sharmila V, Bhat V, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 253, October 2020, pp 333-334

Available from: https://doi.org/10.1016/j.ejogrb.2020.08.055
Full URL: https://doi.org/10.1016/j.ejogrb.2020.08.055

Short correspondence piece discussing the reduction in the number of premature births in developed nations during the COVID-19 pandemic. The authors suggest that this trend may be attributed to decreases in infectious diseases, work-related stress and air pollution. (LDO)

20200916-19*

Racial-Ethnic Disparities and Pregnancy Outcomes in SARS-CoV-2 Infection in a Universally-Tested Cohort in Houston, Texas. Pineles BL, Alamo IC, Farooq N, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 254, November 2020, pp 329-330

Available from: https://doi.org/10.1016/j.ejogrb.2020.09.012
Full URL: https://doi.org/10.1016/j.ejogrb.2020.09.012

Correspondence piece discussing risk factors for SARS-CoV-2 infection and pregnancy outcomes in a cohort admitted for delivery at a community hospital in Texas. Findings indicated that Hispanic Americans and those with public insurance were more likely to test positive. (LDO)

20200916-18*

Is COVID-19 a risk factor for severe preeclampsia? Hospital experience in a developing country. Coronado-Arroyo JC, Concepción-Zavaleta MJ, Zavaleta-Gutiérrez FE, et al (2021), European Journal of Obstetrics & Gynecology and Reproductive Biology
vol 156, January 2021, pp 502-503

Available from: https://doi.org/10.1016/j.ejogrb.2020.09.020
Full URL: https://doi.org/10.1016/j.ejogrb.2020.09.020

Short correspondence piece discussing the clinical course of hypertensive disorders of pregnancy in women with SARS-CoV-2 in Peru. Findings suggest that SARS-CoV-2 predisposes women to severe pre-eclampsia by inducing a pro-inflammatory state. (LDO)

20200915-23*

Expression of severe acute respiratory syndrome coronavirus 2 cell entry genes, angiotensin-converting enzyme 2 and transmembrane protease serine 2, in the placenta across gestation and at the maternal-fetal interface in pregnancies complicated by preterm birth or preeclampsia. Bloise E, Zhang J, Nakpu J, et al (2021), American Journal of Obstetrics & Gynecology (AJOG) vol 224, no 3, March 2021, pp 298.e1-298.e8
Available from: https://doi.org/10.1016/j.ajog.2020.08.055
Full URL: https://doi.org/10.1016/j.ajog.2020.08.055

Background
Although there is some evidence that severe acute respiratory syndrome coronavirus 2 can invade the human placenta, limited data exist on the gestational age-dependent expression profile of the severe acute respiratory syndrome coronavirus 2 cell entry mediators, angiotensin-converting enzyme 2 and transmembrane protease serine 2, at the human maternal-fetal interface. There is also no information as to whether the expression of these mediators is altered in pregnancies complicated by preeclampsia or preterm birth. This is important because the expression of decidual and placental angiotensin-converting enzyme 2 and transmembrane protease serine 2 across gestation may affect the susceptibility of pregnancies to vertical transmission of severe acute respiratory syndrome coronavirus 2.
Objective
This study aimed to investigate the expression pattern of specific severe acute respiratory syndrome coronavirus 2 cell entry genes, angiotensin-converting enzyme 2 and transmembrane protease serine 2, in the placenta across human pregnancy and in paired samples of decidua and placenta in pregnancies complicated by preterm birth or preeclampsia compared with those in term uncomplicated pregnancies.
Study Design
In this study, 2 separate cohorts of patients, totaling 87 pregnancies, were included. The first cohort was composed of placentae from first- (7-9 weeks), second- (16-18 weeks), and third-trimester preterm (26-31 weeks) and third-trimester term (38-41 weeks) pregnancies (n=5/group), whereas the second independent cohort included matched decidua and placentae from pregnancies from term uncomplicated pregnancies (37-41 weeks' gestation; n=14) and pregnancies complicated by preterm birth (26-37 weeks' gestation; n=11) or preeclampsia (25-37 weeks' gestation; n=42). Samples were subjected to quantitative polymerase chain reaction and next-generation sequencing or RNA sequencing for next-generation RNA sequencing for angiotensin-converting enzyme 2 and transmembrane protease serine 2 mRNA expression quantification, respectively.
Results
In the first cohort, angiotensin-converting enzyme 2 and transmembrane protease serine 2, exhibited a gestational age-dependent expression profile, that is, angiotensin-converting enzyme 2 and transmembrane protease serine 2 mRNA was higher (P<.05) in the first-trimester placenta than in second-trimester, preterm birth, and term placentae (P<.05) and exhibited a negative correlation with gestational age (P<.05). In the second cohort, RNA sequencing demonstrated very low or undetectable expression levels of angiotensin-converting enzyme 2 in preterm birth, preeclampsia, and term decidua and in placentae from late gestation. In contrast, transmembrane protease serine 2 was expressed in both decidual and placental samples but did not change in pregnancies complicated by either preterm birth or preeclampsia.
Conclusion
The increased expression of these severe acute respiratory syndrome coronavirus 2 cell entry-associated genes in the

placenta in the first trimester of pregnancy compared with those in later stages of pregnancy suggests the possibility of differential susceptibility to placental entry to severe acute respiratory syndrome coronavirus 2 across pregnancy. Even though there is some evidence of increased rates of preterm birth associated with severe acute respiratory syndrome coronavirus 2 infection, we found no increase in mRNA expression of angiotensin-converting enzyme 2 or transmembrane protease serine 2 at the maternal-fetal interface. (Author)

20200911-3*

Women's Lives, Women's Rights: Strengthening Access to Contraception Beyond the Pandemic. All Party Parliamentary Group on Sexual and Reproductive Health in the UK (2020), London: APPG 10 September 2020. 44 pages
Available from: https://www.fsrh.org/documents/womens-lives-womens-rights-full-report/
Full URL: https://www.fsrh.org/documents/womens-lives-womens-rights-full-report/

Presents the findings of the All Party Parliamentary Group (APPG) on Sexual and Reproductive Health in the UK, which looked at access to contraception and whether this was meeting women's needs. The Inquiry took place in 2019 with additional evidence submissions in May 2020 in order to ascertain the effects of COVID-19 on women's ability to access reproductive health services. (JSM)

20200911-24*

Histopathologic evaluation of placentas after diagnosis of maternal severe acute respiratory syndrome coronavirus 2 infection. Gulersen M, Prasannan L, Tam HT, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100211
Available from: https://doi.org/10.1016/j.ajogmf.2020.100211
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100211

Background
The impact of maternal severe acute respiratory syndrome coronavirus 2 infection on placental histopathology is not well known.
Objective
To determine if any significant placental histopathologic changes occur after the diagnosis of severe acute respiratory syndrome coronavirus 2 infection during pregnancy and whether these changes are correlated with the presence or absence of symptoms associated with the infection.
Study Design
A retrospective cohort study of women diagnosed as having severe acute respiratory syndrome coronavirus 2 infection who delivered at a single center from April 9, 2020 to April 27, 2020, and had placental specimens reviewed by the Department of Pathology. Women with singleton gestations and laboratory-confirmed severe acute respiratory syndrome coronavirus 2 infection were eligible for inclusion. Historical controls selected from a cohort of women who delivered 6 months before the study period were matched in a 1:1 fashion by weeks of gestation at delivery. Histopathologic characteristics were evaluated in each placenta, and the incidence of these findings was compared between placentas of those who received a diagnosis of maternal severe acute respiratory syndrome coronavirus 2 infection and historical controls, and between placentas from patients with or without typical symptoms related to the infection. Statistical analyses included the use of Wilcoxon rank-sum test and Fisher's exact test for the comparison of categorical and continuous variables. Statistical significance was defined as a P value of <.05.
Results
A total of 50 placentas after the diagnosis of maternal severe acute respiratory syndrome coronavirus 2 infection and 50 historical controls were analyzed. Among the placentas from patients diagnosed with severe acute respiratory syndrome coronavirus 2 infection, 3 (6%) were preterm (33 3/7, 34 6/7, and 36 6/7 weeks of gestation), 16 (32%) were from patients with typical symptoms related to the infection, and 34 (68%) were from patients without typical symptoms related to the infection. All patients had received a diagnosis of severe acute respiratory syndrome

coronavirus 2 infection in the third trimester. Decidual vasculopathy was not visualized in any of the placentas from patients diagnosed as having severe acute respiratory syndrome coronavirus 2 infection. There was no statistically significant difference in placental histopathologic characteristics between the groups. Severe acute respiratory syndrome coronavirus 2 test results for all neonates at 24 hours of life were negative.
Conclusion
Based on the results of this study, there are no significant placental histopathologic changes that occur after the diagnosis of severe acute respiratory syndrome coronavirus 2 infection in women during the third trimester of pregnancy compared with a gestational age-matched historical control group. Similar incidences of histopathologic findings were also discovered when comparing placentas from patients with severe acute respiratory syndrome coronavirus 2 infection with or without the presence of symptoms typically related to the infection.(Author)

20200911-2*

COVID-19 qPCR testing in women admitted for delivery in Spain: Is universal testing worthy?: A commentary. Cubo AM, Villalba-Yarza A, Lapresa Alcalde MV, et al (2020), Archives of Disease in Childhood 6 September 2020, online
Available from: https://doi.org/10.1007/s00404-020-05769-y
Full URL: https://doi.org/10.1007/s00404-020-05769-y

Discusses universal testing for COVID-19 in all women admitted for delivery at Salamanca University Hospital, Spain. Findings revealed that 72% of positive patients were asymptomatic and 20% displayed mild symptoms. The authors suggest that testing is beneficial for both the patients and for the safety of healthcare staff. (LDO)

20200911-19*

Risk factors for severe acute respiratory syndrome coronavirus 2 infection in pregnant women. Sakowicz A, Ayala AE, Ukeje CU, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100198
Available from: https://doi.org/10.1016/j.ajogmf.2020.100198
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100198

Background
Risk factors for severe acute respiratory syndrome coronavirus 2 infection in pregnancy remain poorly understood. Identifying and understanding populations at a heightened risk of acquisition is essential to more effectively target outreach and prevention efforts.
Objective
This study aimed to compare sociodemographic and clinical characteristics of pregnant women with and without severe acute respiratory syndrome coronavirus 2 infection and, among those with severe acute respiratory syndrome coronavirus 2, to compare characteristics of those who reported coronavirus disease symptoms and those who were asymptomatic at diagnosis.
Study Design
This retrospective cohort study includes pregnant women who delivered or intended to deliver at Northwestern Memorial Hospital after initiation of a universal testing protocol on admission (April 8, 2020-May 31, 2020). Women were dichotomized by whether they had a positive test result for severe acute respiratory syndrome coronavirus 2. Among women with a positive test result, women were further dichotomized by whether they reported symptoms of coronavirus disease 2019. Bivariable analysis and parametric tests of trend were used for analyses. Logistic regression was used to control for potential confounders and to examine effect modification between race and ethnicity and any other identified risk factors.
Results
During the study period, 1418 women met inclusion criteria, of whom 101 (7.1%) had a positive test result for severe acute respiratory syndrome coronavirus 2. Of the 101 women who had a positive test result, 77 (76.2%) were symptomatic at the time of diagnosis. Compared with women who had a negative test result for severe acute

respiratory syndrome coronavirus 2, those with a positive test result were younger and were more likely to have public insurance, to identify as black or African American or Latina, to be unmarried, to be obese, to have preexisting pulmonary disease, and to have living children. An increasing number of living children was associated with an increasing risk of severe acute respiratory syndrome coronavirus 2 infection, and this finding persisted after controlling for potential confounders. There was no effect modification between race or ethnicity and having living children with regard to the risk of infection. There were no significant differences identified between women who were symptomatic and asymptomatic.
Conclusion
Many risk factors for severe acute respiratory syndrome coronavirus 2 infection in pregnancy are similar to the social and structural determinants of health that have been reported in the general population. The observed association between severe acute respiratory syndrome coronavirus 2 infection and having children raises the possibility of children themselves being vectors of viral spread or behavior patterns of parents being mediators of acquisition. (Author)

20200911-1*

Contraceptive services 'even worse' after coronavirus. Collinson A (2020), BBC News 10 September 2020
Available from: https://www.bbc.co.uk/news/health-54101324
Full URL: https://www.bbc.co.uk/news/health-54101324

Reports that sexual and reproductive health services, which had already suffered reductions in funding which have led to service closures, reduced opening hours, waiting lists and staff cuts, have been further hit by the coronavirus pandemic, raising the risk of unplanned pregnancies and abortions. States that MPs are calling for a single commissioning body to improve accountability. (JSM)

20200910-37*

Complicated COVID-19 in pregnancy: a case report with severe liver and coagulation dysfunction promptly improved by delivery. Ronnje L, Länsberg J-K, Vikhareva O, et al (2020), BMC Pregnancy and Childbirth vol 20, no 511, 4 September 2020
Available from: https://doi.org/10.1186/s12884-020-03172-8
Full URL: https://doi.org/10.1186/s12884-020-03172-8

Background
It has been proposed that pregnant women and their fetuses may be particularly at risk for poor outcomes due to the coronavirus (COVID-19) pandemic. From the few case series that are available in the literature, women with high risk pregnancies have been associated with higher morbidity. It has been suggested that pregnancy induced immune responses and cardio-vascular changes can exaggerate the course of the COVID-19 infection.
Case presentation
A 26-year old Somalian woman (G2P1) presented with a nine-day history of shortness of breath, dry cough, myalgia, nausea, abdominal pain and fever. A nasopharyngeal swab returned positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. Her condition rapidly worsened leading to severe liver and coagulation impairment. An emergency Caesarean section was performed at gestational week 32 + 6 after which the patient made a rapid recovery. Severe COVID-19 promptly improved by the termination of the pregnancy or atypical HELLP (Hemolysis, Elevated Liver Enzymes and Low Platelet Count) exacerbated by concomitant COVID-19 infection could not be ruled out. There was no evidence of vertical transmission.
Conclusions
This case adds to the growing body of evidence which raises concerns about the possible negative maternal outcomes of COVID-19 infection during pregnancy and advocates for pregnant women to be recognized as a vulnerable group during the current pandemic. (Author)

20200909-8*

Obstetrics and gynecology emergency services during the coronavirus disease 2019 pandemic. Salsi G, Seidenari A, Diglio J, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100214
Available from: https://doi.org/10.1016/j.ajogmf.2020.100214
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100214

Research letter exploring the number of women self-referring to the obstetrics and gynaecology emergency department before and during the COVID-19 pandemic in Italy. Results indicate that the number of self-referrals reduced by 50.2% from March 2019 to March 2020. (LDO)

20200909-7*

Racial and ethnic disparity and spatiotemporal trends in severe acute respiratory syndrome coronavirus 2 prevalence on obstetrical units in New York. Blitz MJ, Rochelson B, Prasannan L, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100212
Available from: https://doi.org/10.1016/j.ajogmf.2020.100212
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100212

Research letter evaluating the temporal trends, regional geographic variations and ethnic disparities in pregnant women with SARS-CoV-2 in New York. Findings indicated that Hispanic women constituted 18% of the study population but accounted for 31% of positive tests, while non-Hispanic white women constituted 44% of the study population and accounted for 8% of positive tests. (LDO)

20200909-6*

Practical considerations for pregnant women with diabetes and severe acute respiratory syndrome coronavirus 2 infection. Boyles GP, Thung S, Gabbe SG, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100210
Available from: https://doi.org/10.1016/j.ajogmf.2020.100210
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100210

Guidance and practical recommendations for the management of diabetes in pregnant women during the COVID-19 pandemic. The authors suggest that oral diabetes medications should be discontinued in pregnant patients with moderate to severe disease, continuous glucose monitoring should be considered, administration of antenatal corticosteroids should be highly individualised, antenatal surveillance should follow standard practice, and institutional algorithms for diabetes management may improve the coordination of care. (LDO)

20200909-4*

Coronavirus infection in a high-risk obstetrical population of the South Bronx, New York. Curi B, Sabre A, Benjamin I, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100203
Available from: https://doi.org/10.1016/j.ajogmf.2020.100203
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100203

Research letter discussing the clinical course of pregnant patients from a South Bronx community hospital with COVID-19. Findings demonstrated that 81.8% of patients had underlying medical conditions, and 18.2% had adverse pregnancy outcomes including preterm delivery and maternal death. (LDO)

20200909-3*

Preferential use of dexamethasone for fetal lung maturation in severe coronavirus disease 2019. Dellapiana G, Naqvi M, Leggett C, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020,

100218
Available from: https://doi.org/10.1016/j.ajogmf.2020.100218
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100218
Case report of a 27-year-old pregnant woman with COVID-19 who received dexamethasone for fetal lung maturation. The authors recommend the use of dexamethasone over betamethasone when acceleration of fetal lung maturity is indicated. (LDO)

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
Available from:
https://www.england.nhs.uk/coronavirus/publication/framework-to-assist-nhs-trusts-to-reintroduce-access-for-partners-visitors-and-other-supporters-of-pregnant-women-in-english-maternity-services/
Full URL:
https://www.england.nhs.uk/coronavirus/publication/framework-to-assist-nhs-trusts-to-reintroduce-access-for-partners-visitors-and-other-supporters-of-pregnant-women-in-english-maternity-services/
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)

20200908-14*
SARS-CoV-2 infection in pregnancy: A systematic review and meta-analysis of clinical features and pregnancy outcomes. Khalil A, Kalafat E, Benlioglu C, et al (2020), EClinical Medicine vol 25, 100446, August 2020
Available from: https://doi.org/10.1016/j.eclinm.2020.100446
Full URL: https://doi.org/10.1016/j.eclinm.2020.100446
Background
Perform a systematic review and meta-analysis of SARS-CoV-2 infection and pregnancy.
Methods
Databases (Medline, Embase, Clinicaltrials.gov, Cochrane Library) were searched electronically on 6th April and updated regularly until 8th June 2020. Reports of pregnant women with reverse transcription PCR (RT-PCR) confirmed COVID-19 were included. Meta-analytical proportion summaries and meta-regression analyses for key clinical outcomes are provided.
Findings
86 studies were included, 17 studies (2567 pregnancies) in the quantitative synthesis; other small case series and case reports were used to extract rarely-reported events and outcome. Most women (73.9%) were in the third trimester; 52.4% have delivered, half by caesarean section (48.3%). The proportion of Black, Asian or minority ethnic group membership (50.8%); obesity (38.2%), and chronic co-morbidities (32.5%) were high. The most commonly reported clinical symptoms were fever (63.3%), cough (71.4%) and dyspnoea (34.4%). The commonest laboratory abnormalities were raised CRP or procalcitonin (54.0%), lymphopenia (34.2%) and elevated transaminases (16.0%). Preterm birth before 37 weeks' gestation was common (21.8%), usually medically-indicated (18.4%). Maternal intensive care unit admission was required in 7.0%, with intubation in 3.4%. Maternal mortality was uncommon (~1%). Maternal intensive care admission was higher in cohorts with higher rates of co-morbidities (beta=0.007, p<0.05) and maternal age over 35 years (beta=0.007, p<0.01). Maternal mortality was higher in cohorts with higher rates of antiviral drug use (beta=0.03, p<0.001), likely due to residual confounding. Neonatal nasopharyngeal swab RT-PCR was positive in 1.4%.
Interpretation
The risk of iatrogenic preterm birth and caesarean delivery was increased. The available evidence is reassuring,

suggesting that maternal morbidity is similar to that of women of reproductive age. Vertical transmission of the virus probably occurs, albeit in a small proportion of cases.
Funding
N/A (Author)

20200907-49*

Vulnerability and Resilience to Pandemic-Related Stress Among U.S. Women Pregnant at the Start of the COVID-19 Pandemic. Preis H, Mahaffey B, Heiselman C, et al (2020), Social Science and Medicine vol 266, December 2020, 113348
Available from: https://doi.org/10.1016/j.socscimed.2020.113348
Full URL: https://doi.org/10.1016/j.socscimed.2020.113348

Rationale. Women pregnant during the COVID-19 pandemic are experiencing moderate to high levels of emotional distress, which has previously been shown to be attributable to two types of pandemic-related pregnancy stress: stress associated with feeling unprepared for birth due to the pandemic (Preparedness Stress) and stress related to fears of perinatal COVID-19 infection (Perinatal Infection Stress). Objective. Given the well-documented harms associated with elevated prenatal stress and the critical importance of developing appropriately targeted interventions, we investigated factors predictive of pandemic-related pregnancy stress. Method. Between April 25 and May 15, 2020, 4,451 pregnant women in the U.S. were recruited via social media to complete an online questionnaire that included sociodemographic, medical, and COVID-19 situational factors, as well as the Pandemic-Related Pregnancy Stress Scale (PREPS). Binary logistic regression was used to calculate odds ratios for high stress. Results. Nearly 30% of participants reported high Preparedness Stress; a similar proportion reported high Perinatal Infection Stress. Abuse history, chronic illness, income loss due to the pandemic, perceived risk of having had COVID-19, alterations to prenatal appointments, high-risk pregnancy, and being a woman of color were associated with greater levels of one or both types of stress. Access to outdoor space, older age, and engagement in healthy behaviors were protective against stress. Conclusions. Practices that may alleviate pandemic-related stress such as minimizing disruptions to prenatal care, ensuring access to outdoor space, and motivating engagement in health behaviors are of vital importance. Particular attention is needed for more vulnerable populations including women of color, women with a history of abuse, and those with high-risk pregnancy. Research focused on the short and longer-term impact of pandemic-related pregnancy stress on maternal mental and physical health, perinatal outcomes, and child development is critical to identify these effects and marshal appropriate resources to reduce them. (Author)

20200904-2*

Coronavirus: 'Lockdown made my miscarriage far more traumatic'. Venema V (2020), BBC News 4 September 2020
Available from: https://www.bbc.co.uk/news/uk-53613348
Full URL: https://www.bbc.co.uk/news/uk-53613348

Pregnant women are often now attending hospital appointments on their own. Covid-19 safety measures in hospitals mean loved ones must sit in the car or pace outside. It means some are being given the heartbreaking news of miscarriages on their own. Four women tell their stories of miscarriage during the coronavirus pandemic. (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)

20200902-4*

Ectopic Pregnancy During Coronavirus Disease 2019 (COVID-19): To Operate, or Not to Operate. Hansen KA, Stovall DW (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 288-290
Available from: https://doi.org/10.1097/AOG.0000000000003995
Full URL: https://doi.org/10.1097/AOG.0000000000003995

Clinical conundrum of whether to operate on a patient with an ectopic pregnancy during the COVID-19 pandemic. Considers the condition of the patient, laparotomy and laparoscopy techniques, and the use of alternative non-surgical therapies. (LDO)

20200902-35*

Prolonged Detection of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) RNA in an Obstetric Patient With Antibody Seroconversion. Molina LP, Chow S-K, Nickel A, et al (2020), Obstetrics & Gynecology vol 136, no 4, October 2020, pp 838-841
Available from: https://doi.org/10.1097/AOG.0000000000004086

BACKGROUND:
There is a growing understanding of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and coronavirus disease 2019 (COVID-19) in the general population. The unique immunology of pregnancy may result in variations from the reported course of disease.
CASE:
A 27-year-old primigravid woman presented with mild COVID-19 symptoms at 28 2/7 weeks of gestation, testing positive for SARS-CoV-2 infection by nasopharyngeal swab reverse transcription-polymerase chain reaction (RT-PCR). Antibody seroconversion was detected at 36 6/7 weeks of gestation. She presented for delivery at 38 1/7 weeks of gestation, and her SARS-CoV-2 RT-PCR test result was positive. Severe acute respiratory syndrome coronavirus 2 RNA remained detectable 34 days postpartum and 104 days from her initial positive test.
CONCLUSION:
Prolonged viral shedding of SARS-CoV RNA may occur in the pregnant patient. If prevalent, this complicates the interpretation of a positive SARS-CoV-2 RT-PCR test result in the asymptomatic gravid patient. (Author)

20200902-24*

Multi-disciplinary care 'vital' for pregnant women with Covid-19. Ford S (2020), Nursing Times 21 August 2020
All pregnant women admitted to hospital with Covid-19 must have multi-disciplinary maternity care from the start, according to two royal colleges in response to the findings of a new report (1).
1. Knight M et al (2020). Saving Lives, Improving Mothers' Care. Rapid Report: Learning from SARS-CoV-2-related and associated maternal deaths in the UK, Oxford: National Perinatal Epidemiology Unit. (Author, edited)

20200902-2*

Prevalence and Severity of Coronavirus Disease 2019 (COVID-19) Illness in Symptomatic Pregnant and Postpartum Women Stratified by Hispanic Ethnicity. Goldfarb IT, Clapp MA, Soffer MD, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 300-302
Available from: https://doi.org/10.1097/AOG.0000000000004005
Full URL: https://doi.org/10.1097/AOG.0000000000004005

Research letter examining ethnic inequalities among pregnant patients with COVID-19 at one institution. Findings revealed that 72% of Hispanic women and 27% of non-Hispanic women with symptoms tested positive. (LDO)

20200901-58*

Clinical Implications of Universal Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Testing in Pregnancy. Miller ES, Grobman WA, Sakowicz A, et al (2020), Obstetrics and Gynecology vol 136, no 2, August 2020, pp 232-234

Available from: https://doi.org/10.1097/AOG.0000000000003983
Full URL: https://doi.org/10.1097/AOG.0000000000003983

Research letter discussing universal testing for SARS-CoV-2 among pregnant women admitted to Northwestern Memorial Hospital in the United States. (LDO)

20200901-57*

Lymphopenia and Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection Among Hospitalized Obstetric Patients. Duffy CR, Hart JM, Modest AM, et al (2020), Obstetrics and Gynecology vol 136, no 2, August 2020, pp 229-231

Available from: https://doi.org/10.1097/AOG.0000000000003984
Full URL: https://doi.org/10.1097/AOG.0000000000003984

Research letter presenting the results of a study to examine whether lymphopenia can identify asymptomatic SARS-CoV-2 infection and recognise the presence of infection in symptomatic patients. (LDO)

20200901-39*

Influence of Race and Ethnicity on Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection Rates and Clinical Outcomes in Pregnancy. Emeruwa UN, Spiegelman J, Ona S, et al (2020), Obstetrics & Gynecology vol 136, no 5, November 2020, pp 1040-1043

Available from: https://doi.org/10.1097/AOG.0000000000004088
Full URL: https://doi.org/10.1097/AOG.0000000000004088

Research letter discussing a retrospective study on infection rates and perinatal outcomes by race and ethnicity among pregnant women with SARS-CoV-2. (LDO)

20200901-29*

Include pregnant women in research - particularly covid-19 research. Knight M, Morris RK, Furniss J, et al (2020), BMJ 25 August 2020, online

Available from: https://doi.org/10.1136/bmj.m3305
Full URL: https://doi.org/10.1136/bmj.m3305

Adapting interventions and changing attitudes will drive scientific progress. (Author)

20200901-23*

The clinical course of COVID in pregnancy. Syeda S, Baptiste C, Breslin N, et al (2020), Seminars in Perinatology vol 44, no 7, November 2020, 151284

Available from: https://doi.org/10.1016/j.semperi.2020.151284
Full URL: https://doi.org/10.1016/j.semperi.2020.151284

The 2019 novel coronavirus disease (COVID-19) pandemic poses unique challenges to the medical community as the optimal treatment has not been determined and is often at the discretion of institutional guidelines. Pregnancy has previously been described as a high-risk state in the context of infectious diseases, given a particular susceptibility to pathogens and adverse outcomes. Although ongoing studies have provided insight on the course of this disease in the adult population, the implications of COVID-19 on pregnancy remains an understudied area. The objective of this

study is to review the literature and describe clinical presentations among pregnant women afflicted with COVID-19. (Author)

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

Available from: https://doi.org/10.1016/j.semperi.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)

20200901-21*

Outcomes and epidemiology of COVID-19 infection in the obstetric population. Sutton D, Bertozzi-Villa C, Lasky J, et al (2020), Seminars in Perinatology vol 44, no 7, November 2020, 151283

Available from: https://doi.org/10.1016/j.semperi.2020.151283
Full URL: https://doi.org/10.1016/j.semperi.2020.151283

As of June 19, 2020 there are more than 8.6 million COVID-19 cases worldwide with over 450,000 deaths. Providing obstetrical care in the setting of the pandemic poses challenges to the healthcare system in that, in comparison to many other medical specialties, obstetrical care cannot be deferred. Pregnant patients represent a high risk population for exposure and infection with respiratory pathogens and, as they require multiple points of contact with the healthcare system, are especially vulnerable. The purpose of this review is assess current epidemiology and outcomes research related to COVID-19 with a focus on obstetric patients. This review covers the global spread of the SARS-CoV-2 virus, symptomatology, modes of transmission, and current knowledge gaps related to epidemiology and outcomes for the obstetric population. (Author)

20200901-20*

Adaptation of prenatal care and ultrasound. Aziz A, Fuchs K, Nhan-Chang C-L, et al (2020), Seminars in Perinatology vol 44, no 7, November 2020, 151278

Available from: https://doi.org/10.1016/j.semperi.2020.151278
Full URL: https://doi.org/10.1016/j.semperi.2020.151278

In the spring of 2020, expeditious changes to obstetric care were required in New York as cases of COVID-19 increased and pandemic panic ensued. A reduction of in-person office visits was planned with provider appointments scheduled to coincide with routine maternal blood tests and obstetric ultrasounds. Dating scans were combined with nuchal translucency assessments to reduce outpatient ultrasound visits. Telehealth was quickly adopted for selected prenatal visits and consultations when deemed appropriate. The more sensitive cell-free fetal DNA test was commonly used to

screen for aneuploidy in an effort to decrease return visits for diagnostic genetic procedures. Antenatal testing guidelines were modified with a focus on providing evidence-based testing for maternal and fetal conditions. For complex pregnancies, fetal interventions were undertaken earlier to avoid serial surveillance and repeated in-person hospital visits. These rapid adaptations to traditional prenatal care were designed to decrease the risk of coronavirus exposure of patients, staff, and physicians while continuing to provide safe and comprehensive obstetric care. (Author)

20200826-50*

Corticosteroids in the Management of Pregnant Patients With Coronavirus Disease (COVID-19). Saad AF, Chappell L, Saade GR, et al (2020), Obstetrics & Gynecology vol 136, no 4, October 2020, pp 823-826
Available from: https://doi.org/10.1097/AOG.0000000000004103
Full URL: https://doi.org/10.1097/AOG.0000000000004103

Recent evidence supports the use of an early, short course of glucocorticoids in patients with COVID-19 who require mechanical ventilation or oxygen support. As the number of coronavirus disease 2019 (COVID-19) cases continues to increase, the number of pregnant women with the disease is very likely to increase as well. Because pregnant women are at increased risk for hospitalization, intensive care unit admission, and mechanical ventilation support, obstetricians will be facing the dilemma of initiating maternal corticosteroid therapy while weighing its potential adverse effects on the fetus (or neonate if the patient is postpartum and breastfeeding). Our objective is to summarize the current evidence supporting steroid therapy in the management of patients with acute respiratory distress syndrome and COVID-19 and to elaborate on key modifications for the pregnant patient. (Author)

20200826-3*

Lessons from past epidemics and pandemics and a way forward for pregnant women, midwives and nurses during COVID-19 and beyond: A meta-synthesis. Shorey S, Chan V (2020), Midwifery vol 90, November 2020, 102821
Available from: https://doi.org/10.1016/j.midw.2020.102821
Full URL: https://doi.org/10.1016/j.midw.2020.102821

Objective
To consolidate qualitative research studies that examined the experiences and needs of pregnant women, midwives, and nurses of maternity units to provide a way forward for future research and practices during the current pandemic and future epidemics and pandemics.
Design
Qualitative systematic review and meta-synthesis.
Data source
Four electronic databases-PubMed, Scopus, PsycINFO, and Cumulative Index to Nursing and Allied Health (CINAHL).
Review methods
Qualitative studies with samples of pregnant women, midwives, and/or nurses of maternity units who experienced epidemics and/or pandemics were searched from 1 January 2000 to 4 April 2020. The included studies were critically appraised using the ten-item Critical Appraisal Skills Programme (CASP) tool.
Findings
Eight studies were included in this review. Four themes emerged from the synthesis: (1) psychological responses, (2) challenges faced, (3) coping strategies, and (4) sources of support and support needs.
Key conclusions
Pregnant women, midwives, and nurses experienced negative psychological responses during epidemics and pandemics. Challenges, such as limited available information and public stigma, were faced. Various coping strategies, such as actively looking for more information and seeking solace in religions, were practiced by pregnant women, midwives, and nurses. Families were both sources of support and stress and they expressed needs for more

informational, emotional, and financial support during pandemics.
Implications for practice
More culturally diverse research in the future that includes the development of technology-based programs, trained community volunteer-led programs, psychosocial interventions, and anti-stigma and awareness initiatives are needed to combat the current pandemic and future public health crises. (Author)

20200824-48*

Inclusion of pregnant women in COVID-19 vaccine development. Heath PT, Le Doare K, Khalil A (2020), The Lancet Infectious Diseases vol 20, no 9, September 2020, pp 1007-1008
Available from: https://doi.org/10.1016/S1473-3099(20)30638-1
Full URL: https://doi.org/10.1016/S1473-3099(20)30638-1

Examines the issues involved in the inclusion of pregnant and lactating women in the development and deployment of COVID-19 vaccines. (MB)

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
Available from: https://doi.org/10.1016/S2214-109X(20)30319-3
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)

20200821-42*

Promotion of Maternal-Infant Mental Health and Trauma-Informed Care During the Coronavirus Disease 2019 Pandemic. Choi K, Records K, Low LK, et al (2020), JOGNN: Journal of Obstetric, Gynecologic and Neonatal Nursing 11 August 2020, online

The coronavirus disease 2019 pandemic has led to disruptions in health care in the perinatal period and women's childbirth experiences. Organizations that represent health care professionals have responded with general practice guidelines for pregnant women, but limited attention has been devoted to mental health in the perinatal period during a pandemic. Evidence suggests that in this context, significant psychological distress may have the potential for long-term psychological harm for mothers and infants. For infants, this risk may extend into early childhood. In this commentary, we present recommendations for practice, research, and policy related to mental health in the perinatal period. These recommendations include the use of a trauma-informed framework to promote social support and infant attachment, use of technology and telehealth, and assessment for mental health needs and experiences of violence. (Author)

20200821-28*

A pandemic center's experience of managing pregnant women with COVID-19 infection in Turkey: A prospective cohort study. Sahin D, Tanacan A, Erol SA, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 1, October 2020, pp 74-82
Available from: https://doi.org/10.1002/ijgo.13318
Full URL: https://doi.org/10.1002/ijgo.13318

Objective
To evaluate the course and effect of coronavirus disease 2019 (COVID-19) on pregnant women followed up in a Turkish institution.

Methods
A prospective, single tertiary pandemic center cohort study was conducted on pregnant women with confirmed or suspected severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. Positive diagnosis was made on a real-time polymerase chain reaction (RT-PCR) assay of a nasopharyngeal and oropharyngeal specimen. Demographic features, clinical characteristics, and maternal and perinatal outcomes were evaluated.
Results
SARS-CoV-2 was suspected in 100 pregnant women. Of them, 29 had the diagnosis confirmed by RT-PCR. Eight of the remaining 71 cases had clinical findings highly suspicious for COVID-19. Ten (34.5%) of the confirmed cases had co-morbidities. Cough (58.6%) and myalgia (51.7%) were the leading symptoms. COVID-19 therapy was given to 10 (34.5%) patients. There were no admissions to the intensive care unit. Pregnancy complications were present in 7 (24.1%) patients. Half of the births (5/10) were cesarean deliveries. None of the neonates were positive for SARS-CoV-2. Samples of breastmilk were also negative for the virus. Three neonates were admitted to the neonatal intensive care unit.
Conclusion
The clinical course of COVID 19 during pregnancy appears to be mild in the present study. (Author)

20200821-26*

Worldwide maternal deaths due to COVID-19: A brief review. Nakamura-Pereira M, Andreucci CB, de Oliveira Menezes M, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 1, October 2020, pp 148-150
Available from: https://doi.org/10.1002/ijgo.13328
Full URL: https://doi.org/10.1002/ijgo.13328

160 maternal deaths due to COVID-19 have been reported worldwide, most of them in middle-income countries, representing a barrier to reducing maternal mortality. (Author)

20200821-14*

Psychological impact of the COVID-19 pandemic among pregnant women in Sri Lanka. Patabendige M, Gamage MM, Weerasinghe M, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 1, October 2020, pp 150-153
Available from: https://doi.org/10.1002/ijgo.13335
Full URL: https://doi.org/10.1002/ijgo.13335

The COVID-19 pandemic has caused increased rates of perinatal anxiety and depression in pregnant women with no known COVID-19 infection in Sri Lanka. (Author)

20200821-1*

Prenatal neonatology telemedicine consultation for patients with fetal anomalies during the COVID-19 pandemic era: rapid implementation and lessons learned. Bishop CE, Jackson LE, Vats KR, et al (2020), Journal of Perinatology vol 40, no 10, October 2020, pp 1451-1452
Available from: https://doi.org/10.1038/s41372-020-00787-9
Full URL: https://doi.org/10.1038/s41372-020-00787-9

Commentary on the use of telemedicine to provide prenatal consultations to women with complex fetal abnormalities at the University of Pittsburgh Medical Center. Discusses the barriers to effective consultation including poor internet connection and difficulties creating a therapeutic environment in the digital space. (LDO)

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
Available from: https://doi.org/10.1111/ajo.13204
Full URL: https://doi.org/10.1111/ajo.13204

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)

20200820-50*
Maternal and infant outcomes of full-term pregnancy combined with COVID-2019 in Wuhan, China: retrospective case series. Chen Y, Bai J (2020), Archives of Gynecology and Obstetrics vol 302, no 3, September 2020, pp 545-551
Available from: https://doi.org/10.1007/s00404-020-05573-8
Full URL: https://doi.org/10.1007/s00404-020-05573-8

Objective
To investigate the maternal and infant outcomes of full-term pregnant patients in Wuhan, China, who were infected with 2019 severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that is responsible for coronavirus disease 2019 (COVID-2019).
Design
Retrospective case series.
Setting
The Central Hospitals of Wuhan, Tongji Medical College, Huazhong University of Science and Technology in Wuhan, China.
Participants
Twenty one full-term pregnant patients who were admitted to the Central Hospital of Wuhan, Tongji Medical College, Huazhong University of Science and Technology, confirmed SARS-CoV-2 infection and COVID-2019 with laboratorial and clinical methods, were reviewed by our medical team, and the data were collected from January 20, 2020 to

February 29, 2020.
Main clinical data collection
Clinical data had been collecting using a standard case report form, such as epidemiological history, clinical manifestations, auxiliary examination of major laboratory and clinic, etc. All the information was collected and confirmed by our medical team.
Results
Twenty one full-term pregnant patients were reviewed (median age 29 years), and no patients were admitted to intensive care unit (ICU), and died during the treating progress. According to our review, all the cases were infected by human to human transmission, and the most common symptoms at onset of illness were cough in 17 (80.95%), fatigue in 10 (47.62%), fever in 7 (33.33%), expectoration in 1 (4.76%), and only one patient (4.76%) developed shortness of breath on admission. The median time from exposure to onset of illness was 10 days (interquartile range 7 -2 days), and from onset of symptoms to first hospital admission was 1 day (interquartile range 1-2 days).
Conclusions
As of February 29, 2020, all the patients who were full-term pregnancy combined with COVID-2019 were cured and delivered successfully, and all the newborns were not infected with SARS-CoV-2, and there were no evidence of mother-to-child transmission. (Author)

20200820-5*

Options for screening for gestational diabetes mellitus during the SARS-CoV-2 pandemic. Simmons D, Rudland VL, Wong V, et al (2020), Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG) vol 60, no 5, October 2020, pp 660-666
Available from: https://doi.org/10.1111/ajo.13224
Full URL: https://doi.org/10.1111/ajo.13224

The balance between avoiding severe acute respiratory syndrome coronavirus-2 contagion and reducing wider clinical risk is unclear for gestational diabetes mellitus (GDM) testing. Recent recommendations promote diagnostic approaches that limit collection but increase undiagnosed GDM, which potentially increases adverse pregnancy outcome risks. The most sensitive approach to detecting GDM at 24-28 weeks beyond the two-hour oral glucose tolerance test (OGTT) is a one-hour OGTT (88% sensitivity). Less sensitive approaches use fasting glucose alone (≥5.1 mmol/L: misses 44-54% GDM) or asking ~20% of women for a second visit (fasting glucose 4.7-5.0 mmol/L (62-72% sensitive)). Choices should emphasise local and patient decision-making. (Author)

20200820-20*

Prenatal anxiety and obstetric decisions among pregnant women in Wuhan and Chongqing during the COVID-19 outbreak: a cross-sectional study. Liu X, Chen M, Wang Y, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology 24 June 2020, online
Available from: https://doi.org/10.1111/1471-0528.16381
Full URL: https://doi.org/10.1111/1471-0528.16381

Objectives
To investigate the mental status of pregnant women and to determine their obstetric decisions during the COVID-19 outbreak.
Design
Cross-sectional study.
Setting
Two cities in China--Wuhan (epicentre) and Chongqing (a less affected city).

Population
A total of 1947 pregnant women.
Methods
We collected demographic, pregnancy and epidemic information from our pregnant subjects, along with their attitudes towards COVID-19 (using a self-constructed five-point scale). The Self-Rating Anxiety Scale (SAS) was used to assess anxiety status. Obstetric decision-making was also evaluated. The differences between cities in all of the above factors were compared and the factors that influenced anxiety levels were identified by multivariable analysis.
Main outcome measures
Anxiety status and its influencing factors. Obstetric decision-making.
Results
Differences were observed between cities in some background characteristics and women's attitudes towards COVID-19 in Wuhan were more extreme. More women in Wuhan felt anxious (24.5 versus 10.4%). Factors that influenced anxiety also included household income, subjective symptom and attitudes. Overall, obstetric decisions also revealed city-based differences; these decisions mainly concerned hospital preference, time of prenatal care or delivery, mode of delivery and infant feeding.
Conclusions
The outbreak aggravated prenatal anxiety and the associated factors could be targets for psychological care. In parallel, key obstetric decision-making changed, emphasising the need for pertinent professional advice. Special support is essential for pregnant mothers during epidemics.
Tweetable abstract
The COVID-19 outbreak increased pregnant women's anxiety and affected their decision-making. (Author)

20200820-125*
Saving Lives, Improving Mothers' Care. Rapid Report: Learning from SARS-CoV-2-related and associated maternal deaths in the UK. Knight M, Bunch K, Cairns A, et al on behalf of MBRRACE-UK (2020), Oxford: National Perinatal Epidemiology Unit 20 August 2020, 15 pages
Available from:
https://www.hqip.org.uk/wp-content/uploads/2020/08/Ref.-201-MBRRACE-UK-maternal-COVID-19-Report-FINAL.pd

Rapid report outlining the lessons learned from SARS-CoV-2-related maternal deaths in the UK. Discusses senior obstetric involvement as part of multidisciplinary team care, location of care and transfers to other facilities, increased prevalence of thrombotic disease in women with COVID-19, redeployment of senior obstetric staff, treatment with antivirals such as remdesivir, advice to self-isolate, communication with families, access to mental health care and safeguarding for domestic violence victims. Highlights the need to address the disparity in outcomes for those from black, Asian and ethnic minority groups. (LDO)

20200820-12*
Pregnancy and postpartum outcomes in a universally tested population for SARS-CoV-2 in New York City: a prospective cohort study. Prabhu M, Cagino K, Matthews KC, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 12, November 2020, pp 1548-1556
Available from: https://doi.org/10.1111/1471-0528.16403
Full URL: https://doi.org/10.1111/1471-0528.16403

Objective
To describe differences in outcomes between pregnant women with and without coronavirus dsease 2019 (COVID-19).
Design
Prospective cohort study of pregnant women consecutively admitted for delivery, and universally tested via

nasopharyngeal (NP) swab for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) using reverse transcription-polymerase chain reaction. All infants of mothers with COVID-19 underwent SARS-CoV-2 testing.
Setting
Three New York City hospitals.
Population
Pregnant women >20 weeks of gestation admitted for delivery.
Methods
Data were stratified by SARS-CoV-2 result and symptomatic status, and were summarised using parametric and nonparametric tests.
Main outcome measures
Prevalence and outcomes of maternal COVID-19, obstetric outcomes, neonatal SARS-CoV-2, placental pathology.
Results
Of 675 women admitted for delivery, 10.4% were positive for SARS-CoV-2, of whom 78.6% were asymptomatic. We observed differences in sociodemographics and comorbidities among women with symptomatic COVID-10 versus asymptomatic COVID-19 versus no COVID-19. Caesarean delivery rates were 46.7% in symptomatic COVID-19, 45.5% in asymptomatic COVID-19 and 30.9% in women without COVID-19 (P = 0.044). Postpartum complications (fever, hypoxia, readmission) occurred in 12.9% of women with COVID-19 versus 4.5% of women without COVID-19 (P < 0.001). No woman required mechanical ventilation, and no maternal deaths occurred. Among 71 infants tested, none were positive for SARS-CoV-2. Placental pathology demonstrated increased frequency of fetal vascular malperfusion, indicative of thrombi in fetal vessels, in women with COVID-19 versus women without COVID-19 (48.3% versus 11.3%, P < 0.001).
Conclusion
Among pregnant women with COVID-19 at delivery, we observed increased caesarean delivery rates and increased frequency of maternal complications in the postpartum period. Additionally, intraplacental thrombi may have maternal and fetal implications for COVID-19 remote from delivery.
Tweetable abstract
COVID-19 at delivery: more caesarean deliveries, postpartum complications and intraplacental thrombi. (Author)

20200819-68*
A multidisciplinary telemedicine model for management of coronavirus disease 2019 (COVID-19) in obstetrical patients. Reforma LG, Duffy C, Collier A-Y, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 4, suppl, November 2020, 100180
Available from: https://doi.org/10.1016/j.ajogmf.2020.100180
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100180

Background
The COVID-19 pandemic caused by the SARS-CoV-2 virus has increased the demand for inpatient healthcare resources; however, approximately 80% of patients with COVID-19 have a mild clinical presentation and can be managed at home.
Objective
To describe the feasibility, clinical and process outcomes associated with a multidisciplinary telemedicine surveillance model to triage and manage obstetric patients with known exposures and/or symptoms concerning for COVID-19.
Study Design
We implemented a multidisciplinary telemedicine surveillance model with obstetric physicians and nurses to standardize ambulatory care for obstetric patients with confirmed or suspected COVID-19 based on symptoms or exposures at an urban academic tertiary care center with multiple hospital and community-based affiliated practices. All pregnant or postpartum patients with COVID-19 symptoms, exposures or hospitalization were eligible for inclusion in the program. Patients were assessed via regular nursing phone calls and were managed according to illness

severity. Patient characteristics, clinical and process outcomes were abstracted from the electronic medical record.
Results
A total of 135 patients were enrolled in the multidisciplinary telemedicine model from March 17-April 19, 2020, of whom 130 were pregnant and 5 recently postpartum. The majority (N=116, 86%) were managed solely in the outpatient setting and did not require in-person evaluation; 9 were ultimately admitted after ambulatory or urgent evaluation and 10 patients were followed after hospital discharge. Although only 50% of the patients were tested secondary to limitations in ambulatory testing, 1 in 3 of those was PCR-positive for SARS-CoV-2 (N=22, 16% of entire cohort). Patients were enrolled in the telemedicine model for a median of 7 days (IQR 4-8) and averaged one phone call daily, resulting in 891 nursing calls and 20 physician calls over 1 month.
Conclusion
A multidisciplinary telemedicine surveillance model for outpatient management of obstetric patients with COVID-19 symptoms and/or exposures is feasible and resulted in rates of ambulatory management similar to those seen in non-pregnant patients. A centralized model for telemedicine surveillance of obstetric patients with COVID-19 symptoms may preserve inpatient resources and prevent avoidable staff and patient exposures, particularly in centers with multiple ambulatory practice settings. (Author)

20200819-45*

The Psychological Experience of Obstetric Patients and Health Care Workers after Implementation of Universal SARS-CoV-2 Testing. Bender WR, Srinivas S, Coutifaris P, et al (2020), American Journal of Perinatology vol 37, no 12, October 2020, pp 1271-1279
Available from: https://doi.org/10.1055/s-0040-1715505
Full URL: https://doi.org/10.1055/s-0040-1715505

Objective This study was aimed to describe the hospitalization and early postpartum psychological experience for asymptomatic obstetric patients tested for severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) as part of a universal testing program and report the impact of this program on labor and delivery health care workers' job satisfaction and workplace anxiety.
Study Design This is a cohort study of asymptomatic pregnant women who underwent SARS-CoV-2 testing between April 13, 2020 and April 26, 2020. Semistructured interviews were conducted via telephone at 1 and 2 weeks posthospitalization to assess maternal mental health. Depression screening was conducted using the patient health questionnaire-2 (PHQ-2). An online survey of labor and delivery health care workers assessed job satisfaction and job-related anxiety before and during the novel coronavirus disease 2019 (COVID-19) pandemic, as well as employees' subjective experience with universal testing. Patient and employee responses were analyzed for recurring themes.
Results A total of 318 asymptomatic women underwent SARS-CoV-2 testing during this 2-week period. Six of the eight women (75%) who tested positive reported negative in-hospital experiences secondary to perceived lack of provider and partner support and neonatal separation after birth. Among the 310 women who tested negative, 34.4% of multiparous women reported increased postpartum anxiety compared with their prior deliveries due to concerns about infectious exposure in the hospital and lack of social support. Only 27.6% of women, tested negative, found their test result to be reassuring. Job satisfaction and job-related anxiety among health care workers were negatively affected. Universal testing was viewed favorably by the majority of health care workers despite concerns about delays or alterations in patient care and maternal and neonatal separation.
Conclusion Universal testing for SARS-CoV-2 in obstetric units has mixed effects on maternal mental health but is viewed favorably by labor and delivery employees. Ongoing evaluation of new testing protocols is paramount to balance staff and patient safety with quality and equality of care. (Author)

20200819-4*

What does COVID-19 mean for new mothers in prison?. Delap N (2020), British Journal of Midwifery vol 28, no 8, August 2020, pp 460-461

Naomi Delap, Director of Birth Companions, discusses the charity's work with pregnant women and new mothers in prison. (Author)

20200819-152*

Thrombotic microangiopathy, DIC-syndrome and COVID-19: link with pregnancy prothrombotic state. Makatsariya AD, Slukhanchuk EV, Bitsadze VO, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 6 July 2020, online

Available from: https://doi.org/10.1080/14767058.2020.1786811

Full URL: https://doi.org/10.1080/14767058.2020.1786811

For last months, humanity has faced a formidable unknown enemy, which is presented as a new coronavirus infection. Despite the fact that the causative agents of new diseases appear at a certain frequency and that the virus SARS-CoV-2 has certain common properties with its predecessors, at the moment we are dealing with a new unknown pathogenesis of the development of severe complications in patients with risk factors. A final understanding of pathological process mechanisms is the goal of the scientific community. Summarizing research data from different countries, it became obvious that in severe cases of viral infection, we are dealing with a combination of the systemic inflammatory response syndrome, disseminated intravascular coagulation and thrombotic microangiopathy (TMA). Thrombotic microangiopathy is represented by a group of different conditions in which thrombocytopenia, hemolytic anemia, and multiple organ failure occur. The article reflects the main types of TMA, pathogenesis and principles of therapy. The main participants in the process are described in detail, including the von Willebrand factor and ADAMTS-13. Based on the knowledge available, as well as new data obtained from patients with COVID-19, we proposed possible models for the implementation of conditions such as sepsis, TMA, and DIC in patients with severe new coronavirus infection. Through a deeper understanding of pathogenesis, it will be possible to develop more effective diagnosis and therapy. (Author)

20200819-147*

Pregnancy and COVID-19: a systematic review of maternal, obstetric and neonatal outcomes. Trocado V, Silvestre-Machado J, Azevedo L, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 7 July 2020, online

Available from: https://doi.org/10.1080/14767058.2020.1781809

Full URL: https://doi.org/10.1080/14767058.2020.1781809

Background

There is limited information related to COVID-19 in pregnancy.

Objectives

Evaluate the impact of COVID-19 during pregnancy.

Search strategy: Searches were systematically carried out in PubMed, Scopus database and WHO database.

Selection criteria: Studies with information related to the effects of COVID-19 in pregnancy, concerning maternal, obstetric, and neonatal outcomes were included.

Data collection and analysis: Data were extracted for systematic review following PRISMA guidelines. CARE and STROBE were used to evaluate the quality of data.

Main Results: A total of 8 studies involving 95 pregnant women and 51 neonates were included. Overall, the quality was considered good in four studies, moderate in three and poor in one. Among pregnant women, 26% had a history of epidemiological exposure to SARS-CoV-2. The most common symptoms presented were fever (55%), cough (38%) and fatigue (11%). In 50 deliveries, 94% were cesarean sections and 35% were preterm births. Of the 51 neonates, 20% had low birth weight and 1 tested positive for Sars-CoV-2. There was 1 neonatal death, not related to the viral

infection, and no cases of severe neonatal asphyxia.
Conclusions
The information compiled in this systematic review may help healthcare providers administer the best possible care. (Author)

20200819-144*

Thrombocytopaenia in pregnancy: the importance of differential diagnosis during the COVID-19 pandemic. Zitiello A, Grant GE, Ali NB, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 8 July 2020, online
Since the beginning of the COVID-19 pandemic, an optimal management of vulnerable patients, such as pregnant women, has been regarded as a challenge for healthcare professionals. Although thrombocytopaenia is considered a minor criterion for admission within an intensive care unit, a low platelet count has been observed in COVID-19 patients, including a pregnant woman, who developed severe pulmonary complications. Furthermore, thrombocytopaenia has been proposed as a potential biomarker in order to identify cases at high-risk complications. Nevertheless, thrombocytopaenia is a relatively frequent condition observed in pregnancy. In this context, a differential diagnosis is essential for the correct management of COVID-19 pregnant women. (Author)

20200819-138*

SARS-CoV-2 infection testing at delivery: a clinical and epidemiological priority. Ferrazzi E, Beretta P, Bianchi S, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 13 July 2020, online
Background
Universal testing has been suggested as a useful strategy for a safe exit from the total lockdown, without recurrence of COVID-19 epidemic, delivering women being considered a sentinel population. Further universal testing for pregnant women may be useful in order to define appropriate access to COVID19 areas, dedicated neonatal care, and personal protective equipment.
Methods
During the period 10-26 April, all consecutive women admitted for delivery at the Maternity Hospitals of the city of Milan and in six provinces of Lombardy: Brescia, Como, Lecco Monza, Pavia, and Sondrio. areas were tested with nasopharyngeal swabs.
Results and conclusion: Out of 1566 women, 49 were tested positive for SARS-Cov-2 (3.1%, 95% Confidence Interval (CI) 2.3-4.0). This value is largely higher than Heath Authorities estimate. Of tested positive women, 22 (44.9%) had symptoms or reported close contacts with positive patients, that is were found at risk by the itemized questionnaire. In conclusion, routine estimate of frequency of positivity among delivering women can be consider a useful methods to monitor positivity at least in females in their fertile ages. (Author)

20200819-134*

Considerations on COVID-19 pregnancy: a cases series during outbreak in Bergamo Province, North Italy. Algeri P, Stagnati V, Spazzini MD, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 15 July 2020, online
Background
COVID-19 has rapidly spread worldwide, with severe complications affecting particularly elderly and compromised subjects. Less information about COVID-19 in pregnancy has been reported so far in the literature.
Methods
Case series on pregnancies complicated by COVID-19. All cases were diagnosed at Bolognini Hospital, Seriate, Italy. These cases are presented to clarify the features of COVID-19 occurring in pregnancy.
Results
Four women had symptoms of COVID-19 during pregnancy or immediately after delivery. All cases were confirmed by oropharyngeal swab. All patients presented with fever and low saturation levels at the diagnosis. One case was

transferred after diagnosis to a tertiary referral center and delivered the day after for worsening clinical conditions. In the other three cases, bilateral pneumonia was documented at the admission. Antithrombotic therapy was used in most cases. No cases of the infected neonate was reported. At 2 month follow-up, all patients were alive, three were asymptomatic while one presented neurological complication. One more case was described because suspicious for COVID-19, however, it was not confirmed by oropharyngeal swab.
Conclusions
In pregnant women, the peripheral nervous system could be affected. No case of trans-placental passage was reported. The swab could be helpful in diagnosis. The antithrombotic therapy could play a role in the positive course of COVID-19 also in pregnant women. (Author)

20200819-130*

Maternal mortality and COVID-19. Takemoto MLS, Menezes MO, Andreucci CB, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 16 July 2020, online
Available from: https://doi.org/10.1080/14767058.2020.1786056
Full URL: https://doi.org/10.1080/14767058.2020.1786056

Objective
The aim of this study was to collect and analyze data from different sources to have a general overview of COVID-19-related maternal deaths in Brazil, as well as to compare data with worldwide reports.
Study design
We systematically searched data about COVID-19 maternal deaths from the Brazilian Ministry of Health surveillance system, State Departments of Health epidemiological reports, and media coverage. Data about timing of symptom onset and death (pregnancy or postpartum), gestational age, mode of birth, maternal age, comorbidities and/or risk factors, date of death, and place of death were retrieved when available.
Results
We identified 20 COVID-19-related maternal deaths, age range 20-43 years. Symptoms onset was reported as on pregnancy for 12 cases, postpartum for 3 cases, and during the cesarean section for 1 case (missing data for 4). In 16 cases, death occurred in the postpartum period. At least one comorbidity or risk factor was present in 11 cases (missing data for 4). Asthma was the most common risk factor (5/11). Ten cases occurred in the Northeast region, and nine cases occurred in the Southeast region (5 of them in São Paulo, the first epicenter of COVID-19 in the country).
Conclusions
To the best of our knowledge, this is the largest available series of maternal deaths due to COVID-19. Barriers to access healthcare, differences in pandemic containment measures in the country and high prevalence of concomitant risk factors for COVID-19 severe disease may play a role in the observed disparity compared to worldwide reports on maternal outcomes. (Author)

20200819-113*

ADRS due to COVID-19 in midterm pregnancy: successful management with plasma transfusion and corticosteroids. Soleimani Z, Soleimani A (2020), The Journal of Maternal-Fetal and Neonatal Medicine 26 July 2020, online
Background
Management of acute respiratory distress syndrome (ARDS) in pregnant women infected with new severe acute respiratory syndrome Corona virus 2 (SARS-CoV2) is a challenging clinical task.
Case
A 30- year-old woman (gravid 3, parity 2) presented at her 21 and 2/7 weeks gestation (pre pregnancy BMI: 36.1 kg/m2), with ARDS caused by SARS-CoV2 infection. She received lopinavir/ritonavir and azithromycin as well as early methyl prednisolone therapy. Given the persistent hypoxemia despite oxygen therapy via non rebreather face mask

(FiO2:80%), convalescent plasma transfusion was administered that led to a mild clinical improvement as well as decrease in inflammatory markers. Growth of her fetus assessed by obstetric sonography was normal during hospital stay.
Conclusion
Judicious corticosteroid therapy along with convalescent plasma transfusion to suppress viremia and cytokine storm can lead to favorable outcome in the pregnant women with ARDS caused by SARS-CoV2 infection without superimposed bacterial infection. (Author)

20200819-109*
Outcomes of universal SARS-CoV-2 testing program in pregnant women admitted to hospital and the adjuvant role of lung ultrasound in screening: a prospective cohort study. Yassa M, Yirmibes C, Cavusoglu G, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine vol 33, no 22, 2020, pp 3820-3826
Available from: https://doi.org/10.1080/14767058.2020.1798398
Full URL: https://doi.org/10.1080/14767058.2020.1798398

Background
The emerging evidence for the asymptomatic carriers of SARS-CoV-2 infection emphasized the critical need for universal screening of pregnant women.
Objectives
This study aimed to present the prevalence of overall and asymptomatic SARS-CoV-2 infection rates in pregnant women admitted to the hospital, and assess the diagnostic accuracy of maternal symptoms and lung ultrasound (LUS) findings in detecting the infection.
Patients and methods
This prospective cohort study was conducted at a single tertiary center in Istanbul, Turkey, for a month period starting from 27 April 2020. Women with a confirmed pregnancy regardless of the gestational week admitted to the obstetric unit with any indication were consecutively underwent LUS and PCR testing for SARS-CoV-2.
Results
A total of 296 patients were included for the final analysis. The universal screening strategy diagnosed 23 pregnant women (7.77%) with SARS-CoV-2 infection. The rate of symptomatic and asymptomatic patients diagnosed with SARS-CoV-2 was found as 3.72% (n = 11) and 4.05% (n = 12), respectively. Four of nine women who underwent a second testing for SARS-CoV-2 upon abnormal LUS findings were found positive eventually (17.4%, n = 4/23). The asymptomatic pregnant women with LUS score of 1 and those with normal LUS findings were considered as likely to be normal. Symptomatic patients with LUS score of 1 and those with score of 2 or 3 were considered as abnormal. On a secondary diagnostic performance analysis, the positive predictive value and the sensitivity were found as 44% and 47.8% for the triage based on maternal symptoms and, 82.3% and 60.9% for the triage based on LUS, respectively.
Conclusion
A one-month trial period of universal testing for SARS-CoV-2 infection with RT-PCR in pregnant women who admitted to the hospital showed an overall and asymptomatic infection diagnose rate of 7.77% and 4%, respectively. Using lung ultrasound was found more predictive in detecting the infection than the use of symptomatology solely. (Author)

20200819-108*

SARS-CoV-2 in pregnancy: characteristics and outcomes of hospitalized and non-hospitalized women due to COVID-19. Barbero P, Mugüerza L, Herraiz I, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine 20 July 2020, online

Available from: https://doi.org/10.1080/14767058.2020.1793320
Full URL: https://doi.org/10.1080/14767058.2020.1793320

Background

There is little evidence about how novel coronavirus (SARS-CoV-2) affects pregnant women and their newborns. Comparisons with other members of the coronavirus family responsible for severe acute respiratory syndrome (SARS) have been done to predict maternal and neonatal outcomes; however, more information is required to establish clinical patterns, disease evolution and pregnancy prognosis in this group of patients.

Methods

This paper is reporting a series of 91 women diagnosed with SARS-CoV-2 infection during pregnancy and puerperium. The analysis showed that 40 patients developed pneumonia, bilateral in most cases, with a 46.2% rate of hospitalization and 4 patients requiring intensive care unit (ICU) admission. In confront with previous publications, we have found a higher rate of coronavirus disease (COVID-19) severe forms, even when compared to non-pregnant women with the same baseline characteristics. We have analyzed the demographic characteristics, pregnancy-related conditions and presenting symptoms to identify features that could determine which patients will need hospitalization because of COVID-19 (Group 1-G1) and those who not (Group 2-G2). We have found that obesity and Latin-American origin behave as risk factors: OR: 4.3; 95% CI: 1.4-13.2, and OR: 2.6; 95% CI: 1.1 − 6.2, respectively. Among the 23 patients that delivered with active SARS-CoV-2, the overall rate of cesarean section (CS) and preterm birth were 52.2% and 34.8%, respectively, but we observed that the rate of CS was even higher in G1 compared to G2: 81.8% versus 25%, p = .012. However, prematurity was equally distributed in both groups and only one preterm delivery was determined by poor maternal condition. There were no deaths among the patients neither their newborns.

Conclusion

In conclusion, the results of our cohort reveal that SARSC-CoV-2 infection may not behave as mild as suggested during pregnancy, especially when factors as obesity or Latin-American origin are present. No evidence of late vertical transmission was noticed but prematurity and high CS rate were common findings, although it is difficult to establish any causality between these conditions and COVID-19. Further evidence is required to establish if pregnancy itself can lead to severe forms of COVID-19 disease and whether risk factors for the general population are applicable to obstetric patients. Until larger studies are available, pregnant women should be monitored carefully to anticipate severe complications. (Author)

20200818-1*

Coronavirus: 'It's not how I thought maternity leave would be'. Anon (2020), BBC News 18 August 2020

Available from: https://www.bbc.co.uk/news/uk-england-essex-53693086
Full URL: https://www.bbc.co.uk/news/uk-england-essex-53693086

Many new parents are facing mounting debts, childcare issues and mental health problems due to coronavirus, according to campaigners. (Author)

20200817-7*

COVID-19 fears may widen gaps in early pregnancy care. Comeau N (2020), Canadian Medical Association Journal (CMAJ) vol 192, no 30, 27 July 2020, p E870

Available from: https://doi.org/10.1503/cmaj.1095885

Full URL: https://doi.org/10.1503/cmaj.1095885

Reports on the effects of the COVID-19 pandemic on women's access to obstetric care, particularly in the early stages of pregnancy. (MB)

20200814-9*

A critical review of the pathophysiology of thrombotic complications and clinical practice recommendations for thromboprophylaxis in pregnant patients with COVID-19. D'Souza R, Malhamé I, Teshler L, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 9, September 2020, pp 1110-1120

Available from: https://doi.org/10.1111/aogs.13962

Full URL: https://doi.org/10.1111/aogs.13962

Those who are infected with Severe Acute Respiratory Syndrome-related CoronaVirus-2 are theoretically at increased risk of venous thromboembolism during self-isolation if they have reduced mobility or are dehydrated. Should patients develop coronavirus disease (COVID-19) pneumonia requiring hospital admission for treatment of hypoxia, the risk for thromboembolic complications increases greatly. These thromboembolic events are the result of at least two distinct mechanisms - microvascular thrombosis in the pulmonary system (immunothrombosis) and hospital-associated venous thromboembolism. Since pregnancy is a prothrombotic state, there is concern regarding the potentially increased risk of thrombotic complications among pregnant women with COVID-19. To date, however, pregnant women do not appear to have a substantially increased risk of thrombotic complications related to COVID-19. Nevertheless, several organizations have vigilantly issued pregnancy-specific guidelines for thromboprophylaxis in COVID-19. Discrepancies between these guidelines reflect the altruistic wish to protect patients and lack of high-quality evidence available to inform clinical practice. Low molecular weight heparin (LMWH) is the drug of choice for thromboprophylaxis in pregnant women with COVID-19. However, its utility in non-pregnant patients is only established against venous thromboembolism, as LMWH may have little or no effect on immunothrombosis. Decisions about initiation and duration of prophylactic anticoagulation in the context of pregnancy and COVID-19 must take into consideration disease severity, outpatient vs inpatient status, temporal relation between disease occurrence and timing of childbirth, and the underlying prothrombotic risk conferred by additional comorbidities. There is currently no evidence to recommend the use of intermediate or therapeutic doses of LMWH in thromboprophylaxis, which may increase bleeding risk without reducing thrombotic risk in pregnant patients with COVID-19. Likewise, there is no evidence to comment on the role of low-dose aspirin in thromboprophylaxis or of anti-cytokine and antiviral agents in preventing immunothrombosis. These unanswered questions are being studied within the context of clinical trials. (Author)

20200814-4*

Community Obstetrical Units Less Likely than Academic Units to Have Universal COVID-19 Testing. Werner EF, Louis JM, Hughes B, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1074-1076

Available from: https://doi.org/10.1055/s-0040-1712454

Full URL: https://doi.org/10.1055/s-0040-1712454

Discusses COVID-19 testing strategies at community obstetrical units and academic units across the United States. Findings show that 29% of academic unit respondents reported universal testing compared with 5% of community hospital respondents. However, universal use of N95 masks at delivery did not differ significantly between academic and community hospitals. (LDO)

20200814-3*

Laboratory Abnormalities in Pregnant Women with Novel Coronavirus Disease 2019. Shi L, Wang Y, Yang H, et al (2020),
American Journal of Perinatology vol 37, no 10, August 2020, pp 1070-1073

Available from: https://doi.org/10.1055/s-0040-1712181
Full URL: https://doi.org/10.1055/s-0040-1712181

Discusses common laboratory abnormalities in pregnant women with COVID-19. Current evidence shows that the most frequent abnormalities are elevated D-dimer, elevated neutrophil count, elevated C-reactive protein and decreased lymphocyte count. (LDO)

20200813-6*

Maternal deaths with coronavirus disease 2019: a different outcome from low- to middle-resource countries?. AmorimMMR, Takemoto MLS, da Fonseca EB (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 298-299
Available from: https://doi.org/10.1016/j.ajog.2020.04.023
Full URL: https://doi.org/10.1016/j.ajog.2020.04.023

Correspondence piece discussing the increased risk of maternal death from COVID-19 in low- and middle-income countries such as Iran, Mexico and Brazil. (LDO)

20200813-5*

Are clinical outcomes worse for pregnant women at ≥20 weeks' gestation infected with coronavirus disease 2019? A multicenter case-control study with propensity score matching. Badr DA, Mattern J, Carlin A, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 5, November 2020, pp 764-768
Available from: https://doi.org/10.1016/j.ajog.2020.07.045
Full URL: https://doi.org/10.1016/j.ajog.2020.07.045

Research letter on clinical outcomes in pregnant women ≥ 20 weeks' gestation and non-pregnant women infected with COVID-19. The primary outcome was admission to the intensive care unit and secondary outcomes included oxygen therapy and endotracheal intubation. Findings suggest that pregnant women ≥ 20 weeks' gestation have more severe outcomes than their non-pregnant counterparts. (LDO)

20200813-3*

Use of Remdesivir for Pregnant Patients with Severe Novel 2019 Coronavirus Disease. Igbinosa I, Miller S, Bianco K, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 5, November 2020, pp 768-770
Available from: https://doi.org/10.1016/j.ajog.2020.08.001
Full URL: https://doi.org/10.1016/j.ajog.2020.08.001

Research letter presenting a case series of pregnant women who were administered with remdesivir for the treatment of COVID-19. All patients who received supplemental oxygen had resolution of this requirement after initiation of remdesivir but a causal relationship cannot be concluded. (LDO)

20200813-2*

Maternal outcome of pregnant women admitted to intensive care units for coronavirus disease 2019. Kim CNH, Hutcheon J, van Schalkwyk J, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 5, November 2020, pp 773-774
Available from: https://doi.org/10.1016/j.ajog.2020.08.002

Full URL: https://doi.org/10.1016/j.ajog.2020.08.002

Research letter on the case fatality rate of pregnant women infected with COVID-19 admitted to intensive care units (ICUs). A systematic review and meta analysis revealed that 11 out of 85 women died within one week of delivery, corresponding to an overall fatality rate of 12.9%. (LDO)

20200813-1*

Unintended consequences of the transition to telehealth for pregnancies complicated by opioid use disorder during the coronavirus disease 2019 pandemic. McKiever ME, Cleary EM, Schmauder T, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 5, November 2020, pp 770-772
Available from: https://doi.org/10.1016/j.ajog.2020.08.003
Full URL: https://doi.org/10.1016/j.ajog.2020.08.003

Research letter on the implementation of telehealth services for a cohort of pregnant women with opioid use disease during the COVID-19 pandemic. Attendance of virtual group therapy sessions was three times lower compared with in-person sessions which may have negative consequences for an already vulnerable population. (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
Available from: https://doi.org/10.1111/aji.13304
Full URL: https://doi.org/10.1111/aji.13304

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)

20200810-28*

Virtual consultations [Version 2]. Royal College of Midwives (2020), London: RCM 24 July 2020. 5 pages
Available from:
https://www.rcm.org.uk/media/4192/virtual-consultations-v20-24-july-2020-review-24-august-2020-1.pdf
Full URL:
https://www.rcm.org.uk/media/4192/virtual-consultations-v20-24-july-2020-review-24-august-2020-1.pdf

Gives guidance on the appropriate application for virtual consultations and practical tips for effective use.
N.B.: this guidance should be read in conjunction with the RCM guidance on Antenatal and Postnatal care during COVID-19
https://www.rcm.org.uk/media/4132/2020-06-18-guidance-for-antenatal-and-postnatal-services-in-theevolving-coro

navirus-covid-19-pandemic.pdf
A 'virtual' consultation in this guidance refers to one that is undertaken over the telephone or via video as opposed to the traditional consultation format in person, normally referred to as 'face to face'. (Author, edited)

20200806-21*
Fetal alcohol spectrum disorders: preventing collateral damage from COVID-19. Sher J (2020), The Lancet Public Health Vol 5, no 1, August 2020, E424
Available from: https://doi.org/10.1016/S2468-2667(20)30159-6
Full URL: https://doi.org/10.1016/S2468-2667(20)30159-6
Expresses concern that increased alcohol consumption in pregnancy during the current coronavirus pandemic could result in a spike in cases of fetal alcohol spectrum disorders. (JSM)

20200805-61*
Babies in Lockdown: listening to parents to build back better. Executive summary. Best Beginnings, Home-Start UK, Parent-Infant Foundation (2020), London: Best Beginnings, Home-Start UK, Parent-Infant Foundation August 2020. 20 pages
Available from:
https://babiesinlockdown.files.wordpress.com/2020/08/babies_in_lockdown_executive_summary.pdf
Full URL: https://babiesinlockdown.files.wordpress.com/2020/08/babies_in_lockdown_executive_summary.pdf
Summarises the findings of a joint research report from charities Best Beginnings, Home Start UK and the Parent-Infant Foundation, drawing on the experiences of expectant and new parents, looking at the effect lockdown during the COVID-19 pandemic has had on the first months and years of their babies' development. (JSM)

20200805-46*
Babies in Lockdown: listening to parents to build back better. Best Beginnings, Home-Start UK, Parent-Infant Foundation (2020), London: Best Beginnings, Home-Start UK, and the Parent-Infant Foundation August 2020. 92 pages
Available from:
https://babiesinlockdown.files.wordpress.com/2020/08/babies-in-lockdown-main-report-final-version.pdf
Full URL:
https://babiesinlockdown.files.wordpress.com/2020/08/babies-in-lockdown-main-report-final-version.pdf

Joint research report from charities Best Beginnings, Home Start UK and the Parent-Infant Foundation, drawing on the experiences of expectant and new parents, looking at the effect lockdown during the COVID-19 pandemic has had on the first months and years of their babies' development. Reveals a great deal of variation in parents experiences, with some welcoming the extra time to spend with their families, while others, already at greater risk of poorer outcomes, such as those on lower incomes or from Black, Asian and Minority Ethnic backgrounds (BAME) have been hardest hit during the crisis. Includes the experiences of those working on the frontline while pregnant. (JSM)

20200804-67*
Universal screening for SARS-CoV-2 in asymptomatic obstetric patients in Tokyo, Japan. Ochiai D, Kasuga Y, Iida M, et al (2020), International Journal of Gynecology & Obstetrics 4 June 2020, online
The prevalence of COVID-19 in asymptomatic obstetric patients in Tokyo was shown to be 4% when universal screening was implemented. Physicians should pay attention to asymptomatic patients to prevent nosocomial infections. (Author)

20200804-66*

Severe COVID-19 in a pregnant patient admitted to hospital in Wuhan. Yu Y, Fan C, Bian J, et al (2020), International Journal of Gynecology & Obstetrics 19 May 2020, online

Available from: https://doi.org/10.1002/ijgo.13232

Full URL: https://doi.org/10.1002/ijgo.13232

A case report describing severe COVID-19 and treatment strategy in a pregnant patient who delivered vaginally at 34 weeks. (Author)

20200804-65*

Safe abortion amid the COVID-19 pandemic: The case of Italy. Bellizzi S, Ronzoni AR, Pichierri G, et al (2020), International Journal of Gynecology & Obstetrics 21 May 2020, online

Available from: https://doi.org/10.1002/ijgo.13233

Improvement of women's access to abortion care in Italy during the COVID-19 pandemic is critical. (Author)

20200804-58*

Perceptions of obstetricians and pediatricians about the risk of COVID-19 for pregnant women and newborns. Obeidat N, Saadeh R, Obeidat M, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 3, September 2020, pp 306-311

Available from: https://doi.org/10.1002/ijgo.13264

Full URL: https://doi.org/10.1002/ijgo.13264

Objective

To assess the perception of obstetricians and pediatricians about risks of COVID-19 on pregnant women and possible complications in newborns.

Methods

A structured 27-item online survey was sent via social media messaging to obstetricians and pediatricians from public, academic, and private sectors in Jordan between March 23-30, 2020. Descriptive statistics were used to represent numbers and percentages of participants' responses to survey items.

Results

A total of 147 physicians participated (107 obstetricians, 40 pediatricians). Participants were well informed about the symptoms, diagnosis, modes of transmission, and methods of prevention. Participants had variable perceptions about COVID-19 risk during pregnancy, including potential vertical transmission, preferred route of delivery, and safety of breastfeeding. Most participants felt that pregnant women should be prioritized for testing and medical care provision.

Conclusion

While evidence-based strategies to reduce the risks of COVID-19 in pregnant women and newborns are evolving, healthcare providers showed excellent knowledge of the infection and were vigilant regarding its complications for mothers and newborns. To ensure safe pregnancy, physicians must keep informed of developing guidance on best and safest prenatal and perinatal health services. Implementing local hospital policies and adequate training in infection control measures is strongly encouraged. (Author)

20200804-41*

Clinical characteristics and laboratory results of pregnant women with COVID-19 in Wuhan, China. Wang Z, Xiong G (2020), International Journal of Gynecology & Obstetrics vol 150, no 3, September 2020, pp 312-317

Available from: https://doi.org/10.1002/ijgo.13265

Full URL: https://doi.org/10.1002/ijgo.13265

Objective
To evaluate the clinical characteristics and laboratory test results in pregnant women with coronavirus disease 2019 (COVID-19).
Methods
A retrospective study to review and compare clinical data including electronic medical records and laboratory tests from pregnant and nonpregnant patients admitted the Central Hospital of Wuhan, China from December 8, 2019 to April 1, 2020.
Results
A total of 72 women (30 pregnant and 42 nonpregnant) with COVID-19 were included. No patients developed severe pneumonia during the study. Compared with the nonpregnant group, pregnant patients were admitted to hospital earlier (0.25 vs 11.00 days; P <0.001), presented milder symptoms, had a higher rate of asymptomatic infection (26.7% vs 0%), and shorter length of hospital stay (14.5 vs 17.0 days; P <0.01). Laboratory test results showed that levels of inflammation markers such as white blood cell count, neutrophil count and percentage, C-reactive protein, procalcitonin, and D-dimer were significantly higher in pregnant women, whereas mean lymphocyte percentage was significantly lower compared with nonpregnant women.
Conclusion
In some respects, the clinical characteristics and laboratory test results of COVID-19 in pregnant patients seems to be distinctive from their nonpregnant counterparts. Appropriate advice and positive treatment might be critical to the prognosis when dealing with these pregnant patients. Pregnant patients with COVID-19 had their own positive clinical characteristics and special laboratory test results. Responsive medical advice and active treatment for those patients are critical to recovery. (Author)

20200804-38*
System 'failing' black and Asian women, warns midwifery union. Mitchell G (2020), Nursing Times 9 June 2020
More than half of pregnant women admitted to hospital in the UK with Covid-19 are from an ethnic minority background, a new study has found (1), stirring concern among midwifery leaders.
1. Knight M et al. Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study. BMJ, vol 369, no 8251, 27 June 2020, m2107. https://doi.org/10.1136/bmj.m2107. (Author, edited)

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
Available from: https://doi.org/10.1002/ijgo.13278
Full URL: https://doi.org/10.1002/ijgo.13278
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

Available from: https://doi.org/10.1080/01459740.2020.1761804

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)

20200804-19*

Mental health status of pregnant and breastfeeding women during the COVID-19 pandemic: A call for action. Ceulemans M, Hompes T, Foulon V (2020), International Journal of Gynecology & Obstetrics vol 151, no 1, October 2020, pp 146-147

Available from: https://doi.org/10.1002/ijgo.13295

Full URL: https://doi.org/10.1002/ijgo.13295

Increased prevalence of depressive symptoms and anxiety among pregnant women and women in the early postpartum period was observed during the lockdown in Belgium. Obstetricians must take actions to safeguard perinatal mental health. (Author)

20200804-17*

Coronavirus disease 2019: Knowledge, attitude, and practice of pregnant women in a tertiary hospital in Abakaliki, southeast Nigeria. Anikwe CC, Ogah CO, Anikwe IH, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 2, November 2020, pp 197-202

Available from: https://doi.org/10.1002/ijgo.13293

Full URL: https://doi.org/10.1002/ijgo.13293

Objective

To determine the knowledge, attitude, and practice of antenatal attendees towards COVID-19 in Alex Ekwueme Federal University Teaching Hospital, Abakaliki, Nigeria.

Methods

A cross-sectional survey was carried out among 430 consenting pregnant women attending antenatal clinics between March 1 and May 30, 2020, using pretested questionnaires.

Results

The mean age and mean gestational age of the respondents were 30.04 years (95% confidence interval [CI] 28.9-31.1) and 26.3 weeks (95% CI 23.3-29.3), respectively. More than four-fifths (82%) of the women believed that COVID-19 is real and their main source of information was mass media. The majority had adequate knowledge of COVID-19. More than half of the respondents said COVID-19 is a curable disease and that chloroquine can be used. The majority showed a good attitude and preventice practice of COVID-19 disease; however, one-fourth (24%) thought that infected individuals should be killed to prevent the spread of the virus.

Conclusion

The study population has good knowledge, attitude, and practice of COVID-19 disease. However, it is worrisome that some respondents thought that infected individuals should be killed. Proper education must be given to the populace to avert these negative attitudes while promoting a positive preventive attitude.

The study population has adequate knowledge, good attitude, and preventive practice of COVID-19; however,

community education is needed to reduce anxiety among the populace. (Author)

20200804-15*

The tragedy of COVID-19 in Brazil: 124 maternal deaths and counting. Takemoto MLS, Menezes MO, Andreucci CB, et al (2020), International Journal of Gynecology & Obstetrics vol 151, no 1, October 2020, pp 154-156
Available from: https://doi.org/10.1002/ijgo.13300
Full URL: https://doi.org/10.1002/ijgo.13300

At the time of writing 124 pregnant or postpartum women in Brazil have died due to COVID-19 (representing a mortality rate of 12.7%), a figure that currently surpasses the total number of COVID-19-related maternal deaths reported throughout the rest of the world. (Author)

20200803-5*

Associations Between Built Environment, Neighborhood Socioeconomic Status, and SARS-CoV-2 Infection Among Pregnant Women in New York City. Emeruwa UN, Ona S, Shaman JL, et al (2020), JAMA (Journal of the American Medical Association) vol 324, no 4, 28 July 2020, pp 390-392
Available from: https://doi.org/10.1001/jama.2020.11370
Full URL: https://doi.org/10.1001/jama.2020.11370

Research report exploring the relationships between the built environment, neighbourhood socioeconomic status and SARS-CoV-2 transmission among pregnant women in New York City. Infection rates were higher among women residing in neighbourhoods with high unemployment rates, large household membership and greater household overcrowding. (LDO)

20200803-2*

Caring for Women Who Are Planning a Pregnancy, Pregnant, or Postpartum During the COVID-19 Pandemic. Rasmussen SA, Jamieson DJ (2020), JAMA (Journal of the American Medical Association) vol 324, no 2, 14 July 2020, pp 190-191
Available from: https://doi.org/10.1001/jama.2020.8883
Full URL: https://doi.org/10.1001/jama.2020.8883

Discusses the effects of COVID-19 on pregnancy and the risk of intrauterine transmission to the neonate. Provides an overview of guidelines from the Centers for Disease Control and Prevention (CDC) and other organisations, including the use of early epidural analgesia, adequate hygiene and face masks when breastfeeding, and the temporary separation of mothers and newborns. (LDO)

20200731-8*

Domestic abuse [Version 1]. Royal College of Midwives (2020), London: RCM 13 May 2020. 3 pages
Available from:
https://www.rcm.org.uk/media/4067/identifying-caring-for-and-supporting-women-at-risk-of_victims-of-domestic-abuse-during-covid-19-v1__13052020final.pdf

Briefing paper from the Royal College of Midwives (RCM) on identifying, caring for and supporting women who are victims of or are at risk of domestic violence during the current COVID-19 pandemic. (JSM)

20200731-7*

Phone triage assessment: pregnant women with suspected/confirmed COVID-19 [Version 2]. Royal College of Midwives (2020), London: RCM 13 May 2020. 1 page

Available from: https://www.rcm.org.uk/media/4092/phone-triage-during-pandemic-bame-may-v2_130520.pdf

Full URL: https://www.rcm.org.uk/media/4092/phone-triage-during-pandemic-bame-may-v2_130520.pdf

Flow chart illustrating the recommended clinical practice for telephone triage of pregnant women with suspected or confirmed COVID-19. (JSM)

20200729-6*

Covid-19 in Nigeria. Okonkwo CMN (2020), Midwifery Today no 134, Summer 2020

Provides an overview of the impact of COVID-19 on maternity services, employment, food supply and travel in Nigeria. (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)

20200728-23*

RCM Clinical Briefing Sheet: 'freebirth' or 'unassisted childbirth' during the COVID-19 pandemic. The Royal College of Midwives (2020), London: RCM 30 April 2020. 5 pages

Available from: https://www.rcm.org.uk/media/3923/freebirth_draft_30-april-v2.pdf

Full URL: https://www.rcm.org.uk/media/3923/freebirth_draft_30-april-v2.pdf

Guidance for midwifery services on 'freebirth', 'unassisted childbirth' or 'unattended childbirth' during the COVID-19 pandemic. The term 'unassisted childbirth' is used throughout the document. (Author, edited)

20200728-21*

Optimising maternity services and maternal and newborn outcomes in a pandemic. A rapid analytic scoping review. Conducted for the Royal College of Midwives by the RCM Professional Advisory Group [Version 4]. Renfrew MJ, Cheyne H, Hunter B, et al (2020), London: RCM 8 April 2020. 21 pages

Available from:
https://www.rcm.org.uk/media/3869/rapid-review-optimising-maternity-services-for-rcm-v4-8-april.pdf

Full URL: https://www.rcm.org.uk/media/3869/rapid-review-optimising-maternity-services-for-rcm-v4-8-april.pdf

Childbearing women and newborn infants continue to require care during the current COVID-19 pandemic. When staff and services are under extreme stress there is a real risk of increasing avoidable harm, including an increased risk of infection and reductions in the overall quality of care. Safety, quality, and avoiding harm must be key priorities in decision-making.

Review questions

Three related review questions were addressed. All considered safety, quality and minimising avoidable harm in the provision of midwifery services:

1. What is the evidence on the impact of community care vs centralisation of care during pandemics, for childbearing women, newborn infants, families, staff, and resources?

2. How to optimise availability of midwifery expertise when staffing becomes heavily affected by the midwifery workforce being off sick, self-isolating, fear of pandemic or other major unavoidable events?

3. What is the evidence on viral load of SARS-COV-2 in domestic settings and hospitals, relevant to informing the safety of community and hospital settings for health professionals? (Author)

20200728-18*

Initiatives for Pregnant and Birthing Women in India during Covid-19 Pandemic. Chhugani M (2020), Midwifery Today no 134, Summer 2020

Discusses the COVID-19 outbreak in India and the growth in cases from 100 on 15 March 2020 to 17,657 on 20 April 2020. (LDO)

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)

20200727-9*

Histological characterization of placenta in COVID19 pregnant women. Cribiù FM, Croci GA, Del Gobbo A, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 619-621
Available from: https://doi.org/10.1016/j.ejogrb.2020.06.041
Full URL: https://doi.org/10.1016/j.ejogrb.2020.06.041

Correspondence piece discussing histological alterations in placentas from pregnant women with SARS-CoV-2 infection. Distal villous hypoplasia was detectable in 22% of cases, delayed villous maturation was shown in 55% of cases and no significant T- and B-cell infiltrate was observed in any of the cases. (LDO)

20200727-8*

Proteinuria in Covid-19 pregnant women: Preeclampsia or severe infection?. Dap M, Morel O (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, p 612
Available from: https://doi.org/10.1016/j.ejogrb.2020.07.005
Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.005

Case report of a 26-year-old pregnant woman with COVID-19 who was wrongly diagnosed with pre-eclampsia due to proteinuria. (LDO)

20200727-7*

Late miscarriage as a presenting manifestation of COVID-19. Hachem R, Markou GA, Veluppillai C, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, p 614

Available from: https://doi.org/10.1016/j.ejogrb.2020.07.024

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.024

Case report of a 21-year-old healthcare worker who presented with uterine contractions at 20 weeks' gestation and tested positive for SARS-CoV-2. The patient then experienced abrupt rupture of membranes and the fetus died immediately after birth. This is the first report of a second trimester miscarriage as an inaugural manifestation of COVID-19. (LDO)

20200727-53*

Is pregnancy a risk factor of COVID-19?. Phoswa WN, Khaliq OP (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 605-609

Available from: https://doi.org/10.1016/j.ejogrb.2020.06.058

Full URL: https://doi.org/10.1016/j.ejogrb.2020.06.058

This review evaluates whether pregnancy is a risk factor for COVID-19 by looking at the expression of immune markers such as immune cells and cytokines in order to have a better understanding on the pathophysiology of the disease, thus reducing maternal deaths. Pregnant women are more at risk of contracting COVID-19 due to their weakened immune system. Studies demonstrate that COVID-19 is an immune condition which is marked by reduced lymphocytes and elevated selected proinflammatory cytokines. Similar immune expression has been demonstrated in pregnancy by several studies. In addition, the placenta has been shown to possess ACE2 receptors on the villous cytotrophoblast and the syncytiotrophoblast and findings suggest that the coronavirus enters the host cells via these ACE2 receptors. The immune response in pregnancy increases the risk of contracting COVID-19. Both normal pregnancy and COVID-19 are marked by decreased lymphocytes, NKG2A inhibitory receptors, and increased ACE2, IL-8, IL-10, and IP-10 it therefore safer to conclude that pregnancy is a risk factor for COVID-19 development. Furthermore, the presence of the ACE2 receptors in the placenta may increase the risk of mother to baby transmission of the virus. Therefore, more studies investigating the link between pregnancy and COVID-19 are needed. (Author)

20200727-49*

Ethical considerations relevant to infections in pregnancy: Application to Sars-Covid-19. Habiba M, Akkad A (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 563-567

Available from: https://doi.org/10.1016/j.ejogrb.2020.07.013

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.013

Despite wide diversity and scope, the ethical dimensions relevant to infections in pregnancy remain little explored. Important questions span topics with personal or wider societal and public health impact. The conceptualization of the status and responsibilities of the pregnant woman and the legitimate limits of third-party interests are key determinants of our appreciation of applicable ethical obligations. (Author)

20200727-47*

Maternal COVID-19 infection, clinical characteristics, pregnancy, and neonatal outcome A prospective cohort study. Antoun L, Taweel NE, Ahmed I, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 559-562

Available from: https://doi.org/10.1016/j.ejogrb.2020.07.008

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.008

Objective
To study the effect of COVID-19 on pregnancy and neonatal outcomes.
Study design
Prospective cohort study in a large tertiary maternity unit within a university hospital with an average annual birth of over 10,000 births. We prospectively collected and analysed data for a cohort of 23 pregnant patients including singleton and multiple pregnancies tested positive for COVID-19 between February 2020 and April 2020 inclusive to assess the effect of COVID-19 on pregnancy, and neonatal outcomes.
Results
Twenty-three pregnant patients tested positive for COVID-19, delivering 20 babies including a set of twins, with four ongoing pregnancies at the time of manuscript submission. 16/23 (70%) whom tested positive were patients from Asian (Indian sub-continent) background. The severity of the symptoms ranged from mild in 13/23 (65.2%) of the patients, moderate in 2/23 (8.7%), and severe in 8/23 (34.8%). Four out of total 23 COVID-19 pregnant patients (17.4%) developed severe adult respiratory distress syndrome complications requiring ICU support, one of whom led to maternal death 1/23 (4.3%). 11/23 (48%) of the patients had pre-existing co-morbidities, with morbid obesity 5/23 (21.7%) and diabetes 4/23 (17.4%) being the more commonly represented. Of the 23 pregnant patients 19 were in their third trimester of pregnancy and delivered; 7/19 (36.8%) had preterm birth, 3/19 (15.8%) developed adult respiratory distress syndrome before delivery, and 2/19 (10.5%) had pre-eclampsia. 16/19 (84%) of patients delivered by C-section. Out of the 20 new-borns, 18 were singletons with a set of twin.
Conclusion
COVID-19 is associated with high prevalence of preterm birth, preeclampsia, and caesarean section compared to non-COVID pregnancies. COVID-19 infection was not found in the newborns and none developed severe neonatal complications. (Author)

20200727-46*

COVID-19 in pregnant women: A systematic review and meta-analysis. Capobianco G, Saderi L, Aliberti S, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 543-558
Available from: https://doi.org/10.1016/j.ejogrb.2020.07.006
Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.006

Objective
Coronavirus disease 2019 (COVID-19) is a novel infectious disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Several reports highlighted the risk of infection and disease in pregnant women and neonates. To assess the risk of clinical complications in pregnant women and neonates infected with SARS-CoV-2 carrying out a systematic review and meta-analysis of observational studies.
Data sources
Search of the scientific evidence was performed using the engines PubMed and Scopus, including articles published from December 2019 to 15 April 2020.
Study eligibility criteria
Only observational studies focused on the assessment of clinical outcomes associated with pregnancy in COVID-19 women were selected.
Study appraisal and synthesis methods
The first screening was based on the assessment of titles and abstracts, followed by the evaluation of full-texts. Qualitative variables were summarized with frequencies, whereas quantitative variables with central and variability indicators depending on their parametric distribution. Forest plots were used to describe point estimates and in-between studies variability. Study quality assessment was performed.
Results
Thirteen studies were selected. All of them were carried out in China. The mean (SD) age and gestational age of

pregnant women were 30.3 (1.5) years and 35.9 (2.9) weeks, respectively. The mean (SD) duration from the first symptoms to the hospital admission and to labour were 5.5 (2.0) and 9.5 (8.7) days, respectively. Patients mainly complained of fever and cough (pooled (95 % CI) proportions were 76.0 % (57.0 %-90.0 %) and 38.0 (28.0 %-47.0 %), respectively). Several antibiotics, antivirals, and corticosteroids were prescribed in different combinations. The pooled prevalence of maternal complications and of caesarean section were 45.0 % (95 % CI: 24.0 %-67.0 %) and 88.0 % (95 %CI: 82.0 %-94.0 %). A proportion of pregnant women less than 20 % were admitted to ICU. The pooled proportion of preterm infants was 23.0 % (95 %CI: 11.0 %-39.0 %). The most frequent neonatal complications were pneumonia and respiratory distress syndrome. The pooled percentage of infected neonates was 6.0 % (95 %CI: 2.0 %-12.0 %).
Conclusions
The present study suggests a high rate of maternal and neonatal complications in infected individuals. However, the current scientific evidence highlights a low risk of neonatal infection. Multicentre, cohort studies are needed to better elucidate the role of SARS-CoV-2 during pregnancy. (Author)

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
Available from: https://doi.org/10.1016/j.ejogrb.2020.07.034
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)

20200727-41*

Universal Screening for SARS-CoV-2 in Pregnant Women at Term Admitted to an East London Maternity Unit. Abeysuriya S, Wasif S, Counihan C, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 444-446

Available from: https://doi.org/10.1016/j.ejogrb.2020.07.035

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.035

Objective

To explore the prevalence of asymptomatic SARS-CoV-2 in the maternity population.

Study design

Newham University Hospital based in East London serving a population with the highest death rate secondary to SARS-CoV-2 in the UK, commenced universal screening of all admissions to the Maternity Unit from 22nd April to 5th May, 2020. A proforma was created to capture key patient demographics, indication for admission and presence of SARS-CoV-2 related symptoms at the point of presentation.

Results

A total of 180 women with a mean age of 29.9 (SD 7.4) years, at a median gestation of 39 (IQR 37 + 1to 40 + 3) weeks underwent universal screening with nasopharyngeal PCR swabs during the two-week period of the study. BAME identity or parity was not associated with the likelihood of a positive result. Seven women (3.9%, 1.6 to 7.8) were tested positive for SARS-CoV-2, of whom 6 (3.3%, 1.2 to 7.1) were asymptomatic; 85.7% (42.1 to 99.6) of the SARS-CoV-2 positive women were asymptomatic.

The sensitivity of symptom-driven testing was 14.3% (0.36 to 57.87) and specificity was 91.86% (86.72 to 95.48) with a positive predictive value of 6.67% (1.08 to 31.95) and a negative predictive value of 96.34% (95.10 to 97.28).

Conclusion

The prevalence of SARS-CoV-2 in the maternity population served by Newham University Hospital was 3.9%, four weeks after lockdown. Of the women who were found to be SARS-CoV-2 positive, a high proportion (87.9%) were asymptomatic. These findings support the need for universal testing to enable targeted isolation and robust infectious control measures to mitigate outbreaks of SARS-CoV-2 in maternity units. (Author)

20200727-4*

COVID-19 positive mothers are not more anxious or depressed than non COVID pregnant women during the pandemic: a pilot case-control comparison. Kotabagi P, Nauta M, Fortune L, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 615-616

Available from: https://doi.org/10.1016/j.ejogrb.2020.07.037

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.037

Correspondence piece discussing the mental health of pregnant women during the COVID-19 pandemic. Results show that pregnant women with COVID-19 demonstrate similar rates of anxiety and depression compared to those without the virus. It is crucial that frontline healthcare workers discuss anxiety, depression, stress and sleeping patterns during antenatal and postnatal consultations. (LDO)

20200727-3*

Sars-CoV-2 in pregnancy: Why is it better than expected?. Ghi T, Di Pasquo E, Mekinian A, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 476-478

Available from: https://doi.org/10.1016/j.ejogrb.2020.07.025

Full URL: https://doi.org/10.1016/j.ejogrb.2020.07.025

Short review of the reasons for less severe SARS-CoV-2 infection in pregnant women compared with SARS, MERS and H1N1. Discusses the activation of natural killer cells, T regulatory lymphocytes and the Th2 immune response. (LDO)

20200727-24*

Pre-eclampsia-like syndrome induced by severe COVID-19: a prospective observational study. Mendoza M, Garcia-Ruiz I, Maiz N, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 11, October 2020, pp 1374-1380

Available from: https://doi.org/10.1111/1471-0528.16339

Full URL: https://doi.org/10.1111/1471-0528.16339

Objectives

To investigate the incidence of clinical, ultrasonographic and biochemical findings related to pre-eclampsia (PE) in pregnancies with COVID-19, and to assess their accuracy to differentiate between PE and the PE-like features associated with COVID-19.

Design

A prospective, observational study.

Setting

Tertiary referral hospital.

Participants

Singleton pregnancies with COVID-19 at >20+0 weeks.

Methods

Forty-two consecutive pregnancies were recruited and classified into two groups: severe and non-severe COVID-19, according to the occurrence of severe pneumonia. Uterine artery pulsatility index (UtAPI) and angiogenic factors (soluble fms-like tyrosine kinase-1/placental growth factor [sFlt-1/PlGF]) were assessed in women with suspected PE.

Main outcome measures

Incidence of signs and symptoms related to PE, such as hypertension, proteinuria, thrombocytopenia, elevated liver enzymes, abnormal UtAPI and increased sFlt-1/PlGF.

Results

Thirty-four cases were classified as non-severe and 8 as severe COVID-19. Five (11.9%) women presented signs and symptoms of PE, all five being among the severe COVID-19 cases (62.5%). However, abnormal sFlt-1/PlGF and UtAPI could only be demonstrated in one case. One case remained pregnant after recovery from severe pneumonia and had a spontaneous resolution of the PE-like syndrome.

Conclusions

Pregnant women with severe COVID-19 can develop a PE-like syndrome that might be distinguished from actual PE by sFlt-1/PlGF, LDH and UtAPI assessment. Healthcare providers should be aware of its existence and monitor pregnancies with suspected pre-eclampsia with caution.

Tweetable abstract

This study shows that a pre-eclampsia-like syndrome could be present in some pregnancies with severe COVID-19. (Author)

20200723-72*

Pregnancy and breastfeeding during COVID-19 pandemic: A systematic review of published pregnancy cases. Rodrigues C, Baia I, Domingues R, et al (2020), MedRxiv 5 May 2020

Available from: https://doi.org/10.1101/2020.04.25.20079509

Full URL: https://doi.org/10.1101/2020.04.25.20079509

Background: The COVID-19 pandemic is an emerging concern regarding the potential adverse effects during pregnancy. This study reviews knowledge on the impact of COVID-19 on pregnancy and describes the outcome of published cases of pregnant women diagnosed with COVID-19. Methods: Searches were conducted in PubMed up to 8 April 2020, using PRISMA standards, to identify original published studies describing pregnant women at any gestational age diagnosed COVID-19. There were no date or language restrictions on the search. All identified studies

were included irrespective of assumptions on study quality. Results: We identified 30 original studies reporting 212 cases of pregnant women with COVID-19 (30 discharged while pregnant), 200 from China and 12 from other countries. The 182 published deliveries resulted in one stillbirth and 185 live births. Four women with severe COVID-19 required admission to an intensive care unit but no cases of maternal death were reported. There was one neonatal death. Preterm births occurred in 28.7% of cases, but it is unclear whether this was iatrogenic. All cases with amniotic fluid, placenta, and/or cord blood analyzed for the SARS-CoV-2 virus were negative. Four newborns were positive for SARS-CoV-2 and three newborns had high levels of IgM antibodies. Breast milk samples from 13 mothers and described in seven studies showed no evidence of SARS-CoV-2. Conclusion: The evidence related to the effect of COVID-19 on pregnant women is still limited. Pregnant women and newborns should be considered particularly vulnerable populations regarding COVID-19 prevention and management strategies. (Author)
NB: 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.

20200723-6*

Hospital visiting during the coronavirus outbreak: guidance [Last updated 15 July 2020]. Welsh Government (2020), Cardiff: Welsh Government 22 April 2020
Available from: https://gov.wales/hospital-visiting-during-coronavirus-outbreak-guidance#section-46536
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)

20200723-53*

Laboratory characteristics of pregnant compared to non-pregnant women infected with SARS-CoV-2. Mohr-Sasson A, Chayo J, Bart Y, et al (2020), Archives of Gynecology and Obstetrics vol 302, no 3, September 2020, pp 629-634
Key message
Laboratory characteristics of SARS-CoV-2 infection did not differ between pregnant and non-pregnant women. A trend of lower lymphocyte count was observed in the pregnant women group
Purpose
Laboratory abnormalities, which characterize SARS-CoV-2 infection have been identified, nevertheless, data concerning laboratory characteristics of pregnant women with SARS-CoV-2 are limited. The aim of this study is to evaluate the laboratory characteristics of pregnant compared to non-pregnant women with SARS-CoV-2 infection.
Methods
A retrospective cohort study of all pregnant women with SARS-CoV-2 who were examined at the obstetric emergency room in a tertiary medical center between March and April 2020. Patients were compared with non-pregnant women with SARS-CoV-2 matched by age, who were examined at the general emergency room during the study period. All patients were confirmed for SARS-CoV-2 on admission. Clinical characteristics and laboratory results were compared between the groups.
Results
Study group included 11 pregnant women with SARS-CoV-2, who were compared to 25 non-pregnant controls. Respiratory complaints were the most frequent reason for emergency room visit, and were reported in 54.5% and 80.0% of the pregnant and control groups, respectively (p = 0.12). White blood cells, hemoglobin, platelets, and liver enzymes counts were within the normal range in both groups. Lyphocytopenia was observed in 45.5% and 32% of the pregnant and control groups, respectively (p = 0.44). The relative lymphocyte count to WBC was significantly reduced

in the pregnant group compared to the controls [13.6% (4.5-19.3) vs. 26.5% (15.7-29.9); p = 0.003]. C-reactive protein [20(5-41) vs. 14 (2-52) mg/dL; p = 0.81] levels were elevated in both groups but without significant difference between them.
Conclusion
Laboratory characteristics of SARS-CoV-2 infection did not differ between pregnant and non-pregnant women, although a trend of lower lymphocyte count was observed in the pregnant women group. (Author)

20200722-84*

A snapshot of the Covid-19 pandemic among pregnant women in France. Kayem G, Lecarpentier E, Deruelle P, et al (2020), Journal of Gynecology, Obstetrics and Human Reproduction 4 June 2020, online
Available from: https://doi.org/10.1016/j.jogoh.2020.101826

Objective: To describe the course over time of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in French women from the beginning of the pandemic until mid-April, the risk profile of women with respiratory complications, and short-term pregnancy outcomes.
Methods: We collected a case series of pregnant women with COVID-19 in a research network of 33 French maternity units between March 1 and April 14, 2020. All cases of SARS-CoV-2 infection confirmed by a positive result on real-time reverse transcriptase polymerase chain reaction tests of a nasal sample and/or diagnosed by a computed tomography chest scan were included and analyzed. The primary outcome measures were COVID-19 requiring oxygen (oxygen therapy or noninvasive ventilation) and critical COVID-19 (requiring invasive mechanical ventilation or extracorporeal membrane oxygenation, ECMO). Demographic data, baseline comorbidities, and pregnancy outcomes were also collected.
Results: Active cases of COVID-19 increased exponentially during March 1-31, 2020; the numbers fell during April 1-14, after lockdown was imposed on March 17. The shape of the curve of active critical COVID-19 mirrored that of all active cases. By April 14, among the 617 pregnant women with COVID-19, 93 women (15.1 %; 95 %CI 12.3-18.1) had required oxygen therapy and 35 others (5.7 %; 95 %CI 4.0-7.8) had had a critical form of COVID-19. The severity of the disease was associated with age older than 35 years and obesity, as well as preexisting diabetes, previous preeclampsia, and gestational hypertension or preeclampsia. One woman with critical COVID-19 died (0.2 %; 95 %CI 0-0.9). Among the women who gave birth, rates of preterm birth in women with non-severe, oxygen-requiring, and critical COVID-19 were 13/123 (10.6 %), 14/29 (48.3 %), and 23/29 (79.3 %) before 37 weeks and 3/123 (2.4 %), 4/29 (13.8 %), and 14/29 (48.3 %) before 32 weeks, respectively. One neonate (0.5 %; 95 %CI 0.01-2.9) in the critical group died from prematurity.
Conclusion: COVID-19 can be responsible for significant rates of severe acute, potentially deadly, respiratory distress syndromes. The most vulnerable pregnant women, those with comorbidities, may benefit particularly from prevention measures such as a lockdown. (Author)

20200722-65*

A Proposed Plan for Prenatal Care to Minimize Risks of COVID-19 to Patients and Providers: Focus on Hypertensive Disorders of Pregnancy. Barton JR, Saade G, Sibai BM (2020), American Journal of Perinatology vol 37, no 8, June 2020
Available from: https://doi.10.1055/s-0040-1710538
Full URL: https://doi.10.1055/s-0040-1710538
Hypertensive disorders are the most common medical complications of pregnancy and a major cause of maternal and perinatal morbidity and death. The detection of elevated blood pressure during pregnancy is one of the cardinal aspects of optimal antenatal care. With the outbreak of novel coronavirus disease 2019 (COVID-19) and the risk for person-to-person spread of the virus, there is a desire to minimize unnecessary visits to health care facilities. Women should be classified as low risk or high risk for hypertensive disorders of pregnancy and adjustments can be accordingly made in the frequency of maternal and fetal surveillance. During this pandemic, all pregnant women

should be encouraged to obtain a sphygmomanometer. Patients monitored for hypertension as an outpatient should receive written instructions on the important signs and symptoms of disease progression and provided contact information to report the development of any concern for change in status. As the clinical management of gestational hypertension and preeclampsia is the same, assessment of urinary protein is unnecessary in the management once a diagnosis of a hypertensive disorder of pregnancy is made. Pregnant women with suspected hypertensive disorders of pregnancy and signs and symptoms associated with the severe end of the disease spectrum (e.g., headaches, visual symptoms, epigastric pain, and pulmonary edema) should have an evaluation including complete blood count, serum creatinine level, and liver transaminases (aspartate aminotransferase and alanine aminotransferase). Further, if there is any evidence of disease progression or if acute severe hypertension develops, prompt hospitalization is suggested. Current guidelines from the American College of Obstetricians and Gynecologists (ACOG) and The Society for Maternal-Fetal Medicine (SMFM) for management of preeclampsia with severe features suggest delivery after 34 0/7 weeks of gestation. With the outbreak of COVID-19, however, adjustments to this algorithm should be considered including delivery by 30 0/7 weeks of gestation in the setting of preeclampsia with severe features. (Author)

20200722-64*

Telehealth for High-Risk Pregnancies in the Setting of the COVID-19 Pandemic. Aziz A, Zork N, Aubey JJ, et al (2020), American Journal of Perinatology vol 37, no 8, June 2020
Available from: https://doi.10.1055/s-0040-1712121
Full URL: https://doi.10.1055/s-0040-1712121

As New York City became an international epicenter of the novel coronavirus disease 2019 (COVID-19) pandemic, telehealth was rapidly integrated into prenatal care at Columbia University Irving Medical Center, an academic hospital system in Manhattan. Goals of implementation were to consolidate in-person prenatal screening, surveillance, and examinations into fewer in-person visits while maintaining patient access to ongoing antenatal care and subspecialty consultations via telehealth virtual visits. The rationale for this change was to minimize patient travel and thus risk for COVID-19 exposure. Because a large portion of obstetric patients had underlying medical or fetal conditions placing them at increased risk for adverse outcomes, prenatal care telehealth regimens were tailored for increased surveillance and/or counseling. Based on the incorporation of telehealth into prenatal care for high-risk patients, specific recommendations are made for the following conditions, clinical scenarios, and services: (1) hypertensive disorders of pregnancy including preeclampsia, gestational hypertension, and chronic hypertension; (2) pregestational and gestational diabetes mellitus; (3) maternal cardiovascular disease; (4) maternal neurologic conditions; (5) history of preterm birth and poor obstetrical history including prior stillbirth; (6) fetal conditions such as intrauterine growth restriction, congenital anomalies, and multiple gestations including monochorionic placentation; (7) genetic counseling; (8) mental health services; (9) obstetric anesthesia consultations; and (10) postpartum care. While telehealth virtual visits do not fully replace in-person encounters during prenatal care, they do offer a means of reducing potential patient and provider exposure to COVID-19 while providing consolidated in-person testing and services. (Author)

20200722-49*

Universal SARS-Cov-2 Screening in Women Admitted for Delivery in a Large Managed Care Organization. Fassett MJ, Lurvey LD, Yasumura L, et al (2020), American Journal of Perinatology vol 37, no 11, September 2020, pp 1110-1114
Available from: https://doi.org/10.1055/s-0040-1714060
Full URL: https://doi.org/10.1055/s-0040-1714060

Objective The coronavirus disease 2019 (COVID-19) pandemic has created a need for data regarding the prevalence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in pregnant women. After implementing universal screening for COVID-19 in women admitted for delivery, we sought to describe the characteristics of COVID-19 in this large cohort of women.

Study Design An observational study of women admitted to labor and delivery units in Kaiser Permanente Southern California (KPSC) hospitals between April 6 and May 11, 2020 who were universally offered testing for SARS-CoV-2 infection (n = 3,963). Hospital inpatient and outpatient physician encounter, and laboratory records were used to ascertain universal testing levels, test results, and medical and obstetrical histories. The prevalence of SARS-CoV-2 infection was estimated from the number of women who tested positive during labor per 100 women delivered.
Results Of women delivered during the study period, 3,923 (99.0%) underwent SARS-CoV-2 testing. A total of 17 (0.43%; 95% confidence interval: 0.23-0.63%) women tested positive, and none of them were symptomatic on admission. There was no difference in terms of characteristics between SARS-CoV-2 positive and negative tested women. One woman developed a headache attributed to COVID-19 3 days postpartum. No neonates had a positive test at 24 hours of life.
Conclusion The findings suggest that in pregnant women admitted for delivery between April 6 and May 11, 2020 in this large integrated health care system in Southern California, prevalence of SARS-CoV-2 test positive was very low and all patients were asymptomatic on admission. (Author)

20200722-40*
Gestational diabetes mellitus testing in the COVID-19 pandemic: The problems with simplifying the diagnostic process. van Gemert TE, Moses RG, Pape AV, et al (2020), Australian and New Zealand Journal of Obstetrics and Gynaecology vol 60, no 5, October 2020, pp 671-674
Available from: https://doi.org/10.1111/ajo.13203
Full URL: https://doi.org/10.1111/ajo.13203

Background
Multiple professional bodies have temporarily revised recommendations for gestational diabetes mellitus (GDM) testing during the COVID-19 pandemic to reduce person-to-person contact. The current Australian temporary criteria advise that if the fasting glucose is ≤4.6 mmol/L, then no glucose tolerance test (GTT) is required.
Aims
The aim of this study is to examine the extent of underdiagnosis of GDM using a fasting glucose ≤4.6 mmol/L as a cut-off to determine that a GTT is not necessary.
Materials and Methods
De-identified data from pregnant women having a GTT test in the Illawarra area during a six-year period was used to determine the number of women with GDM and the proportion of positive cases that would be missed for different fasting glucose values.
Results
There were 16 522 results identified and GDM was diagnosed in 12.2%. The majority of women were more than 30 years of age (85.2%) and diagnosed at ≥20 weeks gestation (81.1%). Of those diagnosed with GDM, 29% had a fasting glucose of ≤4.6 mmol/L and would have been missed.
Conclusions
Our results show that using a fasting glucose of 4.6 mmol/L or less would miss nearly a third of women who would otherwise be diagnosed with GDM. (Author)

20200722-39*
Detection of COVID-19 in a Vulvar Lesion. Rubin ES, Sansone SA, Hirshberg A, et al (2020), American Journal of Perinatology vol 37, no 11, September 2020, pp 1183-1184
Available from: https://doi.org/10.1055/s-0040-1713665
Full URL: https://doi.org/10.1055/s-0040-1713665
As new information about coronavirus disease 2019 (COVID-19) is rapidly discovered, clinicians are better equipped to make informed decisions for their patients. While current research suggests COVID-19 viral antigen is not found in

vaginal secretions, its detectability in the female lower genital tract may have clinical implications for obstetric and gynecologic care for women. We present a case of a woman at 31 weeks' gestation with simultaneous upper respiratory symptoms and vulvovaginitis. She was found to have a vulvar lesion positive for severe acute respiratory syndrome-COVID by viral swab. This case shows that COVID-19 is detectable in the vulva. This may have implications for health care workers' exposure and personal protective equipment needs. While vertical transmission has largely not been reported, the presence of detectable virus in the female lower genital tract makes this a continued possibility and area of study. (Author)

20200722-34*

Antenatal Corticosteroids for Pregnant Women at High Risk of Preterm Delivery with COVID-19 Infection: A Decision Analysis. Packer CH, Zhou CG, Hersh AR, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1015-1021

Available from: https://doi.org/10.1055/s-0040-1713145

Full URL: https://doi.org/10.1055/s-0040-1713145

Objective Antenatal corticosteroids given prior to preterm deliveries reduce the risk of adverse neonatal outcomes. However, steroid administration in the setting of a viral respiratory infection can worsen maternal outcomes. Therefore, the decision to administer corticosteroids must balance the neonatal benefits with the potential harm to the mother if she is infected with the novel coronavirus disease 2019 (COVID-19). This study aimed to determine the gestational ages for which administering antenatal corticosteroids to women at high risk of preterm labor with concurrent COVID-19 infection results in improved combined maternal and infant outcomes.
Study Design A decision-analytic model using TreeAge (2020) software was constructed for a theoretical cohort of hospitalized women with COVID-19 in the United States. All model inputs were derived from the literature. Outcomes included maternal intensive care unit (ICU) admission and death, along with infant outcomes of death, respiratory distress syndrome, intraventricular hemorrhage, and neurodevelopmental delay. Quality-adjusted life years (QALYs) were assessed from the maternal and infant perspectives. Sensitivity analyses were performed to determine if the results were robust over a range of assumptions.
Results In our theoretical cohort of 10,000 women delivering between 24 and 33 weeks of gestation with COVID-19, corticosteroid administration resulted in 2,200 women admitted to the ICU and 110 maternal deaths. No antenatal corticosteroid use resulted in 1,500 ICU admissions and 75 maternal deaths. Overall, we found that corticosteroid administration resulted in higher combined QALYs up to 31 weeks of gestation in all hospitalized patients, and up to 29 weeks of gestation in ICU patients.
Conclusion Administration of antenatal corticosteroids at less than 32 weeks of gestation for hospitalized patients and less than 30 weeks of gestation for patients admitted to the ICU resulted in higher combined maternal and infant outcomes compared with expectant management for women at high risk of preterm birth with COVID-19 infection. These results can guide clinicians in their counseling and management of these pregnant women. (Author)

20200722-26*

You Don't Have to Be Infected to Suffer: COVID-19 and Racial Disparities in Severe Maternal Morbidity and Mortality. Minkoff H (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1052-1054

Available from: https://doi.org/10.1055/s-0040-1713852

Full URL: https://doi.org/10.1055/s-0040-1713852

Both coronavirus disease 2019 (COVID-19) and maternal mortality disproportionately affect minorities. However, direct viral infection is not the only way that the former can affect the latter. Most adverse maternal events that end in hospitals have their genesis upstream in communities. Hospitals often represent a last opportunity to reverse a process that begins at a remove in space and time. The COVID-19 pandemic did not create these upstream injuries, but it has brought them to national attention, exacerbated them, and highlighted the need for health care providers to move out of the footprint of their institutions. The breach between community events that seed morbidity and

hospitals that attempt rescues has grown in recent years, as the gap between rich and poor has grown and as maternity services in minority communities have closed. COVID-19 has become yet another barrier. For example, professional organizations have recommended a reduced number of prenatal visits, and the platforms hospitals use to substitute for some of these visits are not helpful to people who either lack the technology or the safe space in which to have confidential conversations with providers. Despite these challenges, there are opportunities for departments of obstetrics and gynecology. Community-based organizations including legal professionals, health-home coordinators, and advocacy groups, surround almost every hospital, and can be willing partners with interested departments. COVID-19 has made it clearer than ever that it is time to step out of the footprint of our institutions, and to recognize that the need to find upstream opportunities to prevent downstream tragedies. (Author)

20200722-24*

Putting It All Together: Clinical Considerations in the Care of Critically Ill Obstetric Patients with COVID-19. Oxford-Horrey C, Savage M, Prabhu M, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1044-1051
Available from: https://doi.org/10.1055/s-0040-1713121
Full URL: https://doi.org/10.1055/s-0040-1713121

Pregnant patients with severe acute respiratory syndrome coronavirus 2, the virus responsible for the clinical condition newly described in 2019 as coronavirus disease 2019 (COVID-19) and illness severity to warrant intensive care have a complex disease process that must involve multiple disciplines. Guidelines from various clinical societies, along with direction from local health authorities, must be considered when approaching the care of an obstetric patient with known or suspected COVID-19. With a rapidly changing landscape, a simplified and cohesive perspective using guidance from different clinical society recommendations regarding the critically-ill obstetric patient with COVID-19 is needed. In this article, we synthesize various high-level guidelines of clinical relevance in the management of pregnant patients with severe disease or critical illness due to COVID-19. (Author)

20200722-19*

Mechanical Ventilation in Pregnancy Due to COVID-19: A Cohort of Three Cases. Lucarelli E, Behn C, Lashley S, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1066-1069
Available from: https://doi.org/10.1055/s-0040-1713664
Full URL: https://doi.org/10.1055/s-0040-1713664

We describe our experience with three pregnant women with novel coronavirus disease 2019 (COVID-19) who required mechanical ventilation. Recent data suggest a mortality of 88% in nonpregnant patients with COVID-19 who require intubation and mechanical ventilation. The three women we report were intubated and mechanically ventilated during pregnancy due to respiratory failure and pneumonia resulting from COVID-19. After several days of ventilation, all three were successfully weaned off mechanical ventilation and extubated, and are continuing their pregnancies with no demonstrable adverse effects. Our experience suggests that the mortality in pregnant women with COVID-19 requiring mechanical ventilation is not necessarily as high as in nonpregnant patients with COVID-19. (Author)

20200721-51*

When fear becomes reality. West R (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/item/covid-19-rosie-west
Full URL: https://www.aims.org.uk/journal/item/covid-19-rosie-west

Rosie West explains how the withdrawal of the homebirth and MLU services during Covid-19 is affecting her and her family. (Author)

20200721-50*

Preparing for birth in lockdown. Noble L (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/item/covid-19-lorraine-noble
Full URL: https://www.aims.org.uk/journal/item/covid-19-lorraine-noble

Describes the ups and downs experienced by the author as she prepared for the birth of her baby during Covid-19 (Author, edited)

20200721-49*

When unassisted birth may be the safest option. Day L (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/item/covid-19-louise-day
Full URL: https://www.aims.org.uk/journal/item/covid-19-louise-day

The author tells why she is opting for an unassisted birth after midwife-attended home births were suspended during the coronavirus pandemic. (JSM)

20200721-48*

Positive hospital birth during Covid-19. Hubbard L (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/item/covid-19-lois-underwood
Full URL: https://www.aims.org.uk/journal/item/covid-19-lois-underwood

The author shares her positive experience of giving birth to her third baby in hospital, despite having to change her plans to have a water birth at home because of the coronavirus pandemic of 2020.JSM)

20200721-46*

Interim schedule for pregnant women and children during the COVID-19 pandemic. Bogler T, Bogler O (2020), Canadian Family Physician vol 66, no 5, May 2020, pp e155-e161
Available from: https://www.cfp.ca/content/66/5/e155
Full URL: https://www.cfp.ca/content/66/5/e155

Proposes an interim well-child and prenatal visit schedule that providers can use and adapt to their local settings. (MB)

20200721-44*

The importance of home birth during Covid-19. Cobb B (2020), AIMS Journal vol 32, no 2, June 2020
Available from: https://www.aims.org.uk/journal/item/covid-19-briony-cobb
Full URL: https://www.aims.org.uk/journal/item/covid-19-briony-cobb

Briony Cobb describes the reassurance that her trust's commitment to home birth is giving her as she awaits her first baby during the Covid-19 crisis. (Author)

20200721-42*

Covid-19 and the UK's maternity services. Ashworth E (2020), AIMS Journal vol 32, no 2, June 2020,
Available from: https://www.aims.org.uk/journal/item/giving-birth-in-covid-19
Full URL: https://www.aims.org.uk/journal/item/giving-birth-in-covid-19

Emma Ashworth introduces this issue of AIMS, her last as editor, which focuses on the real-life stories of women who are pregnant and giving birth during the coronavirus pandemic. Reflects on how COVID-19 has deprived women of several maternity service options, such as home birth, for reasons of maternal safety, and argues that the disease is more likely to be spread through attendance at hospital than from one or two midwives attending a mother who has

chosen to have her baby at home, and hospital midwives are at greater risk of contracting the illness than those working in the community. (JSM)

20200721-20*

Coronavirus disease 2019 in pregnancy was associated with maternal morbidity and preterm birth. Sentilhes L, De Marcillac F, Jouffrieau C, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 6, December 2020, pp 914.e1-914.e15
Available from: https://doi.org/10.1016/j.ajog.2020.06.022
Full URL: https://doi.org/10.1016/j.ajog.2020.06.022

Background
Despite the mainly reassuring outcomes for pregnant women with COVID-19 infection reported by previous case series with small sample sizes, some recent reports of severe maternal morbidity requiring intubation and of maternal deaths show the need for additional data about the impact of COVID-19 on pregnancy outcomes. This study aimed to report the maternal characteristics and clinical outcomes of pregnant women with COVID-19 disease.
Study design
This retrospective single-center study includes all consecutive pregnant women with confirmed (laboratory-confirmed) or suspected (according to version 7.0 of the Chinese management guideline) COVID-19 infection, regardless of gestational age at diagnosis, admitted to the Strasbourg University Hospital (France) from March 1 to April 3, 2020. Maternal characteristics, laboratory and imaging findings, and maternal and neonatal outcomes were extracted from medical records.
Results
The study includes 54 pregnant women with confirmed (n=38) and suspected (n=16) COVID-19 infection. Of these, 32 had an ongoing pregnancy, one a miscarriage, and 21 live births: 12 vaginal and 9 cesarean deliveries. Among the women who gave birth, preterm deliveries were medically indicated for their COVID-19-related condition for 23.8% (5/21): 14.3% (3/21) before 32 weeks' gestation and 9.5% (2/21) before 28 weeks. Oxygen support was required for 24.1% (13/54), including high flow oxygen (n=2), noninvasive (n=1) and invasive (n=3) mechanical ventilation, and extracorporeal membrane oxygenation (n=1). Of these, three, aged 35 years or older with positive COVID-19 RT-PCR, had respiratory failure requiring indicated delivery before 29 weeks' gestation. All three women were overweight or obese, and two had an additional comorbidity.
Conclusion
COVID-19 in pregnancy was associated with maternal morbidity and preterm birth. Its association with other well-known risk factors for severe maternal morbidity in noninfected pregnant women, including maternal age above 35 years, overweight, and obesity, suggests further studies are required to determine whether these risk factors are also associated with poorer maternal outcome in these women. (Author)

20200720-9*

Maternal mortality among women with coronavirus disease 2019 admitted to the intensive care unit. Blitz MJ, Rochelson B, Minkoff H, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 4, October 2020, pp 595-599.e5
Available from: https://doi.org/10.1016/j.ajog.2020.06.020
Full URL: https://doi.org/10.1016/j.ajog.2020.06.020

Research letter discussing the rate of maternal death among pregnant and postpartum women with COVID-19 admitted to intensive care units in the New York area. Out of 70 patients classified as having severe disease, 19% were admitted to intensive care units and 15% of those died. Half of the patients admitted to intensive care units had no baseline comorbidities and most were older, multiparous and from minority ethnic groups. (LDO)

20200720-2*

Implementation of universal testing for severe acute respiratory syndrome coronavirus 2 in pregnant women with intended admission for delivery. Berkowitz KM, Goje O, Eaton J (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 5, November 2020, pp 782-783

Available from: https://doi.org/10.1016/j.ajog.2020.07.011

Full URL: https://doi.org/10.1016/j.ajog.2020.07.011

Letter to the editors presenting the authors' experiences of universal testing for SARS-CoV-2 in a population with a low prevalence of active disease. Among the pregnant women tested, 2% were positive and 70% of those were asymptomatic. (LDO)

20200720-16*

Perinatal COVID-19 Infection Prevention: Infographics for Patients and Providers. Lakshminrusimha S, Sridhar A, Herrera Guerra AA (2020), American Journal of Perinatology vol 37, no 12, October 2020, pp 1185-1188

Available from: https://doi.org/10.1055/s-0040-1714387

Full URL: https://doi.org/10.1055/s-0040-1714387

Editorial discussing the use of simple infographics rather than text guidelines to provide information to pregnant patients during the COVID-19 pandemic. The authors present two infographics on social distancing during pregnancy and the care of infants born to mothers with COVID-19. (LDO)

20200720-12*

Coronavirus disease 2019 in pregnancy: consider thromboembolic disorders and thromboprophylaxis. Di Renzo GC, Giardina I (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, p 135

Available from: https://doi.org/10.1016/j.ajog.2020.04.017

Full URL: https://doi.org/10.1016/j.ajog.2020.04.017

Letter to the editors discussing the risk of thromboembolic disorders among pregnant women diagnosed with COVID-19. The authors suggest the use of low-molecular-weight heparin as thromboprophylaxis. (LDO)

20200720-10*

Lung ultrasound in the coronavirus disease 2019 pandemic: a practical guide for obstetricians and gynecologists. Youssef A, Serra C, Pilu G (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 128-131

Available from: https://doi.org/10.1016/j.ajog.2020.05.014

Full URL: https://doi.org/10.1016/j.ajog.2020.05.014

Research letter discussing the use of lung examination in the detection of pneumonia. The authors draw upon the case of a 33-year-old pregnant woman diagnosed with COVID-19 where lung ultrasound was used to evaluate pleural thinning and B-lines. (LDO)

20200717-9

COVID-19 impact on Black, Asian and Minority ethnic (BAME) women [Version 2]. Royal College of Midwives (2020), London: RCM 15 July 2020, 5 pages

Available from:

https://www.rcm.org.uk/media/4164/covid-19-impact-on-black-asian-and-minority-ethnic-bame-women.pdf

Full URL:
https://www.rcm.org.uk/media/4164/covid-19-impact-on-black-asian-and-minority-ethnic-bame-women.pdf

Briefing paper from the Royal College of Midwives (RCM) discussing the disproportionate impact of COVID-19 on black, Asian and minority ethnic (BAME) people, and how maternity professionals can offer the right care to BAME women during pregnancy. (Author)

20200716-9*

Universal testing for coronavirus disease 2019 in pregnant women admitted for delivery: prevalence of peripartum infection and rate of asymptomatic carriers at four New York hospitals within an integrated healthcare system. Blitz MJ, Rochelson B, Rausch AC, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100169

Available from: https://doi.org/10.1016/j.ajogmf.2020.100169
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100169

Research letter presenting a study on the prevalence of peripartum COVID-19 infection and the number of asymptomatic carriers among pregnant women admitted for delivery in New York. Universal screening revealed that 18.6% of patients tested positive and 70.3% of those were asymptomatic. Hispanic patients accounted for 31.9% of those who tested positive which was significantly higher than other ethnic group. (LDO)

20200716-8*

Convalescent plasma for coronavirus disease 2019 in pregnancy: a case report and review. Grisolia G, Franchini M, Glingani C, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100174

Available from: https://doi.org/10.1016/j.ajogmf.2020.100174
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100174

Case report of a 29-year-old woman at 24 weeks' gestation who presented at the emergency room with a cough and fever and was diagnosed with COVID-19. The clinical condition of the patient rapidly improved after repeat transfusions of convalescent plasma. (LDO)

20200716-6*

RCM Briefing on Re-introduction of visitors to Maternity Units across the UK during the COVID-19 pandemic [Version 1]. Royal College of Midwives (2020), London: RCM 15 July 2020. 9 pages

Available from:
https://www.rcm.org.uk/media/4161/rcm-briefing-on-reintroduction-of-visitors-to-maternity-units-in-the-covid-pandemic-003.pdf

Guidance from the Royal College of Midwives (RCM) on the re-introduction of visitors to maternity units across the UK, as the country begins to ease restrictions during the current coronavirus pandemic. (JSM)

20200716-32*

From the trenches: inpatient management of coronavirus disease 2019 in pregnancy. Vega M, Hughes F, Bernstein PS, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100154

Available from: https://doi.org/10.1016/j.ajogmf.2020.100154
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100154

The novel coronavirus disease 2019 caused by the severe acute respiratory syndrome coronavirus 2 has become a pandemic. It has quickly swept across the globe, leaving many clinicians to care for infected patients with limited information about the disease and best practices for care. Our goal is to share our experiences of caring for pregnant

and postpartum women with novel coronavirus disease 2019 in New York, which is the coronavirus disease 2019 epicenter in the United States, and review current guidelines. We offer a guide, focusing on inpatient management, including testing policies, admission criteria, medical management, care for the decompensating patient, and practical tips for inpatient antepartum service management. (Author)

20200716-30*

Placental transfer and safety in pregnancy of medications under investigation to treat coronavirus disease 2019. Louchet M, Sibiude J, Peytavin G, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100159

Available from: https://doi.org/10.1016/j.ajogmf.2020.100159

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100159

Background

Treatment of COVID-19 is mostly symptomatic, but a wide range of medications are under investigation against SARS-CoV-2. Although pregnant women are excluded from clinical trials, they will inevitably receive therapies whenever they appear effective in non-pregnant patients and even under compassionate use.

Method

We conducted a review of the literature on placental transfer and pregnancy safety data of drugs under current investigation for COVID-19.

Results

Regarding remdesivir, there are no data in pregnant women. Several other candidates already have safety data in pregnant women, since they are repurposed drugs already used for their established indications. They may thus be used in pregnancy, although their safety in the context of COVID-19 may differ from conventional use. These include the HIV protease inhibitors such as lopinavir/ritonavir which have low placental transfer; interferon which does not cross the placental barrier, and (hydroxy) chloroquine, which have high placental transfer. There are also pregnancy safety and placental transfer data for colchicine, steroids, oseltamivir and azithromycin, as well as some monoclonals. However, some drugs are strictly prohibited in pregnancy due to known teratogenicity (thalidomide) or fetal toxicities (renin-angiotensin system blockers). Other candidates including tocilizumab and other IL-6 inhibitors, umifenovir and favipiravir have insufficient data on pregnancy outcomes.

Conclusion

In life-threatening cases of COVID-19, the potential risks of therapy to the fetus may be more than offset by the benefit of curing the mother. While preclinical and placental transfer studies are required for a number of potential anti-SARS CoV2 drugs, several medications can already be used in pregnant women. (Author)

20200716-11*

Pandemic-related pregnancy stress and anxiety among women pregnant during the coronavirus disease 2019 pandemic. Preis H, Mahaffey B, Heiselman C, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100155

Available from: https://doi.org/10.1016/j.ajogmf.2020.100155

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100155

Research letter presenting a study on anxiety and stress among pregnant women during the COVID-19 outbreak. Findings suggest that pregnant women experience substantial anxiety related to preparing for birth during a pandemic and disease transmission to themselves and their infants. (LDO)

20200716-10*

Compassionate use of remdesivir for treatment of severe coronavirus disease 2019 in pregnant women at a United States academic center. McCoy JA, Short WR, Srinivas SK, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100164

Available from: https://doi.org/10.1016/j.ajogmf.2020.100164

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100164

Research letter presenting a case series on the compassionate use of remdesivir to treat critically ill pregnant patients with COVID-19. Five patients were included with one patient having to withdraw from treatment due to elevated aminotransferases. (LDO)

20200714-71*

Navigating pregnancy during the coronavirus disease (COVID-19) pandemic. An expert midwife on how to best protect yourself and your baby. UNICEF (2020), UNICEF 11 May 2020

Available from:
https://www.unicef.org/coronavirus/navigating-pregnancy-during-coronavirus-disease-covid-19-pandemic

Full URL:
https://www.unicef.org/coronavirus/navigating-pregnancy-during-coronavirus-disease-covid-19-pandemic

Pregnancy is a special time full of excitement and anticipation. But for expectant mothers facing the outbreak of the coronavirus disease (COVID-19), fear, anxiety and uncertainty are clouding this otherwise happy time. To learn more about how women can protect themselves and their little one, we spoke with Franka Cadée, President of the International Confederation of Midwives. COVID-19 is a new virus and research into it is ongoing. We will update this article as new information becomes available. (Author)

20200714-63*

Severe acute respiratory syndrome coronavirus 2(SARS-CoV-2) infection during late pregnancy: a report of 18 patients from Wuhan, China. Zhang L, Dong L, Ming L, et al (2020), BMC Pregnancy and Childbirth vol 20, no 394, 8 July 2020

Available from: https://doi.org/10.1186/s12884-020-03026-3

Full URL: https://doi.org/10.1186/s12884-020-03026-3

Background

Compared with Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS), Corona Virus Disease 2019(COVID-19) spread more rapidly and widely. The population was generally susceptible. However, reports on pregnant women infected with SARS-CoV-2 were very limited. By sharing the clinical characteristics, treatments and outcomes of 18 patients with COVID-19 during late pregnancy, we hope to provide some references for obstetric treatment and management.

Methods

A total of 18 patients with COVID-19 treated at Renmin Hospital of Wuhan University were collected. The epidemiological characteristics, clinical manifestations, laboratory tests, chest CT and pregnancy outcomes were performed for analysis.

Results

1. 18 cases of late pregnancy infected with SARS-CoV-2 pneumonia were delivered at 35 + 5 weeks to 41 weeks. According to the clinical classification of COVID-19, 1 case was mild type, 16 cases were ordinary type, and 1 case was severe type. 2. According to imaging examinations: 15 (83%) cases showed unilateral or bilateral pneumonia, 2 (11%) cases had pulmonary infection with pleural effusion, and 1 (6%) case had no abnormal imaging changes. 8 (44%) cases were positive and 10 (56%) cases were negative for nasopharyngeal-swab tests of SARS-CoV-2. 3. Among the 18

newborns, there were 3 (17%) premature infants, 1 (6%) case of mild asphyxia, 5 (28%) cases of bacterial pneumonia, 1 (6%) case of gastrointestinal bleeding, 1 (6%) case of necrotizing enteritis, 2 (11%) cases of hyperbilirubinemia and 1 (6%) case of diarrhea. All the newborns were negative for the first throat swab test of SARS-CoV-2 after birth. 4. Follow-up to Mar 7, 2020, no maternal and neonatal deaths occurred.
Conclusions
The majority of patients in late term pregnancy with COVID-19 were of ordinary type, and they were less likely to develop into critical pneumonia after early isolation and antiviral treatment. Vertical transmission of SARS-CoV-2 was not detected, but the proportion of neonatal bacterial pneumonia was higher than other neonatal diseases in newborns. (Author)

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
Available from: https://doi.org/10.1111/aogs.13894
Full URL: https://doi.org/10.1111/aogs.13894

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)

20200714-3*

Severe maternal morbidity and mortality associated with COVID-19: The risk should not be downplayed. Westgren M, Pettersson K, Hagberg H, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 7, July 2020, pp 815-816
Available from: https://doi.org/10.1111/aogs.13900
Full URL: https://doi.org/10.1111/aogs.13900

Editorial on the increased risks of maternal morbidity and mortality during the COVID-19 pandemic. Suggests that the risks of severe disease in pregnant women cannot be properly determined without analysing large-scale population-based data from several countries. (LDO)

20200713-8*

Maternal postnatal health during the COVID-19 pandemic: Vigilance is needed. Bick D, Cheyne H, Chang Y-S, et al (2020), Midwifery vol 88, September 2020, 102781
Available from: https://doi.org/10.1016/j.midw.2020.102781
Full URL: https://doi.org/10.1016/j.midw.2020.102781

Editorial on the impact of COVID-19 on women during pregnancy and the postnatal period. The authors argue that more attention should be given to maternal morbidity following birth in restructured maternity systems during the pandemic. (LDO)

20200713-7*

The impact of the coronavirus (COVID-19) pandemic on maternity care in Europe. Coxon K, Turienzo CF, Kweekel L, et al (2020), Midwifery vol 88, September 2020, 102779
Available from: https://doi.org/10.1016/j.midw.2020.102779
Full URL: https://doi.org/10.1016/j.midw.2020.102779

Editorial on the impact of COVID-19 on maternity care in Europe and the different responses among European

countries. Discusses the use of personal protective equipment (PPE) and changes to the provision of maternity services in the antenatal, perinatal and postnatal periods. (LDO)

20200713-42*

Tocilizumab and Remdesivir in a Pregnant Patient With Coronavirus Disease 2019 (COVID-19). Naqvi M, Zakowski P, Glucksman L, et al (2020), Obstetrics & Gynecology vol 136, no 5, November 2020, pp 1025-1029
Available from: https://doi.org/10.1097/AOG.0000000000004050
Full URL: https://doi.org/10.1097/AOG.0000000000004050

BACKGROUND:
There are limited data regarding treatment options for pregnant women with severe coronavirus disease 2019 (COVID-19).
CASE:
A 35-year-old primigravid patient at 22 weeks of gestation presented with 7 days of fever, cough, anosmia, and dyspnea. Nasopharyngeal swab was positive for the novel coronavirus severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and a chest X-ray demonstrated bilateral patchy infiltrates. Laboratory evaluation was notable for marked elevation of interleukin-6 and C-reactive protein concentrations. On hospital day 3, owing to increased dyspnea and oxygen requirement, the patient was treated with tocilizumab followed by 5 days of remdesivir. She responded well, recovered to room air, and was discharged home after a 9-day hospitalization.
CONCLUSION:
Tocilizumab and remdesivir may be effective for treatment of severe COVID-19 in pregnancy, but additional data are needed to guide risk-benefit considerations. (Author)

20200713-4*

Covid-19 and the need for perinatal mental health professionals: now more than ever before. Hynan MT (2020), Journal of Perinatology vol 40, no 7, July 2020, pp 985-986
Available from: https://doi.org/10.1038/s41372-020-0696-z
Full URL: https://doi.org/10.1038/s41372-020-0696-z

Commentary on the need for neonatal intensive care unit (NICU) psychologists and social workers during COVID-19 to support the mental health of parents and staff. (LDO)

20200713-27*

Virolactia in an Asymptomatic Mother with COVID-19. Bastug A, Hanifehnezhad A, Tayman C, et al (2020), Breastfeeding Medicine vol 15, no 8, August 2020, pp 488-491
Available from: https://doi.org/10.1089/bfm.2020.0161
Full URL: https://doi.org/10.1089/bfm.2020.0161

Background: Limited data are available on the perinatal and postnatal transmission of novel coronavirus disease 2019 (COVID-19). The Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) recommended breastfeeding with necessary precautions to mothers with COVID-19.
Case Presentation: A 20-year-old pregnant woman with no symptoms of COVID-19 presented to the hospital for delivery at 39 weeks of gestation. She was tested for severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) by reverse transcriptase polymerase chain reaction (RT-PCR) because her father had been diagnosed with COVID-19. A nasopharyngeal swab RT-PCR test was positive for SARS-CoV-2. Therefore, the baby and the mother were cared for separately after delivery. Breast milk obtained after first lactation was tested by real-time RT-PCR and was positive for SARS-CoV-2.

Conclusions: In this article, we aimed to report the presence of SARS-CoV-2 in breast milk. Although further studies are needed, this situation may have an impact on breastfeeding recommendations. (Author)

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
Available from: https://doi.org/10.1016/j.jnn.2020.06.002
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)

20200708-6*

Pregnancy and COVID-19. Elsevier Patient Education (2020), London: Elsevier 14 April 2020. 3 pages
Available from:
https://www.elsevier.com/__data/assets/pdf_file/0008/1010312/Pregnancy-and-COVID-19_14042020.pdf?campid=20N18119&utm_campaign=ckphy_awcovid-19healthcarehub_em_20N18119&mm=cima-thornhillk®=naTT=ckphy&utm_medium=&utm_source=database&utm_content=awcovid-19healthcarehub&cid=DM65132&bid=64070031&utm_campaign=OP1007&utm_medium=email&utm_dgroup=20N18119&utm_acid=7788381&dgcid=OP1007&CMX_ID=0&utm_in=DM65132&utm_delid=DM65132

DM65132
Consumer information summarising what is known so far about COVID-19 in pregnancy. (JSM)

20200707-20*

Bereavement care in maternity services during COVID-19 pandemic [Version 5]. Sands, Royal College of Midwives (2020),
London: RCM 14 July 2020. 5 pages
Available from:
https://www.rcm.org.uk/media/4162/maternity-bereavement-care-during-covid-19-v5-150720.pdf
Full URL: https://www.rcm.org.uk/media/4162/maternity-bereavement-care-during-covid-19-v5-150720.pdf
Provides information for health care professionals caring for women and their families experiencing bereavement following pregnancy loss during the coronavirus pandemic. (JSM)

20200707-18*

RCM Clinical Guidance Briefing: Perinatal Mental Health Care During Covid -19. Royal College of Midwives (2020), London: RCM 2020. 2 pages
Available from:
https://www.rcm.org.uk/media/3859/rcm-clinical-guidance-briefing-no-10-perinatal-mental-health-care.pdf
Full URL:
https://www.rcm.org.uk/media/3859/rcm-clinical-guidance-briefing-no-10-perinatal-mental-health-care.pdf
Identifying, caring for and supporting women at risk of or with pre-existing Perinatal Mental Health problems during Covid-19 epidemic. (Author, edited)

20200707-17*

Public health and COVID-19. Royal College of Midwives (2020), London: RCM 29 July 2020. 4 pages
Available from: https://www.rcm.org.uk/media/4187/public-health-and-covid-19.pdf
Full URL: https://www.rcm.org.uk/media/4187/public-health-and-covid-19.pdf

Briefing paper providing a list of resources on various public health topics, for health professionals during the current coronavirus pandemic. (JSM)

20200707-16*

Antenatal care for women with current suspected or confirmed COVID-19 or with a member of their household with suspected or confirmed COVID-19 [Version 3.1]. Royal College of Midwives (2020), London: RCM 19 May 2020. 3 pages
Available from:
https://www.rcm.org.uk/media/4091/professional-briefingpaper-two-antenatal-care-for-women-with-suspected-or-confirmed-covid19-v31-190520.pdf

Briefing paper from the Royal College of Midwives (RCM) for maternity professionals caring for pregnant women with suspected or confirmed coronavirus, or living in households where there are suspected or confirmed cases of the illness. (JSM)

20200707-15*

Antenatal Care for women without suspected or confirmed COVID-19 and living in a symptom free household [Version 3.1]. Royal College of Midwives (2020), London: RCM 19 May 2020. 3 pages
Available from:
https://www.rcm.org.uk/media/4090/professional-briefing-paper-one-antenatal-care-for-women-without-symptoms-v31-190520.pdf

Briefing paper from the Royal College of Midwives (RCM) for maternity professionals caring for pregnant women without coronavirus symptoms, and living in symptom free households. (JSM)

20200707-11*

Coronavirus (COVID-19) infection in pregnancy: Information for healthcare professionals [Version 11] [Superseded by Version 12, 14 October 2020]. Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of Paediatrics and Child Health, et al (2020), Royal College of Obstetricians and Gynaecologists (RCOG) 24 July 2020. 68 pages
Available from:
https://www.rcm.org.uk/media/4181/2020-07-24-coronavirus-covid-19-infection-in-pregnancyv11.pdf
Full URL: https://www.rcm.org.uk/media/4181/2020-07-24-coronavirus-covid-19-infection-in-pregnancyv11.pdf

Guidance for healthcare professionals on Coronavirus (COVID-19) infection in pregnancy, published by the RCOG, Royal College of Midwives, Royal College of Paediatrics and Child Health, Public Health England and Health Protection Scotland. The guidance, which will be updated on a regular basis, covers: epidemiology; transmission; effect of COVID-19 on pregnant women; effect of COVID-19 on the fetus; travel advice for pregnant women; advice for women who may have been exposed; diagnosis; advice for women who have been advised to self-isolate; management of pregnant women with confirmed COVID-19; postnatal management: neonatal care and infant feeding; admissions flowchart; information for women and their families. (Publisher). [This version of the guidance has now been

superseded by Version 12:
https://www.rcm.org.uk/media/4383/2020-10-14-coronavirus-covid-19-infection-in-pregnancy-v12.pdf]

20200706-45*
Guidance for antenatal and postnatal services in the evolving coronavirus (COVID-19) pandemic. Information for healthcare professionals. Version 2.1. Royal College of Midwives, Royal College of Obstetricians and Gynaecologists (2020), London: RCOG 19 June 2020. 17 pages
Available from:
https://www.rcog.org.uk/globalassets/documents/guidelines/2020-06-18-guidance-for-antenatal-and-postnatal-services-in-the-evolving-coronavirus-covid-19-pandemic.pdf

This guidance is for antenatal and postnatal services to support them during the evolving coronavirus pandemic. This document intends to outline which elements of routine antenatal and postnatal care are essential and which could be modified, given national recommendations for social distancing of pregnant women. (Author)

20200706-1*
Getting ready for a visit from your midwife. Royal College of Midwives (2020), London: RCM 2020. 1 page
Available from: https://www.rcm.org.uk/media/3915/guidance-for-women-on-home-visits-4.jpg

Safety information for women expecting a home visit from their midwife during the coronavirus pandemic. (JSM)

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)

20200702-34*
Incidence and clinical profiles of COVID-19 pneumonia in pregnant women: A single-centre cohort study from Spain. van Veenendaal NR, van Kempen AAMW, Franck LS, et al (2020), EClinical Medicine vol 23, 100407, June 2020
Available from: https://doi.org/10.1016/j.eclinm.2020.100407

Full URL: https://doi.org/10.1016/j.eclinm.2020.100407

Background
Information regarding the incidence and characteristics of COVID-19 pneumonia amongst pregnant women is scarce.
Methods
Single-centre experience with 32 pregnant women diagnosed with COVID-19 between March 5 to April 5, 2020 at Madrid, Spain.
Findings
COVID-19 pneumonia was diagnosed in 61·5% (32/52) women. Only 18·7% (6/32) had some underlying condition (mostly asthma). Supplemental oxygen therapy was required in 18 patients (56·3%), with high-flow requirements in six (18·7%). Eight patients (25·0%) fulfilled the criteria for acute distress respiratory syndrome. Invasive mechanical ventilation was required in two patients (6·2%). Tocilizumab was administered in five patients (15·6%). Delivery was precipitated due to COVID-19 in three women (9·4%). All the newborns had a favourable outcome, with no cases of neonatal SARS-CoV-2 transmission. Severe cases of pneumonia requiring supplemental oxygen were more likely to exhibit bilateral alveolar or interstitial infiltrates on chest X-ray (55·6% vs. 0·0%; P-value = 0·003) and serum C-reactive protein (CRP) levels >10 mg/dL (33·0% vs. 0·0%; P-value = 0·05) at admission than those with no oxygen **requirements.**
Interpretation
Pregnant women with COVID-19 have a high risk of developing pneumonia, with a severe course in more than half of cases. The presence of bilateral kung infiltrates and elevated serum CRP at admission may identify women at-risk of severe COVID-19 pneumonia.
Funding
Instituto de Salud Carlos III (COV20/00,181), Spanish Ministry of Science and Innovation. (Author)

20200701-1*

Covid-19: Admit ethnic minority pregnant women to hospital earlier, says NHS England. Iacobucci G (2020), BMJ 30 March 2020, online
Available from: https://doi.org/10.1136/bmj.m2628
Full URL: https://doi.org/10.1136/bmj.m2628

News item reporting on NHS England advice that pregnant women from ethnic minority backgrounds who display covid-19 symptoms should have a lower threshold for admission to hospital. (MB)

20200629-8*

Maternal Mortality From Coronavirus Disease 2019 (COVID-19) in the United States. Metz T, Collier C, Hollier LM (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 313-316
Available from: https://doi.org/10.1097/AOG.0000000000004024
Full URL: https://doi.org/10.1097/AOG.0000000000004024

Individual state maternal mortality review committees aim to comprehensively review all maternal deaths to not only evaluate the cause of death, but also to assess preventability and make recommendations for action to prevent future deaths. The maternal mortality review committee process remains critical during the coronavirus disease 2019 (COVID-19) pandemic. Maternal deaths due to COVID-19 have been reported in the United States. Some state maternal mortality review committees may choose to expedite review of these deaths in an effort to quickly provide clinicians with information intended to prevent other deaths during the ongoing pandemic. If states opt to pursue rapid review, entry of data into the Maternal Mortality Review Information Application system for submission to the Centers for Disease Control and Prevention will allow for aggregation nationally without duplication. It will be important to review not only deaths directly attributed to COVID-19, but also those that may be indirectly related to the COVID-19 pandemic, such as those influenced by changes in care practices or delays in seeking care during the

pandemic. Therefore, regardless of the timing of the review, maternal deaths that occur during the time of the COVID-19 pandemic must be evaluated within that framework to ensure that all factors contributing to the death are considered to better understand the context of each of these tragic events. (Author)

20200629-7*

Patient Perspectives on Audio-Only Virtual Prenatal Visits Amidst the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Pandemic. Holcomb D, Faucher MA, Bouzid J, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 317-322

Available from: https://doi.org/10.1097/AOG.0000000000004026

Full URL: https://doi.org/10.1097/AOG.0000000000004026

OBJECTIVE:

To evaluate patient satisfaction after integration of audio-only virtual visits into a pre-existing prenatal care schedule within a large, county-based system during the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic.

METHODS:

We implemented audio-only prenatal virtual visits in response to the SARS-CoV-2 pandemic within a large, county-based prenatal care system serving predominantly women with low socioeconomic status and limited resources. Using a four-question telephone survey, we surveyed a cross-section of patients who had opted to participate in virtual visits to assess their level of satisfaction surrounding audio-only visits. In addition, average clinic wait times and attendance rates by visit type were examined.

RESULTS:

From March 17 to May 31, 2020, more than 4,000 audio-only virtual prenatal visits were completed in our system. After implementation, the percentage of visits conducted through the virtual platform gradually rose, with nearly 25% of weekly prenatal visits being performed through the virtual platform by the month of May. Clinic wait times trended downward after implementation of virtual visits (P<.001). On average, 88% of virtual prenatal visits were completed as scheduled, whereas only 82% of in-person visits were attended (P<.001). Hospital administration attempted to contact 431 patients who had participated in at least one virtual visit to assess patient satisfaction; 283 patients were reached and agreed to participate (65%). Ninety-nine percent of respondents reported that their needs were met during their audio-only virtual visits. The majority of patients preferred a combination of in-person and virtual visits for prenatal care, and patients reported many benefits with virtual visits.

CONCLUSION:

Audio-only virtual prenatal visits-as a complement to in-person prenatal visits-have specific and distinct advantages compared with video-enabled telehealth in a vulnerable population of women and offer a viable option to increase access to care. (Author)

20200629-36*

Practice Modification for Pandemics: A Model for Surge Planning in Obstetrics. Duzyj CM, Thornburg LL, Han CS (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 237-251

Available from: https://doi.org/10.1097/AOG.0000000000004004

Full URL: https://doi.org/10.1097/AOG.0000000000004004

This review highlights proposed pandemic-adjusted modifications in obstetric care, with discussion of risks and benefits based on available evidence. We suggest best practices for balancing community-mitigation efforts with appropriate care of obstetric patients. (Author)

20200629-32*
Clinical Findings and Disease Severity in Hospitalized Pregnant Women With Coronavirus Disease 2019 (COVID-19). Savasi VM, Parisi F, Patanè L, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 252-258

Available from: https://doi.org/10.1097/AOG.0000000000003979
Full URL: https://doi.org/10.1097/AOG.0000000000003979

OBJECTIVE:
To investigate the clinical evolution of coronavirus disease 2019 (COVID-19) in hospitalized pregnant women and potential factors associated with severe maternal outcomes.
METHODS:
We designed a prospective multicenter cohort study of pregnant women with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection who were admitted to 12 Italian maternity hospitals between February 23 and March 28, 2020. Clinical records, laboratory and radiologic examinations, and pregnancy outcomes were collected. A subgroup of patients with severe disease was identified based on intensive care unit (ICU) admission, delivery for respiratory compromise, or both.
RESULTS:
Seventy-seven patients were included, 14 of whom had severe disease (18%). Two thirds of the patients in the cohort were admitted during the third trimester, and 84% were symptomatic on admission. Eleven patients underwent urgent delivery for respiratory compromise (16%), and six were admitted to the ICU (8%). One woman received extracorporeal membrane oxygenation; no deaths occurred. Preterm delivery occurred in 12% of patients, and nine newborns were admitted to the neonatal intensive care unit. Patients in the severe subgroup had significantly higher pregestational body mass indexes (BMIs) and heart and respiratory rates and a greater frequency of fever or dyspnea on admission compared with women with a nonsevere disease evolution.
CONCLUSION:
In our cohort, one in five women hospitalized with COVID-19 infection delivered urgently for respiratory compromise or were admitted to the ICU. None, however, died. Increased pregestational BMI and abnormal heart and respiratory rates on admission were associated with severe disease. (Author)

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
Available from: https://doi.org/10.1097/AOG.0000000000003985
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)

20200629-30*
Symptoms and Critical Illness Among Obstetric Patients With Coronavirus Disease 2019 (COVID-19) Infection.
Andrikopoulou M, Madden N, Wen Timothy, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 291-299
Available from: https://doi.org/0.1097/AOG.0000000000003996

Full URL: https://doi.org/0.1097/AOG.0000000000003996
OBJECTIVE:
To characterize symptoms and disease severity among pregnant women with coronavirus disease 2019 (COVID-19) infection, along with laboratory findings, imaging, and clinical outcomes.
METHODS:
Pregnant women with COVID-19 infection were identified at two affiliated hospitals in New York City from March 13 to April 19, 2020, for this case series study. Women were diagnosed with COVID-19 infection based on either universal testing on admission or testing because of COVID-19-related symptoms. Disease was classified as either 1) asymptomatic or mild or 2) moderate or severe based on dyspnea, tachypnea, or hypoxia. Clinical and demographic risk factors for moderate or severe disease were analyzed and calculated as odds ratios (ORs) with 95% CIs. Laboratory findings and associated symptoms were compared between those with mild or asymptomatic and moderate or severe disease. The clinical courses and associated complications of women hospitalized with moderate and severe disease are described.
RESULTS:
Of 158 pregnant women with COVID-19 infection, 124 (78%) had mild or asymptomatic disease and 34 (22%) had moderate or severe disease. Of 15 hospitalized women with moderate or severe disease, 10 received respiratory support with supplemental oxygen and one required intubation. Women with moderate or severe disease had a higher likelihood of having an underlying medical comorbidity (50% vs 27%, OR 2.76, 95% CI 1.26–6.02). Asthma was more common among those with moderate or severe disease (24% vs 8%, OR 3.51, 95% CI 1.26–9.75). Women with moderate or severe disease were significantly more likely to have leukopenia and elevated aspartate transaminase and ferritin. Women with moderate or severe disease were at significantly higher risk for cough and chest pain and pressure. Nine women received ICU or step-down-level care, including four for 9 days or longer. Two women underwent preterm delivery because their clinical status deteriorated.

CONCLUSION:
One in five pregnant women who contracted COVID-19 infection developed moderate or severe disease, including a small proportion with prolonged critical illness who received ICU or step-down-level care. (Author)

20200629-18*
Severe Coronavirus Infections in Pregnancy: A Systematic Review. Galang RR, Chang K, Strid P, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 262-272
Available from: https://doi.org/10.1097/AOG.0000000000004011
Full URL: https://doi.org/10.1097/AOG.0000000000004011
OBJECTIVE
To inform the current coronavirus disease 2019 (COVID-19) outbreak, we conducted a systematic literature review of case reports of Middle East respiratory syndrome coronavirus (MERS-CoV), severe acute respiratory syndrome coronavirus (SARS-CoV), and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19, during pregnancy and summarized clinical presentation, course of illness, and pregnancy and neonatal outcomes.
DATA SOURCES
We searched MEDLINE and ClinicalTrials.gov from inception to April 23, 2020.
METHODS OF STUDY SELECTION
We included articles reporting case-level data on MERS-CoV, SARS-CoV, and SARS-CoV-2 infection in pregnant women. Course of illness, indicators of severe illness, maternal health outcomes, and pregnancy outcomes were abstracted from included articles.
TABULATION, INTEGRATION, AND RESULTS
We identified 1,328 unique articles, and 1,253 articles were excluded by title and abstract review. We completed full-text review on 75, and 29 articles were excluded by full-text review. Among 46 publications reporting case-level data, eight described 12 cases of MERS-CoV infection, seven described 17 cases of SARS-CoV infection, and 31 described 98 cases of SARS-CoV-2 infection. Clinical presentation and course of illness ranged from asymptomatic to severe fatal disease, similar to the general population of patients. Severe morbidity and mortality among women with MERS-CoV, SARS-CoV, or SARS-CoV-2 infection in pregnancy and adverse pregnancy outcomes, including pregnancy loss, preterm delivery, and laboratory evidence of vertical transmission, were reported.
CONCLUSION
Understanding whether pregnant women may be at risk for adverse maternal and neonatal outcomes from severe coronavirus infections is imperative. Data from case reports of SARS-CoV, MERS-CoV, and SAR-CoV-2 infections during pregnancy are limited, but they may guide early public health actions and clinical decision-making for COVID-19 until more rigorous and systematically collected data are available. The capture of critical data is needed to better define how this infection affects pregnant women and neonates. This review was not registered with PROSPERO. (Author)

20200629-17*
Rapid Deployment of a Drive-Through Prenatal Care Model in Response to the Coronavirus Disease 2019 (COVID-19) Pandemic. Turrentine M, Ramiez M, Monga M, et al (2020), Obstetrics & Gynecology vol 136, no 1, July 2020, pp 29-32
Available from: https://doi.org/10.1097/AOG.0000000000003923
Full URL: https://doi.org/10.1097/AOG.0000000000003923

Coronavirus disease 2019 (COVID-19) has been declared a public health emergency for the entire United States. Providing access to prenatal health care while limiting exposure of both obstetric health care professionals and patients to COVID-19 is challenging. Although reductions in the frequency of prenatal visits and implementation of

telehealth interventions provide some options, there still remains a need for patient-health care professional visits. A drive-through prenatal care model was developed in which pregnant women would remain in their automobiles while being assessed by the health care professional, thus reducing potential patient, health care professional, and staff exposure to COVID-19. Drive-through prenatal visits would include key elements that some institutions cannot perform by telehealth encounters, such as blood pressure measurements for evaluation for hypertensive disorders of pregnancy, fetal heart rate assessment, and selected ultrasound-based measurements or observations, as well as face-to-face patient-health care professional interaction, thereby reducing patient anxiety resulting from the reduction in the number of planned clinic visits with an obstetric health care professional as well as fear of virus exposure in the clinic setting. We describe the rapid development of a drive-through prenatal care model that is projected to reduce the number of in-person clinic visits by 33% per patient compared with the traditional prenatal care paradigm, using equipment and supplies that most obstetric clinics in the United States can access. (Author)

20200629-13*

Examining Inequities Associated With Changes in Obstetric and Gynecologic Care Delivery During the Coronavirus Disease 2019 (COVID-19) Pandemic. Onwuzurike C, Meadows AR, Nour NM (2020), Obstetrics & Gynecology vol 136, no 1, July 2020, pp 37-41
Available from: https://doi.org/10.1097/AOG.0000000000003933
Full URL: https://doi.org/10.1097/AOG.0000000000003933

The coronavirus disease 2019 (COVID-19) pandemic is a public health emergency requiring significant changes in obstetric and gynecologic health care delivery to minimize the risk of transmission to healthy patients and health care workers. Although these changes are necessary, they will differentially affect patients in a way that highlights and exacerbates existing inequities in health care access and outcomes. Socially vulnerable groups are already disproportionately affected by COVID-19 infection and more likely to experience severe morbidity and mortality. Some reasons for this include a limited ability to practice risk-reducing behaviors such as physical distancing, higher prevalence of chronic medical conditions, and less access to medical care. Additionally, the structural changes now taking place in health care delivery have negatively affected the ability of socially vulnerable groups to obtain necessary obstetric and gynecologic care, which may lead to poorer outcomes. As physician-leaders enact new policies to respond to the COVID-19 public health crisis, it is important to consider the potential for exacerbating existing health inequities and to be proactive in creating policies that promote equity. (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
Available from: https://doi.org/10.1097/AOG.0000000000003946
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)

20200629-11*

Prone Positioning for Pregnant Women With Hypoxemia Due to Coronavirus Disease 2019 (COVID-19). Tolcher MC, McKinney JR, Eppes CS, et al (2020), Obstetrics & Gynecology vol 136, no 2, August 2020, pp 259-261

Available from: https://doi.org/10.1097/AOG.0000000000004012

Full URL: https://doi.org/10.1097/AOG.0000000000004012

The coronavirus disease 2019 (COVID-19) pandemic has prompted expanded use of prone positioning for refractory hypoxemia. Clinical trials have demonstrated beneficial effects of early prone positioning for acute respiratory distress syndrome (ARDS), including decreased mortality. However, pregnant women were excluded from these trials. To address the need for low-cost, low-harm interventions in the face of a widespread viral syndrome wherein hypoxemia predominates, we developed an algorithm for prone positioning of both intubated and nonintubated pregnant women. This algorithm may be appropriate for a wide spectrum of hypoxemia severity among pregnant women. The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus is responsible for the clinical manifestations of COVID-19. This syndrome can manifest as severe pneumonia complicated by hypoxemia and ARDS. Given the current global COVID-19 pandemic, with a large number of ARDS cases, there is renewed interest in the use of prone positioning to improve oxygenation in moderate or severe hypoxemia. Among the populations who can benefit from prone positioning are pregnant women experiencing severe respiratory distress, as long as the physiologic changes and risks of pregnancy are taken into account. (Author)

20200629-1*

Coronavirus: More care urged for pregnant BAME patients. Anon (2020), BBC News 27 June 2020

Available from: https://www.bbc.co.uk/news/health-53191235

Full URL: https://www.bbc.co.uk/news/health-53191235

NHS England is asking doctors and midwives to provide more checks and support to black, Asian and ethnic-minority (BAME) pregnant women because of their greater risk from coronavirus. (Author)

20200626-40*

Provision of obstetrics and gynaecology services during the COVID-19 pandemic: a survey of junior doctors in the UK National Health Service. Rimmer MP, Al Wattar BH, on behalf of the UKARCOG Members (2020), BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 9, August 2020, pp 1123-1128

Available from: https://doi.org/10.1111/1471-0528.16313

Full URL: https://doi.org/10.1111/1471-0528.16313

Objective

The coronavirus disease 2019 (COVID-19) pandemic is disrupting health services worldwide. We aimed to evaluate the provision of obstetrics and gynaecology services in the UK during the acute phase of the COVID-19 pandemic.

Design

Interview-based national survey.

Setting

Women's healthcare units in the National Health Service.

Population

Junior doctors in obstetrics and gynaecology.

Methods
Participants were interviewed by members of the UK Audit and Research in Obstetrics and Gynaecology trainees' collaborative between 28 March and 7 April 2020. We used a quantitative analysis for closed-ended questions and a thematic framework analysis for open comments.
Results
We received responses from 148/155 units (95%), most of the participants were in years 3-7 of training (121/148, 82%). Most completed specific training drills for managing obstetric and gynaecological emergencies in women with COVID-19 (89/148, 60.1%) and two-person donning and doffing of Personal Protective Equipment (PPE) (96/148, 64.9%). The majority of surveyed units implemented COVID-19-specific protocols (130/148, 87.8%), offered adequate PPE (135/148, 91.2%) and operated dedicated COVID-19 emergency theatres (105/148, 70.8%). Most units reduced face-to-face antenatal clinics (117/148, 79.1%) and suspended elective gynaecology services (131/148, 88.5%). The 2-week referral pathway for oncological gynaecology was not affected in half of the units (76/148, 51.4%), but half reported a planned reduction in oncology surgery (82/148, 55.4%).
Conclusion
The provision of obstetrics and gynaecology services in the UK during the acute phase of the COVID-19 pandemic seems to be in line with current guidelines, but strategic planning is needed to restore routine gynaecology services and ensure safe access to maternity care in the long term.
Tweetable abstract
Provision of obstetrics and gynaecology services during the acute phase of COVID-19 is in line with current guidelines, strategic planning is needed to restore routine services and ensure safe access to care in the long term. (Author)

20200624-9*

SARS-CoV-2 infection in very preterm pregnancy: Experiences from two cases. Cooke WR, Billett A, Gleeson S, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 250, July 2020, pp 259-260
Available from: https://doi.org/10.1016/j.ejogrb.2020.05.025
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.025
The authors present two cases of SARS-CoV-2 infection in very preterm pregnancy. The first case was a 39-year-old Afro-Caribbean woman at 28 weeks' gestation with a BMI of 42 and type 2 diabetes mellitus. The second case was a 28-year-old Asian woman at 28 weeks' gestation with gestational diabetes. In both cases the patients deteriorated within 24 hours of admission and caesarean sections were performed. (LDO)

20200624-8*

Covid-19 during pregnancy: A case series from an universally tested population from the north of Portugal. Dória M, Peixinho C, Laranjo M, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 250, July 2020, pp 261-262
Available from: https://doi.org/10.1016/j.ejogrb.2020.05.029
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.029
The authors present a case series from a universally tested population from Hospital Pedro Hispano in Portugal. Out of 103 pregnant women 11.7% tested positive and most were asymptomatic. There were no maternal complications and the newborns tested negative. (LDO)

20200624-7*

Prolonged viral persistence in COVID-19 second trimester pregnant patient. Panichaya P, Thaweerat W, Uthaisan J (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 250, July 2020, p 263
Available from: https://doi.org/10.1016/j.ejogrb.2020.05.030
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.030

The authors report a case of a 43-year-old woman at 18 weeks' gestation who tested positive for COVID-19. The patient had mild symptoms and the fetal heart rate remained positive. The pregnancy was terminated due to a diagnosis of Down syndrome and placental pathology revealed no morphological change related to infection. (LDO)

20200624-68*

Prevalence of SARS-CoV-2 Among Patients Admitted for Childbirth in Southern Connecticut. Campbell KH, Tornatore JM, Lawrence KE, et al (2020), JAMA (Journal of the American Medical Association) vol 323, no 24, 23/30 June 2020, pp 2520-2522

Available from: https://doi.org/10.1001/jama.2020.8904
Full URL: https://doi.org/10.1001/jama.2020.8904

Developing an approach to care for pregnancy and childbirth during the coronavirus disease 2019 (COVID-19) crisis is a priority to (1) provide safe care to pregnant women and newborns and (2) protect health care workers from infection. A study conducted in New York City reported a 13.5% prevalence of asymptomatic infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in women presenting for childbirth.1 On March 30, 2020, an initially asymptomatic woman admitted to the Yale New Haven Health system developed cough and fever soon after childbirth; testing confirmed SARS-CoV-2 infection. This event prompted the development of a SARS-CoV-2 screening and testing program of patients presenting for childbirth; we report the prevalence detected in the first weeks of the program. (Author)

20200624-63*

Second-Trimester Miscarriage in a Pregnant Woman With SARS-CoV-2 Infection. Baud D, Greub G, Favre G, et al (2020), JAMA (Journal of the American Medical Association) vol 323, no 21, 30 April 2020, pp 2198-2200

Available from: https://doi.org/10.1001/jama.2020.7233
Full URL: https://doi.org/10.1001/jama.2020.7233

Presents a case of miscarriage during the second trimester in a pregnant woman with COVID-19. (MB)

20200624-61*

Healthcare information on YouTube: Pregnancy and COVID-19. Yuksel B, Cakmak K (2020), International Journal of Gynecology & Obstetrics vol 150, no 2, August 2020, pp 189-193

Available from: https://doi.org/10.1002/ijgo.13246
Full URL: https://doi.org/10.1002/ijgo.13246

Objective

We aimed to analyze Turkish language videos on YouTube about Coronavirus and pregnancy.

Methods

YouTube was searched for the following keywords: 'Coronavirus, gebelik,' 'Coronavirus, Hamilelik,' 'COVID-19, gebelik' and 'COVID-19, hamilelik'. All ranking data for each video was recorded, video sources and target audiences were analyzed. Videos were designated as 'informative, 'misleading' 'personal experience' and 'news update.' The usefulness of the videos were analyzed by DISCERN score and the quality of the content was calculated by MICI score.

Results

Seventy-six videos had a total of 1.494.860 views, with 40.849 likes and 575 dislikes. The source of information in informative videos was physicians (73%), and news agencies (20%), and the majority of these targeted patients. The DISCERN score of videos was 2.9 ± 1, 1.6 ± 0.9, and 1.9 ± 0.9 respectively for respectively for the informative group, personal experience group, and news update group. The mean MICI score for informative videos was low and calculated as 5.3 ± 2.8.

Conclusion
YouTube videos are easily accessible sources of COVID-19 information for pregnant women. The present study demonstrated that videos about pregnancy and COVID-19 have high view rates, but are generally low in quality and trustworthiness. (Author)

20200624-60*
Rheumatic diseases during pregnancy and SARS-CoV-2: An appeal for medication adherence. Scioscia M, Praino E, Scioscia C (2020), International Journal of Gynecology & Obstetrics vol 150, no 2, August 2020, pp 269-270
Available from: https://doi.org/10.1002/ijgo.13255
Full URL: https://doi.org/10.1002/ijgo.13255
The novel SARS-CoV-2 outbreak has raised concerns among patients with rheumatic diseases receiving chronic immunosuppressive therapy. Patient concerns regarding immune response to the virus have fueled non-adherence behavior. (Author)

20200624-6*
Is termination of early pregnancy indicated in women with COVID-19?. Wu Y-T, Li C, Zhang C-J, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 251, August 2020, pp 271-272
Available from: https://doi.org/10.1016/j.ejogrb.2020.05.037
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.037
Discusses the impact of COVID-19 on pregnancy and fetal development. Suggests that the decision to terminate a pregnancy should be based on viral load, transmission generations, range of lung lesions, maternal age and coexisting disorders. (LDO)

20200624-59*
Maternal mortality from COVID-19 in Mexico. Lumbreras-Marquez MI, Campos-Zamora M, de Leon HL-D, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 2, August 2020, pp 266-267
Available from: https://doi.org/10.1002/ijgo.13250
Full URL: https://doi.org/10.1002/ijgo.13250
In this study, we report a 2.3% case fatality rate among parturients with COVID-19 in Mexico. (Author)

20200624-54*
Call to action for a South American network to fight COVID-19 in pregnancy. Costa ML, Pacagnella RC, Guida JP, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 2, August 2020, pp 260-261
Available from: https://doi.org/10.1002/ijgo.13225
Full URL: https://doi.org/10.1002/ijgo.13225
A call to action for joint efforts by South American centers to tackle COVID-19 in pregnancy. (Author)

20200624-50*
Update on clinical outcomes of women with COVID-19 during pregnancy. Zeng Y, Lin L, Yan Q, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 2, August 2020, pp 264-266
Available from: https://doi.org/10.1002/ijgo.13236
Full URL: https://doi.org/10.1002/ijgo.13236

Most women with COVID-19 delivered at or beyond the late preterm period. Some who delivered prematurely had other medical indications for preterm birth. (Author)

20200624-49*

Maternal health and non-communicable disease prevention: An investment case for the post COVID-19 world and need for better health economic data. Kapur A, Hod M (2020), International Journal of Gynecology & Obstetrics vol 150, no 2, August 2020, pp 151-158

Available from: https://doi.org/10.1002/ijgo.13198

Full URL: https://doi.org/10.1002/ijgo.13198

An integrated approach to population health, disease surveillance, and preventive care will dominate the health agenda in the post COVID-19 world. Because of their huge burden and the vulnerability imposed during a health crisis, prevention and care of non-communicable diseases (NCDs) will need to be prioritized even further. Maternal and child health are inextricably linked with NCDs and their risk factors. The intergenerational impact of poor maternal nutrition and health conditions during pregnancy, particularly NCD-related pregnancy complications, can be considered as a multiplier of the ongoing pandemic of NCDs. The economic cost of poor maternal health and NCD-related pregnancy complications is likely very high, but is not adequately researched or documented in the context of long-term population health. Interventions to address NCDs in pregnancy have beneficial effects on short-term pregnancy outcomes; but even more importantly, identifying 'at-risk' mothers and offspring opens up the opportunity for targeted early preventive action. Preventive actions to address obesity, hypertension, type 2 diabetes, and cardiovascular diseases have a common lifestyle approach-identifying any one of these problems in pregnancy provides an opportunity to address them all. Cost-benefit analyses that only focus on the short-term and on one condition do not capture the full value of downstream, long-term benefits for population health. This requires urgent attention from FIGO. (Author)

20200624-45*

Radiological findings and clinical characteristics of pregnant women with COVID -19 pneumonia. Wu X, Sun R, Chen J, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 58-63

Available from: https://doi.org/10.1002/ijgo.13165

Full URL: https://doi.org/10.1002/ijgo.13165

Objective

To study chest CT images and clinical characteristics of COVID -19 pneumonia in pregnant patients to examine any correlation.

Methods

Between December 31, 2019 and March 7, 2020, 23 hospitalized pregnant patients with confirmed COVID -19 were enrolled in the study. Clinical presentations were collected retrospectively from records, including laboratory testing, chest CT imaging, and symptoms. Descriptive analysis and correlation of patients' clinical and CT characteristics were performed. Laboratory results from time of first admission and CT absorption (defined as reduction in lesion area, decrease in density, and absorption of some solid components) were compared between symptomatic and asymptomatic patients.

Results

Fifteen (65.2%) patients were asymptomatic with patchy ground-glass opacity in a single lung lobe. Eight (34.8%) patients were symptomatic with multiple patchy ground-glass shadows, consolidation, and fibrous stripes. Differences in lymphocyte percentage and neutrophil granulocyte rate between first admission and CT absorption were significant ($P < 0.001$). Median absorption time was shorter in the asymptomatic group compared with the symptomatic group (5 vs 10 days; $P < 0.001$). Median hospitalization time between asymptomatic and symptomatic patients was 14 vs 25.5 days; $P > 0.001$. Median absorption time and length of hospitalization for all patients was 6 days (IQR 5-8) and 17 days (IQR 13-25), respectively.

Conclusion

Radiological findings and clinical characteristics in pregnant women with COVID -19 were similar to those of non-pregnant women with COVID -19. Median absorption time and length of hospitalization in asymptomatic patients

were significantly shorter than in symptomatic patients. Lymphocyte percentage and neutrophil granulocyte rate may be used as laboratory indicators of CT absorption. (Author)

20200623-69*

COVID-19 infection during the third trimester of pregnancy: Current clinical dilemmas. Fontanella F, Hannes S, Keating N, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 251, August 2020, pp 268-271

Available from: https://doi.org/10.1016/j.ejogrb.2020.05.053
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.053

The authors present two cases of COVID-19 infection in the third trimester of pregnancy. The first case was a 38-year-old woman with gestational diabetes who was admitted with cough, dyspnoea and oxygen desaturation. The second case was a 28-year-old woman who was admitted with cough, sore throat and diarrhoea. The authors discuss the multidisciplinary considerations related to time of delivery, use of antenatal corticosteroids and thromboprophylaxis. (LDO)

20200623-60*

A practical approach for the management of obstetric and infertile women during the phase two of the novel coronavirus disease 2019 (COVID -19) pandemic. Carbone IF, Conforti A, Farina A, et al (2020), European Journal of Obstetrics &
Gynecology and Reproductive Biology vol 251, August 2020, pp 266-267

Available from: https://doi.org/10.1016/j.ejogrb.2020.06.006
Full URL: https://doi.org/10.1016/j.ejogrb.2020.06.006

The authors present recommendations for the management of obstetric and infertile patients during phase two of the COVID-19 pandemic. Recommendations include a triaging procedure for antenatal care, the use of telemedicine, the continuation of fetal therapy and the resumption of fertility treatment. (LDO)

20200623-57*

Effects of isolation on mood and relationships in pregnant women during the COVID-19 pandemic. Milne SJ, Corbett GA, Hehir MP, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 252, September 2020, pp 610-611

Available from: https://doi.org/10.1016/j.ejogrb.2020.06.009
Full URL: https://doi.org/10.1016/j.ejogrb.2020.06.009

The authors present a study on relationships and maternal mood during COVID-19. 70 women completed the questionnaire between 6 April and 28 April 2020. 4.3% reported the deterioration of relationships with partners and 44% reported low mood due to loneliness. (LDO)

20200623-56*

Covid-19 in pregnant women: General data from a French National Survey. Cohen J, Vignaux O, Jacquemard F (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 251, August 2020, pp 267-268

Available from: https://doi.org/10.1016/j.ejogrb.2020.06.002
Full URL: https://doi.org/10.1016/j.ejogrb.2020.06.002

The authors present the results of a French national survey on pregnant women with confirmed COVID-19 who required treatment or hospitalisation. Out of 194 women 20% were admitted to hospital and 7% required oxygen therapy. Women with severe disease were older, had a higher body mass index (BMI) and were more likely to have a history of diabetes. (LDO)

20200623-53*

Coronavirus: Morning-after pill access 'hit by lockdown'. Anon (2020), BBC News 23 June 2020

Reports on the decline in sales and prescriptions for the morning-after pill during the COVID-19 pandemic. Suggests that limited access to emergency contraception could lead to an increase in unplanned pregnancies. (LDO)

20200622-8*

COVID-19: what are the physical and mental challenges?. Winter GF (2020), British Journal of Midwifery vol 28, no 6, June 2020, pp 342-343

Available from: https://doi.org/10.12968/bjom.2020.28.6.342

Full URL: https://doi.org/10.12968/bjom.2020.28.6.342

George F Winter gives an overview of the impact of the coronavirus on healthcare workers and pregnant women. (Author)

20200622-5*

Collateral damage of the covid-19 pandemic: a Dutch perinatal perspective. Verweij EJ, M'hamdi HI, Steegers EAP, et al (2020), BMJ vol 369, no 8250, 12 June 2020, m2326

Correspondence raising concerns about the collateral damage caused by the covid-19 pandemic. (MB)

20200622-3*

'Women and children last'-effects of the covid-19 pandemic on reproductive, perinatal, and paediatric health. von Dadelszen P, Khalil A, Wolfe I, et al (2020), BMJ vol 369, no 8250, 10 June 2020, m2287

Correspondence discussing the risks to children during the covid-19 pandemic. (MB)

20200622-29*

COVID-19: reflections on childbirth and neonatal care in Italy. Varsalone FF, Dermyshi E (2020), Infant vol 16, no 3, May 2020, pp 101-102

In Italy, the spread of the SARS-CoV-2 infection has hit with an uneven distribution and, fortunately, in the neonatal setting the virus affects fewer patients and with less severity. Nevertheless, the moment of childbirth has turned into a more complex event for healthcare professionals as we have to work with visors, masks and gowns. The continuously increasing number of COVID-19 cases has also given rise to the need for specific protocols to protect pregnant women and newborn babies. (Author)

20200619-37*

Critically ill pregnant patient with COVID-19 and neonatal death within two hours of birth. Li J, Wang Y, Zeng Y, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 126-128

Available from: https://doi.org/10.1002/ijgo.13189

Full URL: https://doi.org/10.1002/ijgo.13189

COVID-19 may lead to a sharp decline in blood oxygen, can cause sudden changes in the fetal intrauterine environment, and could possibly result in neonatal death. (Author)

20200619-36*

Effectiveness of a COVID-19 screening questionnaire for pregnant women at admission to an obstetric unit in Milan. Tassis B, Lunghi G, Frattaruolo MP, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 124-126
Available from: https://doi.org/10.1002/ijgo.13191
Full URL: https://doi.org/10.1002/ijgo.13191

Screening for SARS-Cov-2 at hospital admission using a specific questionnaire is less effective than nasopharyngeal swab but more sustainable, hence it can be considered in contexts with low incidence of the virus. (Author)

20200619-34*

Guidance for the provision of antenatal services during the COVID-19 pandemic. Richens Y, Wilkinson M, Connor D (2020), British Journal of Midwifery vol 28, no 5, May 2020, pp 324-327
Available from: https://doi.org/10.12968/bjom.2020.28.5.324
Full URL: https://doi.org/10.12968/bjom.2020.28.5.324

Novel coronavirus, known as severe acute respiratory syndrome coronavirus 2 (SARS-COV-2), is a new strain of coronavirus causing the COVID-19 infection. The incubation period is estimated at 0-14 days (mean 5-6 days). The majority of people with COVID-19 infection have mild symptoms. Typical symptoms include a fever and cough which may progress to a severe pneumonia causing breathing difficulties. Severe symptoms are more likely in people with weakened immune systems, older people and people with long-term conditions. Pregnant women do not appear to be more susceptible to the consequences of an infection with COVID-19 than the general population. Special consideration should be given to pregnant women with concomitant medical illnesses. There is currently no evidence concerning transmission through genital fluids or breastmilk. (Author)

20200619-17*

Preserving and advocating for essential care for women during the coronavirus disease 2019 pandemic. Robinson EF, Moulder JK, Zerden ML, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 219-220.e1
Available from: https://doi.org/10.1016/j.ajog.2020.05.022
Full URL: https://doi.org/10.1016/j.ajog.2020.05.022

The coronavirus disease 2019 pandemic has redefined 'essential care,' and reproductive healthcare has become a frequently targeted and debated topic. As obstetricians and gynecologists, we stand with our patients and others as advocates for women's reproductive health. With the medical and surgical training to provide all aspects of reproductive healthcare, obstetricians and gynecologists are indispensable and uniquely positioned to advocate for the full spectrum of care that our patients need right now. All patients have a right to these services. Contraception and abortion care remain essential, and we need to work at the local, state, and federal levels on policies that preserve these critical services. We must also support policies that will promote expansion of care, including lengthening Medicaid pregnancy and postpartum coverage. Although we continue to see patients, this is the time to engage outside clinical encounters by participating in lobbying and other advocacy efforts to preserve essential services, protecting the health, life, and welfare of our patients during the coronavirus disease 2019 pandemic. (Author)

20200619-13*

Clinical Characteristics of 46 Pregnant Women with a SARS-CoV-2 Infection in Washington State. Lokken EM, Walker CL, Delaney S, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 6, December 2020, pp 911.e1-911.e14
Available from: https://doi.org/10.1016/j.ajog.2020.05.031

Full URL: https://doi.org/10.1016/j.ajog.2020.05.031

Background
The impact of the coronavirus disease 2019 (Covid-19) on pregnant women is incompletely understood, but early data from case series suggest a variable course of illness from asymptomatic or mild disease to maternal death. It is unclear whether pregnant women manifest enhanced disease similar to influenza viral infection or whether specific risk factors might predispose to severe disease.
Objective
To describe maternal disease and obstetrical outcomes associated with Covid-19 disease in pregnancy to rapidly inform clinical care.
Study Design
Retrospective study of pregnant patients with a laboratory-confirmed severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection from six hospital systems in Washington State between January 21, 2020 and April 17, 2020. Demographics, medical and obstetric history, and Covid-19 encounter data were abstracted from medical records.
Results
A total of 46 pregnant patients with a SARS-CoV-2 infection were identified from hospital systems capturing 40% of births in Washington State. Nearly all pregnant individuals with a SARS-CoV-2 infection were symptomatic (93.5%, n=43) and the majority were in their second or third trimester (43.5%, n=20 and 50.0%, n=23, respectively). Symptoms resolved in a median of 24 days (interquartile range 13-37). Seven women were hospitalized (16%) including one admitted to the intensive care unit. Six cases (15%) were categorized as severe Covid-19 disease with nearly all patients being either overweight or obese prior to pregnancy, asthma or other co-morbidities. Eight deliveries occurred during the study period, including a preterm birth at 33 weeks to improve pulmonary status in a woman with Class III obesity. One stillbirth occurred of unknown etiology.
Conclusions
Nearly 15% of pregnant patients developed severe Covid-19, which occurred primarily in overweight or obese women with underlying conditions. Obesity and Covid-19 may synergistically increase risk for a medically-indicated preterm birth to improve maternal pulmonary status in late pregnancy. Collectively, these findings support categorizing pregnant patients as a higher risk group, particularly for those with chronic co-morbidities. (Author)

20200616-79*

Exclusion of Pregnant Women from Clinical Trials during the Coronavirus Disease 2019 Pandemic: A Review of International Registries. Smith DD, Pippen JL, Adesomo AA, et al (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 792-799

Available from: https://doi.org/10.1055/s-0040-1712103

Full URL: https://doi.org/10.1055/s-0040-1712103

Objective Pregnant women have been historically excluded from clinical trials for nonobstetric conditions, even during prior epidemics. The objective of this review is to describe the current state of research for pregnant women during the coronavirus disease 2019 (COVID-19) pandemic.
Study Design We conducted a search of international trial registries for trials relating to the novel coronavirus. The eligibility criteria for each trial were reviewed for inclusion/exclusion of pregnant women. Relevant data were extracted and descriptive statistics were calculated for individual and combined data. The total number of trials from each registry were compared, as well as the proportions of pregnancy-related trials within each.
Results Among 621,370 trials in the World Health Organization International Clinical Trials Registry, 927 (0.15%) were COVID-19 related. Of those, the majority (52%) explicitly excluded pregnancy or failed to address pregnancy at all (46%) and only 16 (1.7%) were pregnancy specific. When categorized by region, 688 (74.2%) of COVID-19 trials were in Asia, followed by 128 (13.8%) in Europe, and 66 (7.2%) in North America. Of the COVID-19 trials which included

pregnant women, only three were randomized-controlled drug trials.
Conclusion Approximately 1.7% of current COVID-19 research is pregnancy related and the majority of trials either explicitly exclude or fail to address pregnancy. Only three interventional trials worldwide involved pregnant women. The knowledge gap concerning the safety and efficacy of interventions for COVID-19 created by the exclusion of pregnant women may ultimately harm them. While 'ethical' concerns about fetal exposure are often cited, it is in fact unethical to habitually exclude pregnant women from research. (Author)

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
Available from: https://doi.org/10.1055/s-0040-1712164
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)

20200616-77*
N95 Filtering Facepiece Respirator Use during Pregnancy: A Systematic Review. Roeckner JT, Krstić N, Sipe BH, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 995-1001
Available from: https://doi.org/10.1055/s-0040-1712475
Full URL: https://doi.org/10.1055/s-0040-1712475

Objective This study was aimed to systematically review the use of filtering facepiece respirators, such as N95 masks, during pregnancy.
Study Design A comprehensive search for primary literature using Medline, Embase, Scopus, Web of Science, and ClinicalTrials.gov was conducted from inception until April 2020 to find articles reporting outcomes of pregnant women using filtering facepiece respirator (FFR). Studies were selected if they included the use of FFR in pregnant women and reported an outcome of interest including physiologic changes (heart rate, respiratory rate, pulse oximetry, and fetal heart rate tracing) or subjective measures (thermal or exertional discomfort or fit). The Newcastle-Ottawa Quality Assessment scale was used to assess the risk of bias. The main outcome was to describe the physiologic changes in pregnant women compared with nonpregnant women. Due to the small number of studies and heterogeneity of reported outcomes a meta-analysis was not conducted. Results of the studies were synthesized into

a summary of evidence table.
Results We identified four studies, three cohort studies and one crossover study, comprising 42 women using FFR during pregnancy. Risk of bias was judged to be low. Studies were consistent in showing no significant increase in maternal heart rate, respiratory rate, oxygen saturation, and fetal heart rate between pregnant and nonpregnant women using N95 FFRs for short durations. Repeat fit testing was not supported for women gaining the recommended amount of weight during pregnancy. No evidence was found to reach conclusions about prolonged N95 FFR use in pregnancy.
Conclusion Limited duration N95 FFR use during pregnancy is unlikely to impart risk to the pregnant women or her fetus. (Author)

20200616-75*

COVID-19 in Pregnant Women: Case Series from One Large New York City Obstetrical Practice. Fox NS, Melka S (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1002-1004
Available from: https://doi.org/10.1055/s-0040-1712529
Full URL: https://doi.org/10.1055/s-0040-1712529

Objective This study aimed to report a case series of pregnant women in New York City with confirmed or presumed coronavirus disease (COVID-19) infection.
Study Design Beginning March 22, 2020, all pregnant women from one large obstetrical practice in New York City were contacted regularly to inquire about symptoms of COVID-19 (fever, cough, shortness of breath, malaise, anosmia), or sick contacts. A running log was kept of these patients, as well as all patients who underwent COVID-19 testing. For this report, we included every patient with suspected COVID-19 infection, which was defined as at least two symptoms, or a positive COVID-19 nasopharyngeal polymerase chain reaction test.
Results From March 22, 2020 until April 30, 2020, 757 pregnant women in our practice were evaluated and 92 had known or suspected COVID-19 (12.2%, 95% confidence interval [CI]: 10.0-14.7%). Of these 92 women, 33 (36%) had positive COVID-19 test results. Only one woman required hospital admission for 5 days due to COVID-19 (1.1%, 95% CI: 0.2-5.9%). One other woman received home oxygen. No women required mechanical ventilation and there were no maternal deaths. One woman had an unexplained fetal demise at 14 weeks' gestation around the time of her COVID-19 symptoms. Twenty one of the 92 women have delivered, and all were uncomplicated.
Conclusions Among 92 women with confirmed or presumed COVID-19, the overall morbidity was low. These preliminary results are encouraging for pregnant women during the COVID-19 pandemic. (Author)

20200616-50*

Home Birth in the Era of COVID-19: Counseling and Preparation for Pregnant Persons Living with HIV. Premkumar A, Cassimatis I, Berhie SH, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1038-1043
Available from: https://doi.org/10.1055/s-0040-1712513
Full URL: https://doi.org/10.1055/s-0040-1712513

With the coronavirus disease 2019 (COVID-19) pandemic in the United States, a majority of states have instituted 'shelter-in-place' policies effectively quarantining individuals-including pregnant persons-in their homes. Given the concern for COVID-19 acquisition in health care settings, pregnant persons with high-risk pregnancies-such as persons living with HIV (PLHIV)-are increasingly investigating the option of a home birth. Although we strongly recommend hospital birth for PLHIV, we discuss our experience and recommendations for counseling and preparation of pregnant PLHIV who may be considering home birth or at risk for unintentional home birth due to the pandemic. We also discuss issues associated with implementing a risk mitigation strategy involving high-risk births occurring at home during a pandemic. (Author)

20200616-42*

Telehealth Uptake into Prenatal Care and Provider Attitudes during the COVID-19 Pandemic in New York City: A Quantitative and Qualitative Analysis. Madden N, Emeruwa UN, Friedman AM, et al (2020), American Journal of Perinatology vol 37, no 10, August 2020, pp 1005-1014

Available from: https://doi.org/10.1055/s-0040-1712939

Full URL: https://doi.org/10.1055/s-0040-1712939

Objective This study aimed to (1) determine to what degree prenatal care was able to be transitioned to telehealth at prenatal practices associated with two affiliated hospitals in New York City during the novel coronavirus disease 2019 (COVID-19) pandemic and (2) describe providers' experience with this transition.

Study Design Trends in whether prenatal care visits were conducted in-person or via telehealth were analyzed by week for a 5-week period from March 9 to April 12 at Columbia University Irving Medical Center (CUIMC)-affiliated prenatal practices in New York City during the COVID-19 pandemic. Visits were analyzed for maternal-fetal medicine (MFM) and general obstetrical faculty practices, as well as a clinic system serving patients with public insurance. The proportion of visits that were telehealth was analyzed by visit type by week. A survey and semistructured interviews of providers were conducted evaluating resources and obstacles in the uptake of telehealth.

Results During the study period, there were 4,248 visits, of which approximately one-third were performed by telehealth (n = 1,352, 31.8%). By the fifth week, 56.1% of generalist visits, 61.5% of MFM visits, and 41.5% of clinic visits were performed via telehealth. A total of 36 providers completed the survey and 11 were interviewed. Accessing technology and performing visits, documentation, and follow-up using the telehealth electronic medical record were all viewed favorably by providers. In transitioning to telehealth, operational challenges were more significant for health clinics than for MFM and generalist faculty practices with patients receiving public insurance experiencing greater difficulties and barriers to care. Additional resources on the patient and operational level were required to optimize attendance at in-person and video visits for clinic patients.

Conclusion Telehealth was rapidly implemented in the setting of the COVID-19 pandemic and was viewed favorably by providers. Limited barriers to care were observed for practices serving patients with commercial insurance. However, to optimize access for patients with Medicaid, additional patient-level and operational supports were required. (Author)

20200616-4*

How should we treat pregnant women infected with SARS-CoV-2?. Faure-Bardon V, Salomon LJ, Leruez-Ville M, et al (2020),

BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 9, August 2020, pp 1050-1052

Available from: https://doi.org/10.1111/1471-0528.16270

Full URL: https://doi.org/10.1111/1471-0528.16270

Commentary on treatment options for pregnant women with COVID-19. Discusses antiviral agents, protease inhibitors and immunotherapy. (LDO)

20200616-22*

Uptrend in distress and psychiatric symptomatology in pregnant women during the coronavirus disease 2019 pandemic. Berthelot N, Lemieux R, Garon-Bissonnette J, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 7, July 2020, pp 848-855

Available from: https://doi.org/10.1111/aogs.13925

Full URL: https://doi.org/10.1111/aogs.13925

Introduction
Prenatal maternal distress has a negative impact on the course of pregnancy, fetal development, offspring development, and later psychopathologies. The study aimed to determine the extent to which the coronavirus disease 2019 (COVID-19) pandemic may aggravate the prenatal distress and psychiatric symptomatology of pregnant women.
Material and methods
Two cohorts of pregnant volunteer women were evaluated, one that was recruited before the COVID-19 pandemic (n = 496) through advertisements in prenatal clinics in Quebec, Canada, from April 2018 to March 2020; the other (n = 1258) was recruited online during the pandemic from 2 April to 13 April 2020. Prenatal distress and psychiatric symptomatology were measured with the Kessler Distress Scale (K10), Post-traumatic Checklist for DSM-5 (PCL-5), Dissociative Experiences Scale (DES-II), and Positive and Negative Affect Schedule (PANAS).
Results
The 1754 pregnant women (Mage = 29.27, SD = 4.23) were between 4 and 41 gestational weeks (M = 24.80, SD = 9.42), were generally educated (91.3% had post-high-school training), and financially well-resourced (85.3% were above the low-income cut-off). A multivariate analysis of covariance controlling for age, gestational age, household income, education, and lifetime psychiatric disorders showed a large effect size (ES) in the difference between the two cohorts on psychiatric symptoms (Wilks' $\lambda = 0.68$, $F\ 6,1400 = 108.50$, $P < .001$, partial $\eta 2 = 0.32$). According to post-hoc analyses of covariance, the COVID-19 women reported higher levels of depressive and anxiety symptoms (ES = 0.57), dissociative symptoms (ES = 0.22 and ES = 0.25), symptoms of post-traumatic stress disorder (ES = 0.19), and negative affectivity (ES = 0.96), and less positive affectivity (ES = 0.95) than the pre-COVID-19 cohort. Women from the COVID-19 cohort were more likely than pre-COVID-19 women to present clinically significant levels of depressive and anxiety symptoms (OR = 1.94, $\chi 2[1] = 10.05$, $P = .002$). Multiple regression analyses indicated that pregnant women in the COVID-19 cohort having a previous psychiatric diagnosis or low income would be more prone to elevated distress and psychiatric symptoms.
Conclusions
Pregnant women assessed during the COVID-19 pandemic reported more distress and psychiatric symptoms than pregnant women assessed before the pandemic, mainly in the form of depression and anxiety symptoms. Given the harmful consequences of prenatal distress on mothers and offspring, the presently observed upsurge of symptoms in pregnant women calls for special means of clinical surveillance. (Author)

20200616-11*

Coronavirus pay and work problems for pregnant women. Anon (2020), BBC News 10 June 2020
Available from:
https://www.bbc.co.uk/news/av/uk-politics-52994005/coronavirus-pay-and-work-problems-for-pregnant-women
Full URL:
https://www.bbc.co.uk/news/av/uk-politics-52994005/coronavirus-pay-and-work-problems-for-pregnant-women
While many people fear for their career prospects in the pandemic, there are even more problems for some women expecting a baby. Reporter Ellie Price talks to expectant mothers struggling to work safely while shielding, facing unemployment, or possible loss of maternity pay and benefits. (Author, edited)

20200615-6*

Universal severe acute respiratory syndrome coronavirus 2 testing of pregnant women admitted for delivery in 2 Italian regions. Gagliardi L, Danieli R, Suriano G, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 291-292
Available from: https://doi.org/10.1016/j.ajog.2020.05.017
Full URL: https://doi.org/10.1016/j.ajog.2020.05.017

Research letter discussing a study on the SARS-CoV-2 infection rate among women admitted for delivery in two Italian regions. The authors estimate that 83% of infections were unreported and recommend universal testing in all pregnant women admitted for delivery to control the spread of the virus. (LDO)

20200615-45*

The outbreak of coronavirus disease in China: Risk perceptions, knowledge, and information sources among prenatal and postnatal women. Lee T-Y, Zhong Y, Zhou J, et al (2020), Women and Birth: Journal of the Australian College of Midwives 29 May 2020, online

Available from: https://doi.org/10.1016/j.wombi.2020.05.010

Full URL: https://doi.org/10.1016/j.wombi.2020.05.010

Background

The COVID-19 pandemic has created anxiety among members of the public, including all women over the childbirth continuum, who are considered to be at a greater risk of contracting most infectious diseases. Understanding the perspectives of health care consumers on COVID-19 will play a crucial role in the development of effective risk communication strategies. This study aimed to examine COVID-19-related risk perceptions, knowledge, and information sources among prenatal and postnatal Chinese women during the initial phase of the COVID-19 pandemic.

Methods

A cross-sectional survey design was adopted, and a four-section online questionnaire was used to collect data. Using a social media platform, the online survey was administered to 161 participants during the outbreak of COVID-19 in Nanjing, China, in February 2020.

Results

The participants perceived their risk of contracting and dying from COVID-19 to be lower than their risk of contracting influenza, however many of them were worried that they might contract COVID-19. The participants demonstrated adequate knowledge about COVID-19. The three major sources from which they obtained information about COVID-19 were doctors, nurses/midwives, and the television, and they placed a high level of confidence in these sources. There was no significant relationship between the perceived risk of contracting COVID-19 and knowledge about this disease.

Conclusion

The present findings offer valuable insights to healthcare professionals, including midwives, who serve on the frontline and provide care to pregnant women. Although the participants were adequately knowledgeable about COVID-19, they had misunderstood some of the recommendations of the World Health Organisation. (Author)

20200615-2*

How to optimize the management of gestational trophoblastic disease during the coronavirus disease era?. Braga A, Elias KM, Horowitz NS, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 4, October 2020, pp 604-605

Available from: https://doi.org/10.1016/j.ajog.2020.05.042

Full URL: https://doi.org/10.1016/j.ajog.2020.05.042

Discusses changes in the management of gestational trophoblastic disease in the United States and Brazil due to COVID-19. (LDO)

20200610-9*

Coronavirus disease 2019 antibody testing in pregnancy. Zullo F, Di Mascio D, Saccone G (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100142

Available from: https://doi.org/10.1016/j.ajogmf.2020.100142

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100142

Recommends an algorithm for outpatient and inpatient care in cases where rapid antibody testing and personnel are available. The authors draw upon their experiences of antibody testing in the Department of Obstetrics and Gynecology at University of Naples Federico II. (LDO)

20200610-8*

Vertical transmission of coronavirus disease 2019: severe acute respiratory syndrome coronavirus 2 RNA on the fetal side of the placenta in pregnancies with coronavirus disease 2019-positive mothers and neonates at birth. Patanè L, Morotti D, Giunta MR, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100145

Available from: https://doi.org/10.1016/j.ajogmf.2020.100145
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100145

The authors present their experience with placental SARS-CoV-2 markers of infection in a series of mothers who received a diagnosis of COVID-19 in their third trimester of pregnancy. This is the first known report of positive polymerase chain reaction (PCR) results for SARS-CoV-2 in the mother, neonate and the placental tissues. (LDO)

20200610-7*

Maternal-fetal surgery during the coronavirus disease 2019 pandemic. Crombleholme TM, Moise Jr KJ (2020), American
Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100144

Available from: https://doi.org/10.1016/j.ajogmf.2020.100144
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100144

Recommendations for maternal-fetal therapy during the COVID-19 pandemic. Includes guidance on telemedicine consultations, ultrasound surveillance, magnetic resonance imaging, open fetal surgical repair and procedures for life-threatening fetal conditions. (LDO)

20200610-6*

Preeclampsia treatment in severe acute respiratory syndrome coronavirus 2. Joudi N, Henkel A, Lock S, et al (2020), American Journal of Obstetrics & Gynecology MFM 20 May 2020, online

Available from: https://doi.org/10.1016/j.ajogmf.2020.100146
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100146

Discusses the first reported case of management of severe pre-eclampsia with known maternal SARS-CoV-2 infection. Management included magnesium sulphate administration and the patient had no reported exacerbation of pulmonary symptoms. (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

Available from: https://doi.org/10.1016/j.ajogmf.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)

20200610-4*

Perinatal outcomes in critically ill pregnant women with coronavirus disease 2019. Romagano MP, Guerrero K, Spillane N, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100151

Available from: https://doi.org/10.1016/j.ajogmf.2020.100151

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100151

Case series of pregnant women and their neonates requiring critical care for severe COVID-19 in two large hospitals in New Jersey. There were 1053 deliveries in the time period and 8 of the 73 symptomatic positive cases developed a critical illness. The majority of the women were Hispanic and this warrants further investigation given the emerging evidence of racial disparities in COVID-19 related deaths. (LDO)

20200610-3*

NOW!: protection for obstetrical providers and patients. Berghella V (2020), American Journal of Obstetrics & Gynecology
MFM vol 2, no 2, suppl, May 2020, 100109

Available from: https://doi.org/10.1016/j.ajogmf.2020.100109

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100109

Editorial on the impact of COVID-19 on healthcare workers and pregnant women in the United States. Recommends the implementation of strict lockdown measures using the police and military. (LDO)

20200609-9*

Coronavirus: Risk higher for pregnant BAME women. Roxby P (2020), BBC News 8 June 2020

Available from: https://www.bbc.co.uk/news/health-52965722

Full URL: https://www.bbc.co.uk/news/health-52965722

Reports on the findings of a study published in the BMJ (1) and discusses the case of Karen Mannering who tested positive for COVID-19 six months into her pregnancy. Highlights guidance published by the Royal College of Midwives (RCM) aimed at pregnant women. 1. Knight M et al. Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study. BMJ, 8 June 2020, online. (LDO)

20200609-8*

BC Perinatal and Neonatal Health Care Provider Speciality Education Guidance during COVID-19 Pandemic: Took Kit. Perinatal Services BC, Provincial Health Services Authority (2020), Perinatal Services BC June 2020, 22 pages

Available from:
http://www.perinatalservicesbc.ca/Documents/Resources/Alerts/Covid19-provincial-education-guidance-tool-kit.pdf

Full URL:
http://www.perinatalservicesbc.ca/Documents/Resources/Alerts/Covid19-provincial-education-guidance-tool-kit.pdf

This tool kit has been developed to support perinatal and neonatal health care provider speciality education instructors, sites, and Health Authorities in gradually resuming perinatal and neonatal health care provider (HCP) education and training activities, while adhering to BCCDC and WorkSafeBC guidelines. The BC COVID-19 epidemiology is different from many provinces and, as such, the education strategies used in British Columbia may differ from strategies being employed in other Canadian provinces or territories. (Author)

20200608-3*

COVID-19. The new normal for midwives, women and families. Walton G (2020), Midwifery vol 87, August 2020, 102736

Available from: https://doi.org/10.1016/j.midw.2020.102736
Full URL: https://doi.org/10.1016/j.midw.2020.102736

Gill Walton highlights the innovation and resilience of maternity services in the United Kingdom during the COVID-19 pandemic. Discusses new ways of midwives engaging with pregnant women including advice phone lines and the introduction of a safe distancing queuing system using text messaging. (LDO)

20200608-15*

Perinatal mental health during the COVID-19 pandemic. Matvienko-Sikar K, Meedya S, Ravaldi C (2020), Women and Birth: Journal of the Australian College of Midwives vol 33, no 4, July 2020, pp 309-310

Available from: https://doi.org/10.1016/j.wombi.2020.04.006
Full URL: https://doi.org/10.1016/j.wombi.2020.04.006

Discusses the ways in which midwives can support the perinatal mental health of women during the COVID-19 pandemic. The authors suggest that midwives should use the term 'physical distancing' instead of 'social distancing' in order to recognise the importance of social networks, and women should be encouraged to practice mindfulness and other relaxation strategies. (LDO)

20200608-1*

The maternity response to COVID-19: an example from one maternity unit in Taiwan. Liao S-C, Chang Y-S, Chien L-Y, et al (2020), Midwifery vol 88, September 2020, 102756

Available from: https://doi.org/10.1016/j.midw.2020.102756
Full URL: https://doi.org/10.1016/j.midw.2020.102756

Discusses the preventative measures introduced in Taiwan at the government and hospital level to minimise the spread of COVID-19. The authors focus on a maternity unit in Taipei city which introduced designated walkways, fever screening, visitor restrictions, negative-pressure birth rooms and personal protective equipment. (LDO)

20200605-9

The danger indoors. Astrup J (2020), Community Practitioner vol 93, no 3, May-June 2020, pp 14-17

Explores the worrying surge in domestic abuse during the Covid-19 lockdown, the concerns for children living in households where domestic violence is taking place, and what is being done to address it. (Author, edited)

20200605-22*

The impact of covid-19 on midwives' practice in Kenya, Uganda and Tanzania: A reflective account. Pallangyo E, Nakate MG, Maina R, et al (2020), Midwifery vol 89, October 2020, 102775

Available from: https://doi.org/10.1016/j.midw.2020.102775
Full URL: https://doi.org/10.1016/j.midw.2020.102775

Explores the COVID-19 pandemic and its impact on midwifery practice in Kenya, Uganda and Tanzania. The authors suggest that the pandemic has exacerbated the already high maternal and neonatal mortality rates in the three countries. The article discusses travel restrictions, personal protective equipment, access to contraception and antenatal care in rural areas. (LDO)

20200605-2*

Covid-19: Millions of women and children at risk as visits to essential services plummet. Thornton J (2020), BMJ 29 May 2020, online

Available from: https://doi.org/10.1136/bmj.m2171
Full URL: https://doi.org/10.1136/bmj.m2171

Reports that the coronavirus pandemic is threatening the health of women, children and adolescents worldwide, including loss of access to contraception resulting in an estimated 7 million unwanted pregnancies. (MB)

20200605-14

Health equality: can it ever be reached?. Waters J (2020), Community Practitioner vol 93, no 3, May-June 2020, pp 34-39

Landmark reports have shockingly revealed growing gaps between the health and life expectancy of the rich and poor in the UK. Journalist Jo Waters asks why these inequalities exist, plus if and how it's possible to help bridge the divide. (Author)

20200603-41*

Global interim guidance on coronavirus disease 2019 (COVID-19) during pregnancy and puerperium from FIGO and allied partners: Information for healthcare professionals. Poon LC, Yang H, Kapur A, et al (2020), International Journal of Gynecology & Obstetrics vol 149, no 3, June 2020, pp 273-286

Available from: https://doi.org/10.1002/ijgo.13156
Full URL: https://doi.org/10.1002/ijgo.13156

In response to the World Health Organization (WHO) statements and international concerns regarding the coronavirus disease 2019 (COVID-19) outbreak, FIGO has issued comprehensive guidance for the management of pregnant women. (Author)

20200603-31*

Management of the first patient with confirmed COVID-19 in pregnancy in India: From guidelines to frontlines. Sharma, KA, Kumari R, Kachhawa G, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 116-118

Available from: https://doi.org/10.1002/ijgo.13179
Full URL: https://doi.org/10.1002/ijgo.13179

Successful pregnancy management in a patient with confirmed COVID-19 requires a multidisciplinary team approach and facility preparedness, especially during the pandemic. (Author)

20200603-30*

A systematic scoping review of COVID-19 during pregnancy and childbirth. Elshafeey F, Magdi R, Hindi N, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 47-52

Available from: https://doi.org/10.1002/ijgo.13182
Full URL: https://doi.org/10.1002/ijgo.13182

Background

Clinical presentation and outcomes of COVID-19 infection during pregnancy remain limited and fragmented.

Objectives

To summarize the existing literature on COVID-19 infection during pregnancy and childbirth, particularly concerning clinical presentation and outcomes.

Search strategy
A systematic search of LitCovid, EBSCO MEDLINE, CENTRAL, CINAHL, Web of Science, and Scopus electronic databases. The references of relevant studies were also searched.
Selection criteria
Identified titles and abstracts were screened to select original reports and cross-checked for overlap of cases.
Data collection and analysis
A descriptive summary organized by aspects of clinical presentations (symptoms, imaging, and laboratory) and outcomes (maternal and perinatal).
Main results
We identified 33 studies reporting 385 pregnant women with COVID-19 infection: 368 (95.6%) mild; 14 (3.6%) severe; and 3 (0.8%) critical. Seventeen women were admitted to intensive care, including six who were mechanically ventilated and one maternal mortality. A total of 252 women gave birth, comprising 175 (69.4%) cesarean and 77 (30.6%) vaginal births. Outcomes for 256 newborns included four RT-PCR positive neonates, two stillbirths, and one neonatal death.
Conclusion
COVID-19 infection during pregnancy probably has a clinical presentation and severity resembling that in non-pregnant adults. It is probably not associated with poor maternal or perinatal outcomes. (Author)

20200603-29*

Be aware of misdiagnosis-Influenza A H1N1 in a pregnant patient with suspected COVID-19. Fang H, Xingfei P, Yingwei Q, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 119-121
Available from: https://doi.org/10.1002/ijgo.13183
Full URL: https://doi.org/10.1002/ijgo.13183

Following standard and transmission-based precautions is essential in the differential diagnosis of COVID-19 infection. (Author)

20200602-4*

Protect Pregnant and Lactating Women with COVID-19 Through Research, Not from Research. Stuebe A (2020), Breastfeeding Medicine vol 15, no 6, June 2020, pp 423-424

Comments on the lack of research into the safety of the drug remdesivir in pregnancy and breastfeeding. (MB)

20200601-11*

Principles for the testing and triage of women seeking maternity care in hospital settings, during the COVID-19 pandemic: A supplementary framework for maternity healthcare professionals Version 1. Royal College of Obstetricians
and Gynaecologists (2020), London: RCOG 29 May 2020, 13 pages
Available from:
https://www.rcog.org.uk/globalassets/documents/guidelines/2020-05-29-principles-for-the-testing-and-triage-of-women-seeking-maternity-care-in-hospital-settings-during-the-covid-19-pandemic.pdf

This is a dynamic document. It will be continually updated as national guidance evolves, new research emerges, and experience matures. This document is currently specific to maternity care in England where universal patient testing has been introduced. The principles described here would be suitable for informing the development of testing protocols across the rest of the UK. This document is intended to provide supplementary guidance for maternity services on the implementation of the NHS England operational framework in the context of maternity care. (Author, edited)

20200528-9*

Women leaders take action for women and children during COVID-19. The Partnership for Maternal, Newborn & Child Health (2020), Geneva: The Partnership for Maternal, Newborn & Child Health 28 May 2020

Available from: https://www.who.int/pmnch/media/news/2020/women-leaders-action-on-COVID-19/en/

Full URL: https://www.who.int/pmnch/media/news/2020/women-leaders-action-on-COVID-19/en/

Reports on the meeting of women leaders to discuss the impact of COVID-19 on women and children. The meeting highlighted access to contraception, women working as health professionals and caregivers, and children under the age of one at risk of diseases such as diptheria, measles and polio. The leaders included Princess Sarah Zeid of Jordan and Henrietta Fore, Executive Director of UNICEF. (LDO)

20200528-10*

Acute Respiratory Distress Syndrome in a Preterm Pregnant Patient With Coronavirus Disease 2019 (COVID-19). Blauvelt CA, Chiu C, Donovan AL, et al (2020), Obstetrics and Gynecology vol 136, no 1, July 2020, pp 46-51

Available from: https://doi.org/10.1097/AOG.0000000000003949

Full URL: https://doi.org/10.1097/AOG.0000000000003949

BACKGROUND:

Data suggest that pregnant women are not at elevated risk of acquiring severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection or developing severe disease compared with nonpregnant patients. However, management of pregnant patients who are critically ill with coronavirus disease 2019 (COVID-19) infection is complicated by physiologic changes and other pregnancy considerations and requires balancing maternal and fetal well-being.

CASE:

We report the case of a patient at 28 weeks of gestation with acute respiratory distress syndrome (ARDS) from COVID-19 infection, whose deteriorating respiratory condition prompted delivery. Our patient's oxygenation and respiratory mechanics improved within hours of delivery, though she required prolonged mechanical ventilation until postpartum day 10. Neonatal swabs for SARS-CoV-2 and COVID-19 immunoglobulin (Ig) G and IgM were negative.

CONCLUSION:

We describe our multidisciplinary management of a preterm pregnant patient with ARDS from COVID-19 infection and her neonate. (Author)

20200528-1*

APEC are making the following statement regarding antenatal care and preeclampsia risk following the COVID19 pandemic.. Action on Pre-eclampsia (APEC) (2020), Evesham: APEC May 2020. 2 pages

Available from:
https://action-on-pre-eclampsia.org.uk/wp-content/uploads/2020/03/APEC-pre-eclampsia-statement-fluid.pdf

Full URL:
https://action-on-pre-eclampsia.org.uk/wp-content/uploads/2020/03/APEC-pre-eclampsia-statement-fluid.pdf

A statement from Andrew Shennan , the Chair of Trustees, Action on Pre-eclampsia, on the impact of the coronavirus pandemic on pregnant women, prepared with the aim of providing answers to some of the questions being asked at this time. (JSM)

20200527-52*

Women and children will pay for this pandemic - unless we act. Kaljulaid K, Clark H, Varela JA, et al (2020), Geneva: The Partnership for Maternal, Newborn & Child Health 27 May 2020

Available from: https://www.who.int/pmnch/media/news/2020/paying-for-the-pandemic/en/

Full URL: https://www.who.int/pmnch/media/news/2020/paying-for-the-pandemic/en/

Suggests that, in the current coronavirus crisis, we should draw on the knowledge gleaned from past pandemics, such as the Ebola outbreak of 2014-15 in Sierra Leone, to ensure a better outcome for groups such as women, children, adolescents and vulnerable populations, who may have not been given access to sufficient resources and excluded from decision making in the past. (JSM)

20200526-24*

Supporting women facing multiple disadvantage during COVID-19: Guidance for midwives. Bicknell T, Birth Companions
(2020), London: Birth Companions 2020. 4 pages
Available from:
https://hubble-live-assets.s3.amazonaws.com/birth-companions/redactor2_assets/files/253/Supporting_women_facing_multiple_disadvantage_during_COVID-19_Guidance_for_midwives_FINAL.pdf

This guidance for midwives working with women experiencing multiple disadvantage during the COVID-19 pandemic has been developed by Birth Companions and Consultant Midwife Tamsin Bicknell. It draws on recent research to offer insights into women's needs, and key considerations for their maternity care in these challenging times. (Author)

20200525-9*

The Impact of the Current SARS-CoV-2 Pandemic on Neonatal Care. Arnaez J, Montes MT, Herranz-Rubia N, et al (2020),
Frontiers in Pediatrics 30 April 2020, online
Available from: https://doi.org/10.3389/fped.2020.00247
Full URL: https://doi.org/10.3389/fped.2020.00247

Discusses the ways in which the current coronavirus pandemic is affecting care policies in neonatology units and emphasises the importance of contact between mother and newborn baby for bonding. (JSM)

20200525-8*

Dilemmas and Priorities in the Dilemmas and Priorities in the Neonatal Intensive Care Unit Neonatal Intensive Care Unit during the COVID-19 Pandemic. Breindahl M, Zachariassen G, Sønderby Christensen P, et al (2020), Danish Medical Journal vol 67, no 4, April 2020, A205021
Available from: https://ugeskriftet.dk/files/scientific_article_files/2020-04/a205021_web.pdf
Full URL: https://ugeskriftet.dk/files/scientific_article_files/2020-04/a205021_web.pdf

Editorial discussing best practice in caring for families with suspected or confirmed COVID-19 in the NICU. (JSM)

20200525-7*

Current State of Knowledge About SARS-CoV-2 and COVID-19 Disease in Pregnant Women. Gujski M, Humeniuk E, Bojar I
(2020), Medical Science Monitor:International Medical Journal of Experimental and Clinical Research 9 May 2020, online
Available from: https://www.medscimonit.com/abstract/index/idArt/924725
Full URL: https://www.medscimonit.com/abstract/index/idArt/924725

During any epidemic of infectious diseases, pregnant women constitute an extremely sensitive group due to altered physiology and immune functions, and thus altered susceptibility to infection. With regard to the management of pregnant COVID-19 patients, in addition to the treatment of the infection itself, which is not that different from generally accepted principles, it is interesting to consider which obstetric procedures should be used to minimize the adverse effects on mother and child. Questions arise concerning the continuation of pregnancy, how to terminate the

pregnancy, the possibility of virus transmission through the placenta, isolation of the newborn after birth, and breastfeeding. The aim of this study was to review the current state of knowledge about SARS-CoV-2 infection and COVID-19 disease in pregnant women. Because the epidemic began in China, most of the available literature comes from studies conducted there. The studies used to prepare this review article are the first non-randomized studies containing small groups of examined women. They do not provide clear indications, but show that in an epidemic situation, special care should be taken in pregnancy management, making decisions about termination of pregnancy, and handling of the newborn baby to minimize the risk of subsequent health consequences. Further analysis is needed on the incidence of COVID-19 among pregnant women and its consequences. This will allow us to develop recommendations on how to deal with patients in the future in case of repeated epidemic emergencies. (Author)

20200525-6*

The care of pregnant women during the COVID-19 pandemic - response of a large health system in metropolitan New York. Rochelson B, Nimaroff M, Combs A, et al (2020), Journal of Perinatal Medicine 20 May 2020, online
Available from: https://doi.org/10.1515/jpm-2020-0175
Full URL: https://doi.org/10.1515/jpm-2020-0175

The rapid progression of the coronavirus disease 2019 (COVID-19) outbreak presented extraordinary challenges to the US health care system, particularly straining resources in hard hit areas such as the New York metropolitan region. As a result, major changes in the delivery of obstetrical care were urgently needed, while maintaining patient safety on our maternity units. As the largest health system in the region, with 10 hospitals providing obstetrical services, and delivering over 30,000 babies annually, we needed to respond to this crisis in an organized, deliberate fashion. Our hospital footprint for Obstetrics was dramatically reduced to make room for the rapidly increasing numbers of COVID-19 patients, and established guidelines were quickly modified to reduce potential staff and patient exposures. New communication strategies were developed to facilitate maternity care across our hospitals, with significantly limited resources in personnel, equipment, and space. The lessons learned from these unexpected challenges offered an opportunity to reassess the delivery of obstetrical care without compromising quality and safety. These lessons may well prove valuable after the peak of the crisis has passed. (Author)

20200525-4*

Importance of Inclusion of Pregnant and Breastfeeding Women in COVID-19 Therapeutic Trials. LaCourse SM, John-Stewart G, Adams Waldorf KM (2020), Clinical Infectious Diseases 15 April 2020, online
Available from: https://doi.org/10.1093/cid/ciaa444
Full URL: https://doi.org/10.1093/cid/ciaa444

Investigators are employing unprecedented innovation in the design of clinical trials to rapidly and rigorously assess potentially promising therapies for COVID-19; this is in stark contrast to the continued near universal regressive practice of exclusion of pregnant and breastfeeding women from these trials. The few trials which allow their inclusion focus on post-exposure prophylaxis or outpatient treatment of milder disease, limiting the options available to pregnant women with severe COVID-19 to compassionate use of remdesivir, or off-label drug use of hydroxychloroquine or other therapies. These restrictions were put in place despite experience with these drugs in pregnant women. In this Viewpoint, we call attention to the need and urgency to engage pregnant women in COVID-19 treatment trials now in order to develop data-driven recommendations regarding the risks and benefits of therapies in this unique but not uncommon population. (Author)

20200525-25*

COVID-19 in Children, Pregnancy and Neonates: A Review of Epidemiologic and Clinical Features. Zimmermann P, Curtis N (2020), The Pediatric Infectious Disease Journal vol 39, no 6, June 2020, pp 469-477
Available from: https://doi.org/10.1097/inf.0000000000002700

Full URL: https://doi.org/10.1097/inf.0000000000002700

The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic has spread rapidly across the globe. In contrast to initial reports, recent studies suggest that children are just as likely as adults to become infected with the virus but have fewer symptoms and less severe disease. In this review, we summarize the epidemiologic and clinical features of children infected with SARS-CoV-2 reported in pediatric case series to date. We also summarize the perinatal outcomes of neonates born to women infected with SARS-CoV-2 in pregnancy. We found 11 case series including a total of 333 infants and children. Overall, 83% of the children had a positive contact history, mostly with family members. The incubation period varied between 2 and 25 days with a mean of 7 days. The virus could be isolated from nasopharyngeal secretions for up to 22 days and from stool for more than 30 days. Co-infections were reported in up to 79% of children (mainly mycoplasma and influenza). Up to 35% of children were asymptomatic. The most common symptoms were cough (48%; range 19%-100%), fever (42%; 11%-100%) and pharyngitis (30%; 11%-100%). Further symptoms were nasal congestion, rhinorrhea, tachypnoea, wheezing, diarrhea, vomiting, headache and fatigue. Laboratory test parameters were only minimally altered. Radiologic findings were unspecific and included unilateral or bilateral infiltrates with, in some cases, ground-glass opacities or consolidation with a surrounding halo sign. Children rarely needed admission to intensive care units (3%), and to date, only a small number of deaths have been reported in children globally. Nine case series and 2 case reports described outcomes of maternal SARS-CoV-2 infection during pregnancy in 65 women and 67 neonates. Two mothers (3%) were admitted to intensive care unit. Fetal distress was reported in 30% of pregnancies. Thirty-seven percent of women delivered preterm. Neonatal complications included respiratory distress or pneumonia (18%), disseminated intravascular coagulation (3%), asphyxia (2%) and 2 perinatal deaths. Four neonates (3 with pneumonia) have been reported to be SARS-CoV-2 positive despite strict infection control and prevention procedures during delivery and separation of mother and neonates, meaning vertical transmission could not be excluded. (Author)

20200525-22*
Potential Maternal and Infant Outcomes From (Wuhan) Coronavirus 2019-nCoV Infecting Pregnant Women: Lessons From SARS, MERS, and Other Human Coronavirus Infections. Schwartz DA, Graham AL (2020), Viruses vol 12, no 2, February 2020, Article no: 194
Available from: https://doi.org/10.3390/v12020194
Full URL: https://doi.org/10.3390/v12020194

In early December 2019 a cluster of cases of pneumonia of unknown cause was identified in Wuhan, a city of 11 million persons in the People's Republic of China. Further investigation revealed these cases to result from infection with a newly identified coronavirus, termed the 2019-nCoV. The infection moved rapidly through China, spread to Thailand and Japan, extended into adjacent countries through infected persons travelling by air, eventually reaching multiple countries and continents. Similar to such other coronaviruses as those causing the Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS), the new coronavirus was reported to spread via natural aerosols from human-to-human. In the early stages of this epidemic the case fatality rate is estimated to be approximately 2%, with the majority of deaths occurring in special populations. Unfortunately, there is limited experience with coronavirus infections during pregnancy, and it now appears certain that pregnant women have become infected during the present 2019-nCoV epidemic. In order to assess the potential of the Wuhan 2019-nCoV to cause maternal, fetal and neonatal morbidity and other poor obstetrical outcomes, this communication reviews the published data addressing the epidemiological and clinical effects of SARS, MERS, and other coronavirus infections on pregnant women and their infants. Recommendations are also made for the consideration of pregnant women in the design, clinical trials, and implementation of future 2019-nCoV vaccines. (Author)

20200525-19*

Management of the Mother-Infant Dyad With Suspected or Confirmed SARS-CoV-2 Infection in a Highly Epidemic Context. Pietrasanta C, Pugni L, Ronchi A, et al (2020), Journal of Neonatal-Perinatal Medicine 20 May 2020, online
Available from: https://doi.org/10.3233/npm-200478
Full URL: https://doi.org/10.3233/npm-200478

Addresses a number of aspects of the mother-infant dyad management during SARS-CoV-2 epidemic. Networking among maternity centers and anticipatory planning is essential to organise the assistance to mothers and neonates in maternity and neonatal wards. Early identification of SARS-CoV-2 infected mothers, before delivery, allows their management through dedicated protocols and minimizes the risk of contagion for other patients and healthcare providers. Vertical transmission of SARS-CoV-2 cannot be excluded at present, and should be ruled out as soon as possible after birth. Rooming in of infected mothers and neonates, provided their good clinical conditions, is not contraindicated based on current knowledge. The choice of breastfeeding should be carefully discussed with parents based on current, evolving scientific evidence. (Author)

20200525-16*

Near-term Pregnant Women's Attitude Toward, Concern About and Knowledge of the COVID-19 Pandemic. Yassa M, Birol P, Yirmibes C, et al (2020), The Journal of Maternal-Fetal and Neonatal Medicine vol 33, no 22, 2020, pp 3827-3834
Available from: https://doi.org/10.1080/14767058.2020.1763947
Full URL: https://doi.org/10.1080/14767058.2020.1763947

Background: COVID-19 is a novel type of the coronavirus family with an incompletely described clinical course. Little is known about the psychological aspects, particularly for vulnerable populations including pregnant women.Objectives: To understand the attitude, concerns, and knowledge of the non-infected pregnant women toward the COVID-19 outbreak in order to constitute base data for detailed counseling and to develop targeted messages.Patients and methods: This cross-sectional survey research presented analysis of prospectively collected data yielded at a single tertiary 'Coronavirus Pandemic Hospital' referral center for a ten days period following the first confirmed death due to the COVID-19 pandemic in Turkey. Non-infected women with a confirmed pregnancy over 30th gestational week were consecutively included. A patient-reported non-validated questionnaire formed by the expert committee that includes 15 specific questions was used. Non-infected, pregnant women over 30th gestational week who applied to the outpatient clinic were consecutively included. A total of 213 women were enrolled, 37 were excluded: 7 for being in the first trimester, 3 were illiterate, and 27 were Syrian refugees having difficulties in translation.Results: A total of 172 pregnant women were included. Overall, four women refused to participate to the survey (1.9%). The mean age was 27.5 ± 5.3 years. Median gestational week and parity were 35 ± 11 weeks and 1 ± 2, respectively. Pregnant women were observed to trust the authorities (65%) and the healthcare staff (92.4%), and their respect was increased (82.5%) during the outbreak. Majority of the women (87.2%) comply with the self-quarantine rules. Half of the women (52%) reported that they felt vulnerable and predominantly were concerned (80%). Approximately one-third of the women constantly keep thinking that they may get infected (35.5%) or they might get infected during/following the delivery or their baby might get infected after being born (42%). Half of the women (50%) were reported that they either had no idea about or think the breastfeeding is not safe during the outbreak. About 45% of the women were confused or had doubts about if the mode of delivery may be affected by the pandemic. Greater part of the participants does not know if COVID-19 might cause birth defects (76%) or preterm birth (64.5%). Counseling flow keys helping pregnant women to overcome misleads, regarding the COVID-19 outbreak is proposed.Conclusions: Non-infected pregnant women with a viable pregnancy at near term were observed to have positive attitude and compliance toward the COVID-19 outbreak and frontline healthcare staff; increased concern and vulnerability; and restricted knowledge about the pregnancy-related outcomes. While the clinical evidence was growing rapidly, this data may guide obstetricians and midwives to perceive what accurate information should be provided to the pregnant women. (Author)

20200525-14*

Clinical Course of Coronavirus Disease-2019 in Pregnancy. Pereira A, Cruz-Melguizo S, Adrien M, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 7, July 2020, pp 839-847

Available from: https://doi.org/10.1111/aogs.13921

Full URL: https://doi.org/10.1111/aogs.13921

Introduction: The aim of this study is to report our clinical experience in the management of pregnant women infected with Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) during the first thirty days of the Coronavirus disease (COVID-19) pandemic.
Material and methods: We reviewed clinical data from the first 60 pregnant women with COVID-19 whose care was managed at Puerta de Hierro University Hospital, Madrid, Spain from March 14th to April 14th , 2020. Demographic data, clinical findings, laboratory test results, imaging findings, treatment received, and outcomes were collected. An analysis of variance (Kruskal-Wallis test) was performed to compare the medians of laboratory parameters. Fisher's exact test was used to evaluate categorical variables. A correspondence analysis was used to explore associations between variables.
Results: A total of 60 pregnant women were diagnosed with COVID-19. The most common symptoms were fever and cough (75.5%, each) followed by dyspnea (37.8%). Forty-one patients (68.6%) required hospital admission (18 due to disease worsening and 23 for delivery) of whom 21 patients (35%) underwent pharmacological treatment, including hydroxychloroquine, antivirals, antibiotics and tocilizumab. No renal or cardiac failures or maternal deaths were reported. Lymphopenia (50%), thrombocytopenia (25%), and elevated C-reactive protein (CRP) (59%) were observed in the early stages of the disease. Median CRP, D-dimer and the neutrophil/lymphocyte ratio were elevated. High CRP and D-dimer levels were the parameters most frequently associated with severe pneumonia. The Neutrophil/lymphocyte ratio was found to be the most sensitive marker for disease improvement (relative risk: 6.65; 95% CI: 4.1-5.9). During the study period, 18 of the women (78%) delivered vaginally. All newborns tested negative for SARS-CoV-2 and none of them were infected during breastfeeding. No SARS-CoV-2 was detected in placental tissue.
Conclusions: Most of the pregnant COVID-19 positive patients had a favorable clinical course. However, one-third of them developed pneumonia, of whom 5% presented a critical clinical status. CRP and D-dimer levels positively correlated with severe pneumonia and the neutrophil/lymphocyte ratio decreased as the patients improved clinically. Seventy-eight percent of patients had a vaginal delivery. No vertical or horizontal transmissions were diagnosed in the neonates during labor or breastfeeding. (Author)

20200525-10*

SARS-CoV-2 Infection in Pregnancy - a Review of the Current Literature and Possible Impact on Maternal and Neonatal Outcome. Stumpfe FM, Titzmann A, Schneider MO, et al (2020), Geburtshilfe und Frauenheilkunde vol 80, no 4, 2020, pp 380-390

Available from:
https://www.thieme-connect.de/products/ejournals/html/10.1055/a-1134-5951?articleLanguage=en

Full URL: https://www.thieme-connect.de/products/ejournals/html/10.1055/a-1134-5951?articleLanguage=en

In December 2019, cases of pneumonia of unknown cause first started to appear in Wuhan in China; subsequently, a new coronavirus was soon identified as the cause of the illness, now known as Coronavirus Disease 2019 (COVID-19). Since then, infections have been confirmed worldwide in numerous countries, with the number of cases steadily rising. The aim of the present review is to provide an overview of the new severe acute respiratory syndrome (SARS) coronavirus 2 (SARS-CoV-2) and, in particular, to deduce from it potential risks and complications for pregnant patients. For this purpose, the available literature on cases of infection in pregnancy during the SARS epidemic of 2002/2003, the MERS (Middle East respiratory syndrome) epidemic ongoing since 2012, as well as recent publications on cases infected with SARS-CoV-2 in pregnancy are reviewed and reported. Based on the literature available at the

moment, it can be assumed that the clinical course of COVID-19 disease may be complicated by pregnancy which could be associated with a higher mortality rate. It may also be assumed at the moment that transmission from mother to child in utero is unlikely. Breastfeeding is possible once infection has been excluded or the disease declared cured. (Author)

20200522-18*

Coronavirus: Pregnant nurse died of pneumonia, Covid-19 and Caesarean. Anon (2020), BBC News 21 May 2020
Available from: https://www.bbc.co.uk/news/uk-england-beds-bucks-herts-52752818
Full URL: https://www.bbc.co.uk/news/uk-england-beds-bucks-herts-52752818

Reports that an inquest has been told a pregnant nurse who had contracted COVID-19 and pneumonia died after her baby daughter was delivered by caesarean section. States that Mary Agyeiwaa Agyapong was admitted to Luton and Dunstable University Hospital, where she worked, with shortness of breath. She was diagnosed with coronavirus in the 35th week of her pregnancy. (JSM)

20200522-17*

Immunomodulatory drugs: temporary pregnancy prevention guidance during coronavirus (COVID-19). Medicines and Healthcare Products Regulatory Authority (2020), London: MHRA 21 May 2020

Available from:
https://www.gov.uk/guidance/immunomodulatory-drugs-temporary-pregnancy-prevention-guidance-during-coronavirus-covid-19

Covering thalidomide, lenalidomide, and pomalidomide: temporary guidance for pregnancy prevention arrangements for patients taking them during COVID-19. It has been agreed for temporary modifications to be made to the pregnancy prevention programmes for these medicines to facilitate home pregnancy testing and remote consultations, where clinically appropriate, during the COVID-19 pandemic.(Author)

20200522-16*

Immunomodulatory drugs and pregnancy prevention: temporary advice for management during coronavirus (COVID-19). Medicines and Healthcare Products Regulatory Agency (2020), Drug Safety Update vol 13, no 10, May 2020
Available from:
https://www.gov.uk/drug-safety-update/immunomodulatory-drugs-and-pregnancy-prevention-temporary-advice-for-management-during-coronavirus-covid-19

Guidance has been published about thalidomide, lenalidomide, and pomalidomide and the use of remote consultations and home pregnancy testing for patients taking them during COVID-19. (Author)

20200522-15*

Valproate Pregnancy Prevention Programme: temporary advice for management during coronavirus (COVID-19). Medicines and Healthcare Products Regulatory Agency (2020), London: MHRA 6 May 2020
Available from:
https://www.gov.uk/guidance/valproate-pregnancy-prevention-programme-temporary-advice-for-management-during-coronavirus-covid-19

Guidance for specialists for initiation of valproate in female patients and for annual review and pregnancy testing to support adherence to pregnancy prevention requirements during the pandemic. (Author)

20200522-10*

Valproate Pregnancy Prevention Programme: temporary advice for management during coronavirus (COVID-19). Medicines and Healthcare Products Regulatory Agency (2020), Drug Safety Update vol 13, no 10, May 2020,
Available from:
https://www.gov.uk/drug-safety-update/valproate-pregnancy-prevention-programme-temporary-advice-for-management-during-coronavirus-covid-19

Guidance has been published to support initiation of valproate in female patients and for annual review and pregnancy testing during the coronavirus pandemic. (Author)

20200522-1*

Antenatal corticosteroid therapy and COVID-19: Pathophysiological considerations. Sichitiu J, Fakhouri F, Desseauve D (2020), Acta Obstetricia et Gynecologica Scandinavica 17 May 2020, online
Available from: https://doi.org/10.1111/aogs.13887
Full URL: https://doi.org/10.1111/aogs.13887

Correspondence urging caution regarding the administration of antenatal corticosteroids during the early phase of COVID-19. (MB)

20200521-44*

Severe COVID-19 during Pregnancy and Possible Vertical Transmission. Alzamora MC, Paredes T, Caceres D, et al (2020),
American Journal of Perinatology vol 37, no 8, June 2020, pp 861-865
Available from: https://doi.10.1055/s-0040-1710050
Full URL: https://doi.10.1055/s-0040-1710050

There are few cases of pregnant women with novel corona virus 2019 (COVID-19) in the literature, most of them with a mild illness course. There is limited evidence about in utero infection and early positive neonatal testing. A 41-year-old G3P2 with a history of previous cesarean deliveries and diabetes mellitus presented with a 4-day history of malaise, low-grade fever, and progressive shortness of breath. A nasopharyngeal swab was positive for COVID-19, COVID-19 serology was negative. The patient developed respiratory failure requiring mechanical ventilation on day 5 of disease onset. The patient underwent a cesarean delivery, and neonatal isolation was implemented immediately after birth, without delayed cord clamping or skin-to-skin contact. The neonatal nasopharyngeal swab, 16 hours after delivery, was positive for severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) real-time polymerase chain reaction (RT-PCR), and immunoglobulin (Ig)-M and IgG for SARS-CoV-2 were negative. Maternal IgM and IgG were positive on postpartum day 4 (day 9 after symptom onset). We report a severe presentation of COVID-19 during pregnancy. To our knowledge, this is the earliest reported positive PCR in the neonate, raising the concern for vertical transmission. We suggest pregnant women should be considered as a high-risk group and minimize exposures for these reasons. (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

Available from: https://doi.10.1055/s-0040-1709993
Full URL: https://doi.10.1055/s-0040-1709993

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)

20200521-25*

Neonatal Late Onset Infection with Severe Acute Respiratory Syndrome Coronavirus 2. Buonsenso D, Costa S, Sanguinetti M, et al (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 869-872
Available from: https://doi.10.1055/s-0040-1710541
Full URL: https://doi.10.1055/s-0040-1710541

Objective To date, no information on late-onset infection in newborns to mother with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) contracted in pregnancy are available. This study aimed to evaluate postdischarge SARS-CoV-2 status of newborns to mothers with COVID-19 in pregnancy that, at birth, were negative to SARS-CoV-2.
Study Design This is an observational study of neonates born to mothers with coronavirus disease 2019 (COVID-19).
Results Seven pregnant women with documented SARS-CoV-2 infection have been evaluated in our institution. One woman had a spontaneous abortion at 8 weeks of gestational age, four women recovered and are still in follow-up, and two women delivered. Two newborns were enrolled in the study. At birth and 3 days of life, newborns were negative to SARS-CoV-2. At 2-week follow-up, one newborn tested positive although asymptomatic.
Conclusion Our findings highlight the importance of follow-up of newborns to mothers with COVID-19 in pregnancy, since they remain at risk of contracting the infection in the early period of life and long-term consequences are still unknown. (Author)

20200520-31*

Caring for Pregnant Patients with COVID-19: Practical Tips Getting from Policy to Practice. London V, McLaren Jr R, Stein J, et al (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 850-853
Available from: https://doi.10.1055/s-0040-1710539
Full URL: https://doi.10.1055/s-0040-1710539

Novel coronavirus disease 2019 (COVID-19) is a pandemic with most American cases in New York. As an institution residing in a high-prevalence zip code, with over 8,000 births annually, we have cared for over 80 COVID-19-infected pregnant women, and have encountered many challenges in applying new national standards for care. In this article, we review how to change outpatient and inpatient practices, develop, and disseminate new hospital protocols, and we highlight the psychosocial challenges for pregnant patients and their providers. (Author)

20200519-7*

Clinical and CT imaging features of the COVID-19 pneumonia: Focus on pregnant women and children. Liu H, Liu F, Li J, et al (2020), Journal of Infection vol 80, no 5, May 2020, pp E7-E13
Available from: https://doi.org/10.1016/j.jinf.2020.03.007
Full URL: https://doi.org/10.1016/j.jinf.2020.03.007

Background
The ongoing outbreak of COVID-19 pneumonia is globally concerning. We aimed to investigate the clinical and CT features in the pregnant women and children with this disease, which have not been well reported.
Methods
Clinical and CT data of 59 patients with COVID-19 from January 27 to February 14, 2020 were retrospectively reviewed,

including 14 laboratory-confirmed non-pregnant adults, 16 laboratory-confirmed and 25 clinically-diagnosed pregnant women, and 4 laboratory-confirmed children. The clinical and CT features were analyzed and compared.
Findings
Compared with the non-pregnant adults group (n = 14), initial normal body temperature (9 [56%] and 16 [64%]), leukocytosis (8 [50%] and 9 [36%]) and elevated neutrophil ratio (14 [88%] and 20 [80%]), and lymphopenia (9 [56%] and 16 [64%]) were more common in the laboratory-confirmed (n = 16) and clinically-diagnosed (n = 25) pregnant groups. Totally 614 lesions were detected with predominantly peripheral and bilateral distributions in 54 (98%) and 37 (67%) patients, respectively. Pure ground-glass opacity (GGO) was the predominant presence in 94/131 (72%) lesions for the non-pregnant adults. Mixed consolidation and complete consolidation were more common in the laboratory-confirmed (70/161 [43%]) and clinically-diagnosed (153/322 [48%]) pregnant groups than 37/131 (28%) in the non-pregnant adults (P = 0·007, P < 0·001). GGO with reticulation was less common in 9/161 (6%) and 16/322 (5%) lesions for the two pregnant groups than 24/131 (18%) for the non-pregnant adults (P = 0·001, P < 0·001). The pulmonary involvement in children with COVID-19 was mild with a focal GGO or consolidation. Twenty-three patients underwent follow-up CT, revealing progression in 9/13 (69%) at 3 days whereas improvement in 8/10 (80%) at 6-9 days after initial CT scans.
Interpretation
Atypical clinical findings of pregnant women with COVID-19 could increase the difficulty in initial identification. Consolidation was more common in the pregnant groups. The clinically-diagnosed cases were vulnerable to more pulmonary involvement. CT was the modality of choice for early detection, severity assessment, and timely therapeutic effects evaluation for the cases with epidemic and clinical features of COVID-19 with or without laboratory confirmation. The exposure history and clinical symptoms were more helpful for screening in children versus chest CT. (Author)

20200519-22*

Perinatal aspects on the covid-19 pandemic: a practical resource for perinatal-neonatal specialists. Mimouni F, Lakshminrusimha S, Pearlman SA, et al (2020), Journal of Perinatology vol 40, no 5, May 2020, pp 820-826
Available from: https://doi.org/10.1038/s41372-020-0665-6
Full URL: https://doi.org/10.1038/s41372-020-0665-6

Background
Little is known about the perinatal aspects of COVID-19.
Objective
To summarize available evidence and provide perinatologists/neonatologists with tools for managing their patients.
Methods
Analysis of available literature on COVID-19 using Medline and Google scholar.
Results
From scant data: vertical transmission from maternal infection during the third trimester probably does not occur or likely it occurs very rarely. Consequences of COVID-19 infection among women during early pregnancy remain unknown. We cannot conclude if pregnancy is a risk factor for more severe disease in women with COVID-19. Little is known about disease severity in neonates, and from very few samples, the presence of SARS-CoV-2 has not been documented in human milk. Links to websites of organizations with updated COVID-19 information are provided. Infographics summarize an approach to the pregnant woman or neonate with suspected or confirmed COVID-19.
Conclusions
As the pandemic continues, more data will be available that could lead to changes in current knowledge and recommendations. (Author)

20200519-21*

Sex and Gender Disparities in the COVID-19 Pandemic. Gausman J, Langer A (2020), Journal of Women's Health vol 29, no 4, April 2020, pp 465-466

Available from: https://doi.org/10.1089/jwh.2020.8472

Full URL: https://doi.org/10.1089/jwh.2020.8472

Commentary on the disproportionate effects of COVID-19 on women. Highlights the specific impact of the outbreak on pregnant women, including disruption to prenatal appointments, delayed responses to emergency obstetric complications and the lack of social support in the perinatal period. The authors also discuss the impact on non-pregnant women, including the increased risks of unintended pregnancy if contraceptives cannot be accessed, and the risk of disease transmission to the high percentage of female caregivers and frontline health workers. (LDO)

20200518-11*

Antibodies in Infants Born to Mothers With COVID-19 Pneumonia. Zeng H, Xu C, Fan J, et al (2020), JAMA (Journal of the American Medical Association) vol 323, no 18, 12 May 2020, pp 1848-1849

Available from: https://doi.org/10.1001/jama.2020.4861

Full URL: https://doi.org/10.1001/jama.2020.4861

This study describes results of IgM and IgG antibody testing from throat swabs of newborns born to mothers with COVID-19 pneumonia. (Author)

20200515-8*

Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. Roberton T, Carter ED, Chou VB, et al (2020), The Lancet Global Health vol 8, no 7, July 2020, pp E901-E908

Available from: https://doi.org/10.1016/S2214-109X(20)30229-1

Full URL: https://doi.org/10.1016/S2214-109X(20)30229-1

Background

While the COVID-19 pandemic will increase mortality due to the virus, it is also likely to increase mortality indirectly. In this study, we estimate the additional maternal and under-5 child deaths resulting from the potential disruption of health systems and decreased access to food.

Methods

We modelled three scenarios in which the coverage of essential maternal and child health interventions is reduced by 9·8-51·9% and the prevalence of wasting is increased by 10-50%. Although our scenarios are hypothetical, we sought to reflect real-world possibilities, given emerging reports of the supply-side and demand-side effects of the pandemic. We used the Lives Saved Tool to estimate the additional maternal and under-5 child deaths under each scenario, in 118 low-income and middle-income countries. We estimated additional deaths for a single month and extrapolated for 3 months, 6 months, and 12 months.

Findings

Our least severe scenario (coverage reductions of 9·8-18·5% and wasting increase of 10%) over 6 months would result in 253 500 additional child deaths and 12 200 additional maternal deaths. Our most severe scenario (coverage reductions of 39·3-51·9% and wasting increase of 50%) over 6 months would result in 1 157 000 additional child deaths and 56 700 additional maternal deaths. These additional deaths would represent an increase of 9·8-44·7% in under-5 child deaths per month, and an 8·3-38·6% increase in maternal deaths per month, across the 118 countries. Across our

three scenarios, the reduced coverage of four childbirth interventions (parenteral administration of uterotonics, antibiotics, and anticonvulsants, and clean birth environments) would account for approximately 60% of additional maternal deaths. The increase in wasting prevalence would account for 18-23% of additional child deaths and reduced coverage of antibiotics for pneumonia and neonatal sepsis and of oral rehydration solution for diarrhoea would together account for around 41% of additional child deaths.
Interpretation
Our estimates are based on tentative assumptions and represent a wide range of outcomes. Nonetheless, they show that, if routine health care is disrupted and access to food is decreased (as a result of unavoidable shocks, health system collapse, or intentional choices made in responding to the pandemic), the increase in child and maternal deaths will be devastating. We hope these numbers add context as policy makers establish guidelines and allocate resources in the days and months to come.
Funding
Bill & Melinda Gates Foundation, Global Affairs Canada. (Author)

20200515-7*
Consider pregnancy in COVID-19 therapeutic drug and vaccine trials. Whitehead CL, Walker SP (2020), The Lancet vol 395, no 10237, 23 May 2020, p E92
Available from: https://doi.org/10.1016/S0140-6736(20)31029-1
Full URL: https://doi.org/10.1016/S0140-6736(20)31029-1

Correspondence urging researchers to afford pregnant women the same autonomy offered to other adults to decide about participation in clinical trials. (MB)

20200514-9*
Is there evidence of intra-uterine vertical transmission potential of COVID-19 infection in samples tested by quantitative RT-PCR?. Cheruiyot I, Henry BM, Lippi G (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 249, June 2020, pp 100-101
Available from: https://doi.org/10.1016/j.ejogrb.2020.04.034
Full URL: https://doi.org/10.1016/j.ejogrb.2020.04.034
Systematic review of COVID-19 in pregnant women and the risk of intrauterine vertical transmission. The findings suggest that there is currently no evidence of mother-to-child transmission in the third trimester. The potential of transmission in the first and second trimesters is still unknown. (LDO)

20200514-8*
Oligohydramnion in COVID19. Aliji N, Aliu F (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 249, June 2020, p 102
Available from: https://doi.org/10.1016/j.ejogrb.2020.04.047
Full URL: https://doi.org/10.1016/j.ejogrb.2020.04.047
Discusses the case of a 27-year-old woman at 34 weeks' gestation who presented with oligohydramnios and symptoms of COVID-19. The patient underwent a caesarean section due to fetal distress. The mother later tested positive and the premature infant tested negative for the virus. (LDO)

20200514-73*

Coronavirus: Planning your birth. NHS England (2020), London: NHS England May 2020. 2 pages
Available from:
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)

20200514-7*

Obstetric network reorganization during the COVID-19 pandemic: Suggestions from an Italian regional model. Giannubilo SR, Giannella L, Carpini GD, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 249, June 2020, pp 103-105
Available from: https://doi.org/10.1016/j.ejogrb.2020.04.062
Full URL: https://doi.org/10.1016/j.ejogrb.2020.04.062

Discusses the obstetric network model used in Italy during the COVID-19 outbreak. The model includes separate hospital entrances and exits, local protocols for the triage of pregnant women with symptoms, single occupancy rooms, the use of personal protective equipment, restricted numbers of visitors, surgical masks during breastfeeding, the swabbing of all neonates born to positive or high suspicion mothers, and the discharge of asymptomatic women two days after delivery. (LDO)

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
Available from: https://doi.org/10.1016/j.ajog.2020.04.013
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)

20200514-65*

Coronavirus disease 2019 in pregnant women: A report based on 116 cases. Yan J, Guo J, Fan C, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 111.e1-111.e14

Available from: https://doi.org/10.1016/j.ajog.2020.04.014
Full URL: https://doi.org/10.1016/j.ajog.2020.04.014

Background
The coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is a global public health emergency. Data on the effect of COVID-19 in pregnancy are limited to small case series.
Objectives
To evaluate the clinical characteristics and outcomes in pregnancy and the vertical transmission potential of SARS-CoV-2 infection.
Study Desigh
Clinical records were retrospectively reviewed for 116 pregnant women with COVID-19 pneumonia from 25 hospitals in China between January 20 and March 24, 2020. Evidence of vertical transmission was assessed by testing for SARS-CoV-2 in amniotic fluid, cord blood, and neonatal pharyngeal swab samples.
Results
The median gestational age on admission was 38+0 (IQR 36+0-39+1) weeks. The most common symptoms were fever (50.9%, 59/116) and cough (28.4%, 33/116); 23.3% (27/116) patients presented without symptoms. Abnormal radiologic findings were found in 96.3% (104/108) of cases. There were eight cases (6.9%, 8/116) of severe pneumonia but no maternal deaths. One of eight patients (1/8) that presented in the first- and early-second-trimester had a missed spontaneous abortion. Twenty-one of 99 patients (21.2%, 21/99) that had delivered had preterm birth, including six with preterm premature ruptured of membranes. The rate of spontaneous preterm birth before 37 weeks was 6.1% (6/99). There was one case of severe neonatal asphyxia that resulted in neonatal death. Eighty-six of the 100 neonates that had testing for SARS-CoV-2 had negative results, of these ten neonates had paired amniotic fluid and cord blood samples that were tested negative for SARS-CoV-2.
Conclusions
SARS-CoV-2 infection during pregnancy is not associated with an increased risk of spontaneous abortion and spontaneous preterm birth. There is no evidence of vertical transmission of SARS-CoV-2 infection when the infection manifests during the third-trimester of pregnancy. (Author)

20200514-63*

Maternal Death Due to COVID-19 Disease. Hantoushzadeh S, Shamshirsaz AA, Aleyasin a, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 109.e1-109.e16

Available from: https://doi.org/10.1016/j.ajog.2020.04.030
Full URL: https://doi.org/10.1016/j.ajog.2020.04.030

Background
Despite 2.5 million infections and 169,000 deaths worldwide (current as of April 20, 2020), no maternal deaths and only

a few pregnant women afflicted with severe respiratory morbidity had been reported to be related to COVID-19 disease. Given the disproportionate burden of severe and mortal respiratory disease previously documented among pregnant women following other related coronavirus outbreaks (SARS-CoV in 2003 and MERS-CoV) and influenza pandemics over the last century, the absence of reported maternal morbidity and mortality with COVID-19 disease is unexpected.
Objectives
To describe maternal and perinatal outcomes and death in a case series of pregnant women with COVID-19 disease.
Study design
We describe here a multi-institution adjudicated case series from Iran which includes 9 pregnant women diagnosed with severe COVID-19 disease during their latter 2nd or 3rd trimester. All 9 pregnant women were diagnosed with SARS-CoV-2 infection by rRT-PCR nucleic acid testing (NAT). Outcomes of these women were compared to their familial/household members with exposure to the affected patient on or after their symptom onset. All data were reported at death or after a minimum of 14 days from date of admission with COVID-19 disease.
Results
Among 9 pregnant women with severe COVID-19 disease, at the time of reporting 7 of 9 died, 1 of 9 remains critically ill and ventilator-dependent, and 1 of 9 recovered after prolonged hospitalization. We obtained self-verified familial/household cohort data in all 9 cases, and in each and every instance the maternal outcomes were more severe when compared to other high and low-risk familial/household members (n=33 members for comparison).
Conclusion
We report herein maternal deaths due to COVID-19 disease. Until rigorously collected surveillance data emerges, it is prudent to be aware of the potential for maternal death among pregnant women diagnosed with COVID-19 disease in their latter trimester(s). (Author)

20200514-62*

The diagnosis of pneumonia in a pregnant woman with coronavirus disease 2019 using maternal lung ultrasound. Inchingolo R, Smargiassi A, Moro F, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 9-11
Available from: https://doi.org/10.1016/j.ajog.2020.04.020
Full URL: https://doi.org/10.1016/j.ajog.2020.04.020

Lung ultrasound examination has been demonstrated to be an accurate imaging method to detect pulmonary and pleural conditions. During pregnancy, there is a need for rapid assessment of the maternal lung in patients with suspected coronavirus disease 2019. We report our experience on lung ultrasound examination in the diagnosis of coronavirus disease 2019 pneumonia in a pregnant woman. Typical ultrasound features of this pulmonary pathology, including diffuse hyperechoic vertical artifacts with thickened pleural line and 'white lung' with patchy distribution, were observed. We suggest point-of-care lung ultrasound examination as a diagnostic imaging tool in pregnant women with suspected coronavirus disease 2019. (Author)

20200514-56*

Perinatal depressive and anxiety symptoms of pregnant women along with COVID-19 outbreak in China. Wu Y, Zhang C, Liu H, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 240.e1-240.e9
Available from: https://doi.org/10.1016/j.ajog.2020.05.009
Full URL: https://doi.org/10.1016/j.ajog.2020.05.009

Background
On January 20, 2020, a new coronavirus epidemic with 'human-to-human' transmission was officially announced by the

Chinese government, which caused significant public panic in China. Pregnant women may be particularly vulnerable and in special need for preventative mental health strategies. Thus far, no reports exist to investigate the mental health response of pregnant women to the COVID-19 outbreak.
Objective
The aim of the present study is to examine the impact of COVID-19 outbreak on the prevalence of depressive and anxiety symptoms and the corresponding risk factors among pregnant women across China.
Study Design
A multi-center cross-sectional study was initiated in early December 2019 to identify mental health concerns in pregnancy using the Edinburgh Postnatal Depression Scale (EPDS). This study provided a unique opportunity to compare the mental status of pregnant women before and after the announcement of the COVID-19 epidemic. A total of 4124 pregnant women during their third trimester from 25 hospitals in 10 provinces across China were examined in this cross-sectional study from January 1 to February 9, 2020. Of these women, 1285 were assessed after January 20, 2020 when the coronavirus epidemic was publically announced and 2839 were assessed before this pivotal time point. The internationally recommended EPDS was used to assess maternal depression and anxiety symptoms. Prevalence rates and risk factors were compared between the pre and post study groups.
Results
Pregnant women assessed after the declaration of COVID-19 epidemic had significantly higher rates of depressive symptoms (26.0% vs 29.6%, P=0.02) than women assess pre-epidemic announcement. These women were also more likely to endorse thoughts of self-harm (P=0.005). The depressive rates were positively associated with the number of newly-confirmed COVID-19 cases (P=0.003), suspected infections (P=0.004), and death cases per day (P=0.001). Pregnant women who were underweight pre-pregnancy, primiparous, < 35 years old, employed full-time, middle income, and had appropriate living space were at increased risk to develop depressive and anxiety symptoms during the outbreak.
Conclusion
Major life-threatening public health events such as the COVID-19 outbreak may increase the risk for mental illness among pregnant women including thoughts of self-harm. Strategies targeting maternal stress and isolation such as effective risk communication and the provision of psychological first aid may be particularly useful to prevent negative outcomes for women and their fetuses. (Author)

20200514-53*

Lung Ultrasound in the Covid-19 Pandemic: A Practical Guide for Obstetricians and Gynecologists. Dashraath P, Wong JLJ, Lim MXK, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) 10 May 2020, online
Available from: https://doi.org/10.1016/j.ajog.2020.05.014
Full URL: https://doi.org/10.1016/j.ajog.2020.05.014

The current COVID-19 pandemic is a challenge to every health system over the globe. Unfortunately, it is likely that this emergency will not disappear soon. No health system, with its present resources and work flow is ready to deal with a full-blown wave of this pandemic. Rapid acquisition of specific new skills may be fundamental in delivering appropriate health care for our patients. COVID-19 infection is classically diagnosed by real time reverse transcription polymerase chain reaction and radiological investigations (X-ray or high-resolution computerized tomography). These techniques are not without limitations. Ultrasound has been suggested as a reliable and accurate tool for assessing the lungs in patients with suspected pneumonia. Obstetricians and gynecologists are usually familiar with the use of ultrasound. Lung ultrasound can show specific signs of interstitial pneumonia, which is characteristic of COVID-19 pulmonary infection. We believe that extensive and rapid training of healthcare providers on the application of ultrasound in the detection of characteristic pulmonary signs of COVID-19 infection, in addition to proper care and handling of their ultrasound machines, is feasible and may be critical in order to provide appropriate management especially of the obstetric patient in the coming period. We present a systematic approach to lung examination, simplified to encourage its adoption by obstetricians and gynecologists, together with an example of a recent

pregnant woman with COVID-19 infection, in which lung ultrasound was useful in the management. (Author)

20200514-5*

COVID-19 during pregnancy: Potential risk for neurodevelopmental disorders in neonates?. Martins-Filho PR, Tanajura DM, Santos Jr HP, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 250, July 2020, pp 255-256
Available from: https://doi.org/10.1016/j.ejogrb.2020.05.015
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.015

The authors hypothesise that cytokine storms and hyperinflammation found in pregnant women with SARS-CoV-2 may increase the risk for neurodevelopmental disorders in neonates. (LDO)

20200514-3*

Prone positioning and high-flow oxygen improved respiratory function in a 25-week pregnant woman with COVID-19. Vibert F, Kretz M, Thuet V, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 250, July 2020, pp 257-258
Available from: https://doi.org/10.1016/j.ejogrb.2020.05.022
Full URL: https://doi.org/10.1016/j.ejogrb.2020.05.022
Discusses the case of a 21-year-old pregnant woman at 23 weeks' gestation with COVID-19 symptoms. The patient was effectively managed with prone positioning and high-flow oxygen without the need for sedation or invasive ventilation. (LDO)

20200514-1*

Unfavorable outcomes in pregnant patients with COVID-19 outside Wuhan, China. Huang W, Zhao Z, He Z, et al (2020), Journal of Infection vol 81, no 2, August 2020, E99-E101
Available from: https://doi.org/10.1016/j.jinf.2020.05.014
Full URL: https://doi.org/10.1016/j.jinf.2020.05.014
Correspondence reporting on 8 cases of SARS-CoV-2 infection during late pregnancy that resulted in severe maternal and neonatal complications. (MB)

20200513-32*

False-negative testing for severe acute respiratory syndrome coronavirus 2: consideration in obstetrical care. Kelly JC, Dombrowski M, O'neil-Callahan M, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100130
Available from: https://doi.org/10.1016/j.ajogmf.2020.100130
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100130
Case report of a primiparous woman at 33 weeks' gestation who presented to an obstetrical triage unit complaining of a cough, fever, emesis and contractions. The patient was tested for COVID-19 on four separate occasions and all tests were negative. The authors suggest that false-negative testing of SARS-CoV-2 is a clinical problem with numerous implications for pregnant women. (LDO)

20200513-30*

Detection of severe acute respiratory syndrome coronavirus 2 in placental and fetal membrane samples. Penfield CA, Brubaker SG, Limaye MA, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100133
Available from: https://doi.org/10.1016/j.ajogmf.2020.100133

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100133

Study on the presence of SARS-CoV-2 in placental and fetal membrane samples in a series of COVID-19 positive mothers. Three out of 11 swabs tested positive for SARS-CoV-2. None of the infants tested positive or displayed symptoms of COVID-19 infection. This is the first study to demonstrate the presence of SARS-CoV-2 RNA in placental or membrane samples. (LDO)

20200513-27*

Placental abruption in a twin pregnancy at 32 weeks' gestation complicated by coronavirus disease 2019 without vertical transmission to the babies. Kuhrt K, McMicking J, Nanda S, et al (2020), American Journal of Obstetrics & Gynecology
MFM vol 2, no 3, suppl, August 2020, 100135
Available from: https://doi.org/10.1016/j.ajogmf.2020.100135
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100135

The authors present the case of a monochorionic diamniotic twin pregnancy complicated by COVID-19. An emergency caesarean section was performed at 32 weeks' gestation due to antepartum haemorrhage and placental abruption. This is the first known case of significant placental abruption in a COVID-19 patient with good maternal and neonatal outcomes. (LDO)

20200513-21*

Clinical course of severe and critical coronavirus disease 2019 in hospitalized pregnancies: a United States cohort study. Pierce-Williams RAM, Burd J, Felder L, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100134
Available from: https://doi.org/10.1016/j.ajogmf.2020.100134
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100134

Background

The COVID-19 pandemic has had an impact on healthcare systems around the world with 3.0 million infected and 208,000 resultant mortalities as of this writing. Information regarding infection in pregnancy is still limited.

Objectives

To describe the clinical course of severe and critical infection in hospitalized pregnant women with positive laboratory testing for SARS-CoV2.

Study Design

This is a cohort study of pregnant women with severe or critical COVID-19 infection hospitalized at 12 US institutions between March 5, 2020 and April 20, 2020. Severe infection was defined according to published criteria by patient reported dyspnea, respiratory rate > 30 per minute, blood oxygen saturation ≤ 93% on room air, partial pressure of arterial oxygen to fraction of inspired oxygen <300 and/or lung infiltrates >50% within 24 to 48 hours on chest imaging. Critical disease was defined by respiratory failure, septic shock, and/or multiple organ dysfunction or failure. Women were excluded if they had presumed COVID-19 infection but laboratory testing was negative. The primary outcome was median duration from hospital admission to discharge. Secondary outcomes included need for supplemental oxygen, intubation, cardiomyopathy, cardiac arrest, death, and timing of delivery. The clinical courses are described by the median disease day on which these outcomes occurred after the onset of symptoms. Treatment and neonatal outcomes are also reported.

Results

Of 64 pregnant women hospitalized with COVID-19, 44 (69%) had severe and 20 (31%) critical disease. The following pre-existing comorbidities were observed: 25% had a pulmonary condition, 17% had cardiac disease and the mean BMI was 34 kg/m2. Gestational age at symptom onset was at a mean 29 ±6 weeks and at hospital admission a mean of 30 ±6 weeks, on a median day of disease 7 since first symptoms. Eighty-one percent of women were treated with hydroxychloroquine; 9% of women with severe disease and 65% of women with critical disease received remdesivir.

All women with critical disease received either prophylactic or therapeutic anticoagulation during their admission. The median duration of hospital stay was 6 days (6 days for severe, 10.5 days for critical, p=0.01). For those who required it, intubation usually occurred around day 9, and peak respiratory support for women with severe disease occurred on day 8. In women with critical disease, prone positioning was performed in 20% of cases, the rate of ARDS was 70%, and re-intubation was necessary in 20%. There was one case of maternal cardiac arrest, but no cases of cardiomyopathy and no maternal deaths. Thirty-two (50%) women in this cohort delivered during their COVID-19 hospitalization (34% of severe and 85% of critical women). Eighty-eight percent (15/17) of pregnant women with critical COVID-19 who delivered during their disease course were delivered preterm, 94% of them via cesarean; in all, 75% (15/20) of critically ill women delivered preterm. There were no stillbirths or neonatal deaths, or cases of vertical transmission. Conclusion
In hospitalized pregnant women with severe or critical COVID-19 infection, admission typically occurred about 7 days after symptom onset, and the duration of hospitalization was 6 days (6 severe versus 12 critical). Critically ill women had a high rate of ARDS, and there was one case of cardiac arrest, but there were no cases of cardiomyopathy, or maternal mortality. Hospitalization for severe or critical COVID-19 infection resulted in delivery during the course of infection in 50% of this cohort, usually in the third trimester. There were no perinatal deaths in this cohort. (Author)

20200512-9*

Pregnant vs nonpregnant severe acute respiratory syndrome coronavirus 2 and coronavirus disease 2019 hospital admissions: the first 4 weeks in New York. Tekbali A, Grünebaum A, Saraya A, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 126-127
Available from: https://doi.org/10.1016/j.ajog.2020.04.012
Full URL: https://doi.org/10.1016/j.ajog.2020.04.012

This research letter discusses pregnant and non-pregnant COVID-19 hospital admissions in New York. The study results show that pregnant women with SARS-CoV-2 and COVID-19 had a significantly lower admission percentage compared to non-pregnant patients. However, the authors suggest that maternity services should be ringfenced from redeployment to ensure the safest possible care for women and their newborns. (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
Available from: https://doi.org/10.1016/j.ajog.2020.04.024
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)

20200512-7*

Fetal interventions in the setting of the coronavirus disease 2019 pandemic: statement from the North American Fetal Therapy Network. Bahtiyar MO, Baschat A, Deprest J, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 281-284
Available from: https://doi.org/10.1016/j.ajog.2020.04.025
Full URL: https://doi.org/10.1016/j.ajog.2020.04.025

Statement from the North American Fetal Therapy Network (NAFTNet) on fetal interventions during the COVID-19 outbreak. Recommends that fetal interventions should not be considered as elective procedures and should be guided by local institutional policies. (LDO)

20200512-11*

Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study. Knight M, Bunch K, Vousden N, et al on behalf of the UK Obstetric Surveillance System SARS-CoV-2 Infection in Pregnancy Collaborative Group (2020), BMJ vol 369, no 8251, 27 June 2020, m2107

Available from: https://doi.org/10.1136/bmj.m2107

Full URL: https://doi.org/10.1136/bmj.m2107

Objectives To describe a national cohort of pregnant women admitted to hospital with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in the UK, identify factors associated with infection, and describe outcomes, including transmission of infection, for mothers and infants.

Design Prospective national population based cohort study using the UK Obstetric Surveillance System (UKOSS).

Setting All 194 obstetric units in the UK.

Participants 427 pregnant women admitted to hospital with confirmed SARS-CoV-2 infection between 1 March 2020 and 14 April 2020.

Main outcome measures Incidence of maternal hospital admission and infant infection. Rates of maternal death, level 3 critical care unit admission, fetal loss, caesarean birth, preterm birth, stillbirth, early neonatal death, and neonatal unit admission.

Results The estimated incidence of admission to hospital with confirmed SARS-CoV-2 infection in pregnancy was 4.9 (95% confidence interval 4.5 to 5.4) per 1000 maternities. 233 (56%) pregnant women admitted to hospital with SARS-CoV-2 infection in pregnancy were from black or other ethnic minority groups, 281 (69%) were overweight or obese, 175 (41%) were aged 35 or over, and 145 (34%) had pre-existing comorbidities. 266 (62%) women gave birth or had a pregnancy loss; 196 (73%) gave birth at term. Forty one (10%) women admitted to hospital needed respiratory support, and five (1%) women died. Twelve (5%) of 265 infants tested positive for SARS-CoV-2 RNA, six of them within the first 12 hours after birth.

Conclusions Most pregnant women admitted to hospital with SARS-CoV-2 infection were in the late second or third trimester, supporting guidance for continued social distancing measures in later pregnancy. Most had good outcomes, and transmission of SARS-CoV-2 to infants was uncommon. The high proportion of women from black or minority ethnic groups admitted with infection needs urgent investigation and explanation.

Study registration ISRCTN 40092247. (Author)

20200512-10*

Coronavirus: Mum 'grateful' for maternity hospital measures. Anon (2020), BBC News 12 May 2020

Available from:

https://www.bbc.co.uk/news/av/uk-england-cambridgeshire-52625672/coronavirus-mum-grateful-for-maternity-hospital-measures

Reports on the story of Alina Ghergheleuca who recently gave birth and has praised the work of the Rosie Hospital in Cambridge during the COVID-19 pandemic. (LDO)

20200511-67*

Care of critically ill pregnant patients with coronavirus disease 2019: a case series. Hirshberg A, Kern-Goldberger AR, Levine LD, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 286-290
Available from: https://doi.org/10.1016/j.ajog.2020.04.029
Full URL: https://doi.org/10.1016/j.ajog.2020.04.029

This research letter discusses five cases of critically ill symptomatic pregnant women with COVID-19. The cases had varying comorbidities and were managed differently by clinicians. (LDO)

20200511-61*

Intensive care unit admissions for pregnant and nonpregnant women with coronavirus disease 2019. Blitz MJ, Grünebaum A, Tekbali A, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 290-291
Available from: https://doi.org/10.1016/j.ajog.2020.05.004
Full URL: https://doi.org/10.1016/j.ajog.2020.05.004

This research letter discusses a study comparing the number of pregnant and non-pregnant women admitted to intensive care units with COVID-19 in New York State. 28.4% of those admitted were non-pregnant women and 7% were pregnant women. Therefore, the authors suggest that pregnant women with COVID-19 may not experience more severe disease progression than other groups. (LDO)

20200511-60*

Severe acute respiratory syndrome coronavirus 2 in pregnancy: symptomatic pregnant women are only the tip of the iceberg. Khalil A, Hill R, Ladhani S, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 296-297
Available from: https://doi.org/10.1016/j.ajog.2020.05.005
Full URL: https://doi.org/10.1016/j.ajog.2020.05.005

This research letter discusses the SARS-CoV-2 screening of all pregnant women admitted to the Portland Hospital for Women and Children in London between 27 March 2020 and 20 April 2020. 7% of the women tested positive and 88.9% of those were asymptomatic. The authors argue for the universal screening of pregnant women due to high rates of asymptomatic infection. (LDO)

20200511-59*

Psychological impact of coronavirus disease 2019 in pregnant women. Saccone G, Florio A, Aiello F, et al (2020), American
Journal of Obstetrics & Gynecology (AJOG) vol 223, no 2, August 2020, pp 293-295
Available from: https://doi.org/10.1016/j.ajog.2020.05.003
Full URL: https://doi.org/10.1016/j.ajog.2020.05.003

This research letter discusses a study on the psychological impact of COVID-19 on pregnant women in Naples, Italy. Overall the COVID-19 outbreak had a moderate impact on the study participants, with women in their first trimester displaying significantly higher levels of anxiety. (LDO)

20200511-55*

Coronavirus Disease 2019 (COVID-19) and pregnancy: what obstetricians need to know. Rasmussen SA, Smulian JC, Lednicky JA, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 222, no 5, May 2020, pp 415-426
Available from: https://doi.org/10.1016/j.ajog.2020.02.017

Full URL: https://doi.org/10.1016/j.ajog.2020.02.017

This expert review is aimed at practising obstetricians and highlights current research on COVID-19, SARS and MERS during pregnancy. The review includes information on infection control, diagnostic testing, in utero transmission and breastfeeding. (LDO)

20200507-9*

Coronavirus: Concerns for wellbeing of babies born in lockdown. Richardson H (2020), BBC News 7 May 2020
Available from: https://www.bbc.co.uk/news/education-52560388
Full URL: https://www.bbc.co.uk/news/education-52560388

Concerns for the wellbeing of babies born in lockdown are being raised, as parents struggle to access regular support services. (Author)

20200507-10*

Coronavirus: Am I at risk during pregnancy?. Roxby P (2020), BBC News 7 May 2020
Available from: https://www.bbc.co.uk/news/health-52474213
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)

20200506-8*

Laboratory Findings of COVID-19 Infection are Conflicting in Different Age Groups and Pregnant Women: A Literature Review. Vakili S, Savardashtaki A, Jamalnia S, et al (2020), MedRxiv 29 April 2020, online
Available from: https://doi.org/10.1101/2020.04.24.20078568
Full URL: https://doi.org/10.1101/2020.04.24.20078568

Coronavirus disease 2019 (COVID-19), a new type and rapidly spread viral pneumonia, is now producing an outbreak of pandemic proportions. The clinical features and laboratory results of different age groups are different due to the general susceptibility of the disease. The laboratory findings of COVID-19 in pregnant women are also conflicting. Para-clinical investigations including laboratory tests and radiologic findings play an important role in early diagnosis and treatment monitoring of severe acute respiratory syndrome and coronavirus-2 (SARS-CoV-2). The majority of previous reports on the SARS-CoV-2 laboratory results were based on data from the general population and limited information is available based on age difference and pregnancy status. This review aimed to describe the COVID-19 laboratory findings in neonates, children, adults, elderly and pregnant women altogether for the first time. The most attracting and reliable markers of COVID-19 in patients were: normal C-reactive protein (CRP) and very different and conflicting laboratory results regardless of clinical symptoms in neonates, normal or temporary elevated CRP, conflicting WBC count results and procalcitonin elevation in children, lymphopenia and elevated lactate dehydrogenase (LDH) in adult patients, lymphopenia and elevated CRP and LDH in the elderly people and high CRP, leukocytosis and elevated neutrophil ratio in pregnant women. (Author) [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.]

20200506-7*

Are some ethnic groups more vulnerable to COVID-19 than others?. Platt L, Warwick R (2020), London: The Institute for Fiscal Studies May 2020, 26 pages

Available from:
https://www.ifs.org.uk/inequality/chapter/are-some-ethnic-groups-more-vulnerable-to-covid-19-than-others/

Full URL:
https://www.ifs.org.uk/inequality/chapter/are-some-ethnic-groups-more-vulnerable-to-covid-19-than-others/

Report on the disproportionate effects of COVID-19 on ethnic minorities in the United Kingdom. Highlights the complex economic, social and health-related factors which may be causing higher rates of mortality among ethnic groups. The authors discuss occupational risks, financial vulnerability, demographics, household structures and underlying health conditions. (LDO)

20200506-26*

Classification system and case definition for SARS-CoV-2 infection in pregnant women, fetuses, and neonates. Shah PS, Diambomba Y, Acharya G, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 5, May 2020, pp 565-568

Available from: https://doi.org/10.1111/aogs.13870

Full URL: https://doi.org/10.1111/aogs.13870

The authors develop a classification system and case definition for maternal-fetal-neonatal SARS-CoV-2 infections. The classification system includes five categories for the likelihood of infection: (a) confirmed, (b) probable, (c) possible, (d) unlikely, and (e) not infected. (LDO)

20200506-25*

COVID-19 in pregnancy with comorbidities: More liberal testing strategy is needed. Gidlöf S, Savchenko J, Brune T, et al (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 7, July 2020, pp 948-949

Available from: https://doi.org/10.1111/aogs.13862

Full URL: https://doi.org/10.1111/aogs.13862

In this letter the authors present the case of a 34-year-old primipara with a dichorionic twin pregnancy and gestational diabetes. The patient developed a severe headache, her blood pressure remained high despite antihypertensive treatment and she later tested positive for COVID-19. The authors suggest that there are difficulties in discriminating between common complications encountered in high-risk pregnancies and the symptoms of COVID-19. (LDO)

20200506-24*

Maternal and perinatal outcomes with COVID-19: A systematic review of 108 pregnancies. Zaigham M, Andersson O (2020), Acta Obstetricia et Gynecologica Scandinavica vol 99, no 7, July 2020, pp 823-829

Available from: https://doi.org/10.1111/aogs.13867

Full URL: https://doi.org/10.1111/aogs.13867

Introduction

The pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has exposed vulnerable populations to an unprecedented global health crisis. The knowledge gained from previous human coronavirus outbreaks suggests that pregnant women and their fetuses are particularly susceptible to poor outcomes. The objective of this study was to summarize the clinical manifestations and maternal and perinatal outcomes of COVID-19 during pregnancy.

Material and methods
We searched databases for all case reports and series from 12 February to 4 April 2020. Multiple terms and combinations were used including COVID-19, pregnancy, maternal mortality, maternal morbidity, complications, clinical manifestations, neonatal morbidity, intrauterine fetal death, neonatal mortality and SARS-CoV-2. Eligibility criteria included peer-reviewed publications written in English or Chinese and quantitative real-time polymerase chain reaction (PCR) or dual fluorescence PCR-confirmed SARS-CoV-2 infection. Unpublished reports, unspecified date and location of the study or suspicion of duplicate reporting, cases with suspected COVID-19 that were not confirmed by a laboratory test, and unreported maternal or perinatal outcomes were excluded. Data on clinical manifestations, maternal and perinatal outcomes including vertical transmission were extracted and analyzed.
Results
Eighteen articles reporting data from 108 pregnancies between 8 December 2019 and 1 April 2020 were included in the current study. Most reports described women presenting in the third trimester with fever (68%) and coughing (34%). Lymphocytopenia (59%) with elevated C-reactive protein (70%) was observed and 91% of the women were delivered by cesarean section. Three maternal intensive care unit admissions were noted but no maternal deaths. One neonatal death and one intrauterine death were also reported.
Conclusions
Although the majority of mothers were discharged without any major complications, severe maternal morbidity as a result of COVID-19 and perinatal deaths were reported. Vertical transmission of the COVID-19 could not be ruled out. Careful monitoring of pregnancies with COVID-19 and measures to prevent neonatal infection are warranted. (Author)

20200505-9*
Women's Rights in Childbirth Must be Upheld During the Coronavirus Pandemic. International Confederation of Midwives
(2020), The Hague, The Netherlands: International Confederation of Midwives 2020, 3 pages
Available from:
https://www.internationalmidwives.org/assets/files/news-files/2020/03/icm-statement_upholding-womens-rights-during-covid19-5e83ae2ebfe59.pdf

Guidance for midwives on how to uphold the rights of women and their newborns during the COVID-19 pandemic. Includes recommendations on consent, birth partners, breastfeeding and reproductive health care. (LDO)

20200505-8*
Protecting Midwives to Sustain Care for Women, Newborns and their Families in the COVID-19 Pandemic.
International Confederation of Midwives, United Nations Population Fund (2020), The Hague, The Netherlands: International Confederation of Midwives 5 May 2020, 6 pages
Available from:
https://www.internationalmidwives.org/assets/files/news-files/2020/05/call-to-action-5eb0b4ee47deb.pdf
Full URL:
https://www.internationalmidwives.org/assets/files/news-files/2020/05/call-to-action-5eb0b4ee47deb.pdf
Joint statement on the protection of midwives during the COVID-19 pandemic. Calls for the availability of personal protective equipment (PPE), the inclusion of midwives in policy making, the suspension of re-deployment of midwives and the proper funding of maternal health services. The authors also call for governments and organisations to uphold women's sexual and reproductive rights, and to uphold the right to a positive birthing experience. (LDO)

20200505-6*

No SARS-CoV-2 detected in amniotic fluid in mid-pregnancy. Yu N, Li W, Kang Q, et al (2020), The Lancet Infectious Diseases
22 April 2020, online
Available from: https://doi.org/10.1016/S1473-3099(20)30320-0
Full URL: https://doi.org/10.1016/S1473-3099(20)30320-0

Reports the cases of two pregnant women who were diagnosed with COVID-19 in the first trimester of pregnancy. (MB)

20200505-55*

'Video-call the midwife': NHS carries on delivering as Wilfred joins over 150,000 babies born during pandemic. Anon (2020), London: NHS England 5 May 2020
Available from: https://www.england.nhs.uk/2020/05/video-call-the-midwife/
Full URL: https://www.england.nhs.uk/2020/05/video-call-the-midwife/

England's top midwife has today praised NHS maternity teams for providing high quality care in the face of the most significant challenge to ever face the health services, and urged new and expectant families to continue to come forward for routine checks and urgent advice. (Author)

20200505-3*

An international registry for emergent pathogens and pregnancy. Panchaud A, Favre G, Pomar L, et al (2020), The Lancet vol 395, no 10235, 9 May 2020, pp 1483-1484
Available from: https://doi.org/10.1016/S0140-6736(20)30981-8
Full URL: https://doi.org/10.1016/S0140-6736(20)30981-8

Introduces COVI-Preg, a structured data collection tool available to any health care facility assessing pregnant patients for SARS-CoV-2 infection. (MB)

20200505-18

Supporting the women in your care. Anon (2020), Midwives vol 23, April 2020, p 13

This is a worrying time for all of us, but for pregnant women that anxiety is heightened, and they will be looking to you for advice. This should help you answer their questions. (Author)

20200505-12*

Coronavirus confusion putting pregnant women at risk, charity warns. Tommy's (2020), London: Tommy's 5 May 2020
Available from:
https://www.tommys.org/our-organisation/about-us/charity-news/coronavirus-confusion-putting-pregnant-women-risk-charity-warns

Tommy's saw a staggering 71% rise in demand for expert advice from midwives on its Pregnancy Line last month, as coronavirus left expectant and new parents struggling to get the information and support they need. (Author)

20200504-9*

Mental health care for pregnant women in the COVID-19 outbreak is urgently needed. Zeng L-N, Chen L-G, Yang C-M, et a (2020), Women and Birth: Journal of the Australian College of Midwives 3 May 2020, online
Available from: https://doi.org/10.1016/j.wombi.2020.03.009

Full URL: https://doi.org/10.1016/j.wombi.2020.03.009

The authors discuss the impact of COVID-19 on the mental health of pregnant women, and recommend the development of a mental health service for this specific population. (LDO)

20200504-11*

Early Acute Respiratory Support for Pregnant Patients With Coronavirus Disease 2019 (COVID-19) Infection. Pacheco LD, Saad AF, Saade G (2020), Obstetrics & Gynecology vol 136, no 1, July 2020, pp 42-45

Available from: https://doi.org/10.1097/AOG.0000000000003929

Full URL: https://doi.org/10.1097/AOG.0000000000003929

The present coronavirus disease 2019 (COVID-19) pandemic is affecting pregnant patients worldwide. Although it appears that the severity of disease is reduced in pregnant patients, some are likely to develop severe disease. Our objective is to summarize the basic initial respiratory support interventions
recommended for pregnant patients with infection with the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). (Author)

20200504-10*

Pregnant women's knowledge and practice of preventive measures against COVID-19 in a low-resource African setting. Nwafor JI, Aniukwu JK, Anozie BO, et al (2020), International Journal of Gynecology & Obstetrics vol 150, no 1, July 2020, pp 121-123

This brief communication discusses the results of a cross-sectional study on knowledge and practice of preventive measures against COVID-19 among pregnant women in Ebonyi State, Nigeria. (LDO)

20200501-5*

Coronavirus: high-risk pregnancies could be missed due to pandemic, experts warn. Cowburn A (2020), The Independent 1 May 2020

Available from:

https://www.independent.co.uk/news/uk/politics/coronavirus-concerns-raised-highrisk-pregnancies-could-be-missed-due-to-pandemic-a9493856.html

Reports that Gill Walton, CEO of the Royal College of Midwives, has warned of a potential rise in stillbirths and neonatal deaths because high-risk pregnancies may be missed owing to a reluctance among pregnant women to present themselves to maternity services during the current coronavirus pandemic..However, she added that technology has meant that follow-ups on women who missed scans and appointments has improved through virtual contact between women and midwives and maternity services. Her comments were made during a session of Westminster's health and social care committee. (JSM)

20200501-3*

The impact of COVID-19 on BME communities and health and care staff. NHS Confederation (2020), London: NHS Confederation 23 April 2020

Available from:

https://www.nhsconfed.org/resources/2020/04/the-impact-of-covid19-on-bme-communities-and-staff

Full URL: https://www.nhsconfed.org/resources/2020/04/the-impact-of-covid19-on-bme-communities-and-staff

This briefing considers the evidence on the impact of COVID-19 on black and minority ethnic (BME) communities and health and care staff. It explores potential underlying factors, recommends areas for improvement and offers practical advice on how to mitigate risks. Intended for senior health and care leaders, it aims to inform decision making and influence change. (Author)

20200501-1*

Vaccine Update. Public Health England (2020), London: PHE no 307, April 2020, pp 1-14
Available from:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882560/PHE_11652_VU_307_April_2020.pdf

A special edition of Vaccine Update to mark World Immunization Week (WIW), which this year runs from 26th-30th April, and is the World Health Organization's annual celebration of immunisation, best practice, new advances and the work of immunisers, held with the aim of promoting the use of vaccines to protect people of all ages from disease, reflected in the name of this year's theme #VaccinesWork for All. In this, The International Year of the Nurse and Midwife, WHO and Public Health England acknowledge the crucial role played by nurses and midwives as advocates of vaccination throughout the life course. Includes sections on the delivery of immunisation services during the coronavirus pandemic, and vaccinations offered during the antenatal and postnatal periods. (JSM)

20200429-9*

Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected. Interim guidance. World Health Organization (2020), Geneva: WHO 13 March 2020
Available from:
https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected

This is the second edition (version 1.2) of this document, which was originally adapted from Clinical management of severe acute respiratory infection when MERS-CoV infection is suspected (WHO, 2019). It is intended for clinicians involved in the care of adult, pregnant, and paediatric patients with or at risk for severe acute respiratory infection (SARI) when infection with the COVID-19 virus is suspected. Considerations for paediatric patients and pregnant women are highlighted throughout the text. It is not meant to replace clinical judgment or specialist consultation but rather to strengthen clinical management of these patients and to provide up-to-date guidance. Best practices for infection prevention and control (IPC), triage and optimized supportive care are included. (Author)

20200429-6*

Covid-19: The time to shield all pregnant frontline workers is now. Brickley EB, Paixão ES (2020), BMJ 28 April 2020, online
Available from: https://doi.org/10.1136/bmj.m1792
Full URL: https://doi.org/10.1136/bmj.m1792

Recent outbreaks of influenza, Ebola, and Zika viruses have taught us that pregnant women are uniquely vulnerable to emerging infectious threats. Let's not fail pregnant frontline workers during the covid-19 pandemic, say Elizabeth B Brickley and Enny S Paixão. (Author)

20200429-5*

A call for action for COVID-19 surveillance and research during pregnancy. Buekens P, Alger J, Bréart G, et al (2020), The Lancet Global Health 22 April 2020, online
Available from: https://doi.org/10.1016/S2214-109X(20)30206-0
Full URL: https://doi.org/10.1016/S2214-109X(20)30206-0
Calls for cooperation between countries in order to address the gaps in knowledge about COVID-19 and its effect on pregnant women and their babies. (MB)

20200429-4*

Not a luxury: a call to maintain sexual and reproductive health in humanitarian and fragile settings during the COVID-19 pandemic. Tran NT, Tappis H, Spilotros N, et al (2020), The Lancet Global Health vol 8, no 6, June 2020, pp E760-E761

Available from: https://doi.org/10.1016/S2214-109X(20)30190-X
Full URL: https://doi.org/10.1016/S2214-109X(20)30190-X

Discusses the importance of continuing to provide comprehensive sexual and reproductive health services for women and girls living in fragile contexts worldwide as long as health care systems are not overstretched with COVID-19 case management. (MB)

20200429-39

Obstetricians on the Coronavirus Disease 2019 (COVID-19) Front Lines and the Confusing World of Personal Protective Equipment. Jamieson DJ, Steinberg JP, Martinello RA, et al (2020), Obstetrics & Gynecology vol 135, no 6, June 2020, pp 1257-1263

As health care systems struggle to maintain adequate supplies of personal protective equipment, there is confusion and anxiety among obstetricians and others about how to best protect themselves, their coworkers, and their patients. Although use of personal protective equipment is a critical strategy to protect health care personnel from coronavirus disease 2019 (COVID-19), other strategies also need to be implemented on labor and delivery units to reduce the risk of health care-associated transmission, including screening of all pregnant women who present for care (case identification), placing a mask on and rapidly isolating ill pregnant women, and minimizing the number of personnel who enter the room of an ill patient (physical distancing). Although the mechanism of transmission of COVID-19 is not known with certainty, current evidence suggests that COVID-19 is transmitted primarily through respiratory droplets. Therefore, strict adherence to hand hygiene and consistent use of recommended personal protective equipment are cornerstones for reducing transmission. In addition, it is critical that health care professionals receive training on and practice correct donning (putting on) and doffing (removing) of personal protective equipment and avoid touching their faces as well as their facial protection to minimize self-contamination. (Author)

20200429-37*

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Vertical Transmission in Neonates Born to Mothers With Coronavirus Disease 2019 (COVID-19) Pneumonia. Hu X, Gao J, Luo X, et al (2020), Obstetrics & Gynecology vol 136, no 1, July 2020, pp 65-67

Available from: https://doi.org/10.1097/AOG.0000000000003926
Full URL: https://doi.org/10.1097/AOG.0000000000003926

Research letter reporting on seven cases of Covid-19 during late pregnancy and subsequent neonatal outcomes. (MB)

20200429-36*

Protection by Exclusion: Another Missed Opportunity to Include Pregnant Women in Research During the Coronavirus Disease 2019 (COVID-19) Pandemic. Costantine MM, Landon MB, Saade GR (2020), Obstetrics & Gynecology vol 136, no 1, July 2020, pp 26-28

Available from: https://doi.org/10.1097/AOG.0000000000003924
Full URL: https://doi.org/10.1097/AOG.0000000000003924

Coronavirus disease 2019 (COVID-19) is a novel infectious disease that started in Wuhan, China, and has rapidly spread all across the world. With limited ability to contain the virus and relatively high transmissibility and case fatality rates,

governmental institutions and pharmaceutical companies are racing to find therapeutics and vaccines that target this novel coronavirus. However, once again, pregnant and breastfeeding women are excluded from participating in clinical trials during this pandemic. This 'protection by exclusion' of pregnant women from drug development and clinical therapeutic trials, even during epidemics and pandemics, is not unprecedented. Moreover, it is both misguided and not justifiable and may have excluded them from potentially beneficial interventions. This is another missed opportunity to obtain pregnancy-specific safety and efficacy data, because therapeutics developed for men and nonpregnant women may not be generalizable to pregnant women. Therefore, we recommend and urge the scientific community and professional societies that, without clear justification for exclusion, pregnant women should be given the opportunity to be included in clinical trials for COVID-19 based on the concepts of justice, equity, autonomy, and informed consent. (Author)

20200427-75*

Storage limit for frozen eggs, sperm and embryos extended during coronavirus outbreak. Her Majesty's Government (2020), Dods Information Monitoring Service 27 April 2020

Available from:
https://app.dodsinformation.com/ui/app/index.html#/document/render/dbcb7e92046d43f4815ef12b1a7ab05f

Full URL:
https://app.dodsinformation.com/ui/app/index.html#/document/render/dbcb7e92046d43f4815ef12b1a7ab05f

Announces that a two-year extension of the current 10-year storage period of frozen eggs, sperm and embryos has been announced by the Government, to support those undergoing fertility treatment during the current coronavirus pandemic. States that The Human Fertilisation and Embryology Authority, will be issuing guidance to fertility clinics in the UK to assist them with the implementation of the new storage limit extension. (JSM)

20200427-27*

Outcome of coronavirus spectrum infections (SARS, MERS, COVID-19) during pregnancy: a systematic review and meta-analysis. Di Mascio D, Khalil A, Saccone G, et al (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 2, suppl, May 2020, 100107

Available from: https://doi.org/10.1016/j.ajogmf.2020.100107

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100107

Objective

The aim of this systematic review was to report pregnancy and perinatal outcomes of coronavirus spectrum infections, and particularly coronavirus 2019 (COVID-19) disease because of severe acute respiratory syndrome-coronavirus-2 infection during pregnancy.

Data Sources

Medline, Embase, Cinahl, and Clinicaltrials.gov databases were searched electronically utilizing combinations of word variants for coronavirus or severe acute respiratory syndrome or SARS or Middle East respiratory syndrome or MERS or COVID-19 and pregnancy. The search and selection criteria were restricted to English language.

Study Eligibility Criteria

Inclusion criteria were hospitalized pregnant women with a confirmed coronavirus related-illness, defined as severe acute respiratory syndrome, Middle East respiratory syndrome, or COVID-19.

Study Appraisal and Synthesis Methods

We used meta-analyses of proportions to combine data and reported pooled proportions. The pregnancy outcomes observed included miscarriage, preterm birth, preeclampsia, preterm prelabor rupture of membranes, fetal growth restriction, and mode of delivery. The perinatal outcomes observed were fetal distress, Apgar score <7 at 5 minutes,

neonatal asphyxia, admission to a neonatal intensive care unit, perinatal death, and evidence of vertical transmission.
Results
Nineteen studies including 79 hospitalized women were eligible for this systematic review: 41 pregnancies (51.9%) affected by COVID-19, 12 (15.2%) by Middle East respiratory syndrome, and 26 (32.9%) by severe acute respiratory syndrome. An overt diagnosis of pneumonia was made in 91.8%, and the most common symptoms were fever (82.6%), cough (57.1%), and dyspnea (27.0%). For all coronavirus infections, the rate of miscarriage was 39.1% (95% confidence interval, 20.2-59.8); the rate of preterm birth <37 weeks was 24.3% (95% confidence interval, 12.5-38.6); premature prelabor rupture of membranes occurred in 20.7% (95% confidence interval, 9.5-34.9), preeclampsia in 16.2% (95% confidence interval, 4.2-34.1), and fetal growth restriction in 11.7% (95% confidence interval, 3.2-24.4); 84% were delivered by cesarean; the rate of perinatal death was 11.1% (95% confidence interval, 84.8-19.6), and 57.2% of newborns (95% confidence interval, 3.6-99.8) were admitted to the neonatal intensive care unit. When focusing on COVID-19, the most common adverse pregnancy outcome was preterm birth <37 weeks, occurring in 41.1% of cases (95% confidence interval, 25.6-57.6), while the rate of perinatal death was 7.0% (95% confidence interval, 1.4-16.3). None of the 41 newborns assessed showed clinical signs of vertical transmission.
Conclusion
In hospitalized mothers infected with coronavirus infections, including COVID-19, >90% of whom also had pneumonia, preterm birth is the most common adverse pregnancy outcome. COVID-19 infection was associated with a relatively higher rate of preterm birth, preeclampsia, cesarean, and perinatal death. There have been no published cases of clinical evidence of vertical transmission. Evidence is accumulating rapidly, so these data may need to be updated soon. The findings from this study can guide and enhance prenatal counseling of women with COVID-19 infection occurring during pregnancy although should be interpreted with caution in view of the very small number of included cases. (Author)

20200427-26*

COVID-19 in pregnancy: early lessons. Breslin N, Baptiste C, Miller R, et al (2020), American Journal of Obstetrics & Gynecology
MFM vol 2, no 2, suppl, May 2020, 100111
Available from: https://doi.org/10.1016/j.ajogmf.2020.100111
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100111

As the worldwide incidence of coronavirus disease 2019 (COVID-19) rapidly increases, there remains limited information on COVID-19 in pregnancy. We present here our experience with an initial seven cases of confirmed COVID-19 in pregnancy presenting to a single large New York City tertiary care hospital. Five of the seven patients presented with symptoms of COVID-19, including cough, myalgias, fevers, chest pain, and headache. Four patients were admitted to the hospital, including two who required supportive care with intravenous hydration. Most notably, the other two admitted patients were asymptomatic on admission to the hospital, presenting instead for obstetrically-indicated labor inductions; both of these patients became symptomatic post-partum, each requiring intensive care unit admission. (Author)

20200427-25*

Two cases of coronavirus 2019-related cardiomyopathy in pregnancy. Juusela A, Nazir M, Gimovsky M (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 2, suppl, May 2020, 100113
Available from: https://doi.org/10.1016/j.ajogmf.2020.100113
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100113

At our institution, 2 of the initial 7 pregnant patients with confirmed coronavirus disease 2019 severe infection (28.6%; 95% CI, 8.2%-64.1%) developed cardiac dysfunction with moderately reduced left ventricular ejection fractions of

40%-45% and hypokinesis. Viral myocarditis and cardiomyopathy have also been reported in nonpregnant coronavirus disease 2019 patients. A case series of nonpregnant patients with coronavirus disease 2019 found that 33% of those in intensive care developed cardiomyopathy. More data are needed to ascertain the incidence of cardiomyopathy from coronavirus disease 2019 in pregnancy, in all pregnant women with coronavirus disease 2019, and those with severe disease (eg, pneumonia). We suggest an echocardiogram in pregnant women with coronavirus disease 2019 pneumonia, in particular those necessitating oxygen, or those who are critically ill, and we recommend the use of handheld, point-of-care devices where possible to minimize contamination of staff and traditional large echocardiogram machines. (Author)

20200427-24*

Coronavirus disease 2019 infection among asymptomatic and symptomatic pregnant women: two weeks of confirmed presentations to an affiliated pair of New York City hospitals. Breslin N, Baptiste C, Gyamfi-Bannerman C, et al (2020),
American Journal of Obstetrics & Gynecology MFM vol 2, no 2, suppl, May 2020, 100118
Available from: https://doi.org/10.1016/j.ajogmf.2020.100118
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100118

The novel coronavirus 2019, or COVID-19, infection has rapidly spread through the New York metropolitan area since the first reported case in the state on March 1, 2020. New York currently represents an epicenter for COVID-19 infection in the United States, with 84,735 cases reported as of April 2, 2020. We previously presented an early experience with seven COVID-positive patients in pregnancy, including two women who were diagnosed with COVID-19 following an asymptomatic initial presentation. We now describe a series of 43 test-confirmed cases of COVID-19 presenting to a pair of affiliated New York City hospitals over two weeks from March 13 to 27, 2020. Fourteen (32.6%) patients presented without any COVID-associated viral symptoms, and were identified either after developing symptoms during admission or following the implementation of universal testing for all obstetrical admissions on March 22. Of these, 10/14 (71.4%) developed symptoms or signs of COVID-19 infection over the course of their delivery admission or early after postpartum discharge. Of the other 29 (67.4%) patients who presented with symptomatic COVID-19 infection, three women ultimately required antenatal admission for viral symptoms, and an additional patient represented six days postpartum after a successful labor induction with worsening respiratory status that required oxygen supplementation. There were no confirmed cases of COVID-19 detected in neonates upon initial testing on the first day of life. Applying COVID-19 disease severity characteristics as described by Wu et al, 37 (86%) women possessed mild disease, four (9.3%) exhibited severe disease, and two (4.7%) developed critical disease; these percentages are similar to those described for non-pregnant adults with COVID-19 infections (about 80% mild, 15% severe, and 5% critical disease). (Author)

20200427-23*

Severe acute respiratory distress syndrome in coronavirus disease 2019-infected pregnancy: obstetric and intensive care considerations. Schnettler WT, Al Ahwel Y, Suhag A (2020), American Journal of Obstetrics & Gynecology MFM vol 2, no 3, suppl, August 2020, 100120
Available from: https://doi.org/10.1016/j.ajogmf.2020.100120
Full URL: https://doi.org/10.1016/j.ajogmf.2020.100120

Since the emergence of a novel coronavirus (SARS-CoV-2) in Wuhan, China, at the end of December 2019, its infection - COVID-19 - has been associated with severe morbidity and mortality and has left world governments, healthcare systems and providers caring for vulnerable populations, such as pregnant women, wrestling with the optimal management strategy. Unique physiologic and ethical considerations negate a one-size-fits-all approach to the care of critically ill pregnant women with COVID-19, and few resources exist to guide the multi-disciplinary team through decisions regarding optimal maternal-fetal surveillance, intensive care procedures, and delivery timing. We present a case of rapid clinical decompensation and development of severe Acute Respiratory Distress Syndrome (ARDS) in a

woman at 31 weeks' gestation to highlight these unique considerations and present an algorithmic approach to the disease's diagnosis and management. (Author)

20200424-7*
Considerations for Obstetric Care during the COVID-19 Pandemic. Dotters-Katz D, Hughes BL (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 773-779
Available from: https://doi.org/10.1055/s-0040-1710051
Full URL: https://doi.org/10.1055/s-0040-1710051

The novel coronavirus disease 2019 (COVID-19) is a growing pandemic that is impacting daily life across the globe. Though disease is often mild, in high-risk populations, severe disease often leads to intubation, intensive care admission (ICU) admission, and in many cases death. The implications for pregnancy remain largely unknown. Early data suggest that COVID-19 may not pose increased risk in the pregnant population. Vertical transmission has not been confirmed. Because no treatment, no vaccine and no herd immunity exist, social distancing is the best mechanism available to protect patients and health care workers from infection. This review will discuss what is known about the virus as it relates to pregnancy and then consider management considerations based on these data.
Key Points: COVID-19 severity in pregnancy is unclear: Social distancing is the best protective mechanism; No clear evidence of vertical transmission exists; Mother/baby separation avoids transmission. (Author)

20200424-6*
Coronavirus in pregnancy and delivery: rapid review. Mullins E, Evans D, Viner RM, et al (2020), Ultrasound in Obsetrics and Gynecology 17 March 2020, online
Available from: https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1002/uog.22014
Full URL: https://obgyn.onlinelibrary.wiley.com/doi/epdf/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)

20200424-5*
Experience of Clinical Management for Pregnant Women and Newborns with Novel Coronavirus Pneumonia in Tongji Hospital, China.. Wang S, Zhou X, Lin X, et al (2020), Current Medical Science 26 March 2020, online
Available from: https://link.springer.com/article/10.1007/s11596-020-2174-4
Full URL: https://link.springer.com/article/10.1007/s11596-020-2174-4

Based on the New Diagnosis and Treatment Scheme for Novel Coronavirus Infected Pneumonia (Trial Edition 5), combined with our current clinical treatment experience, we recently proposed a revision of the first edition of 'Guidance for maternal and fetal management during pneumonia epidemics of novel coronavirus infection in the Wuhan Tongji Hospital'. This article focused on the issues of greatest concern of pregnant women including severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection diagnostic criteria, inspection precautions, drug treatment options, indications and methods of termination of pregnancy, postpartum fever, breastfeeding considerations, mode of mother-to-child transmission, neonatal isolation and advice on neonatal nursing, to provide valuable experience for better management of SARS-CoV-2 infection in pregnant women and newborns. (Author)

20200424-28*
Coronavirus: Uncertainty over maternity care causing distress. Collinson A (2020), BBC News 24 April 2020
Available from: https://www.bbc.co.uk/news/health-52356067
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)

20200424-1*
COVID-19 vaginal delivery - A case report. Lowe B, Bopp B (2020), Australian and New Zealand Journal of Obstetrics and Gynaecology vol 60, no 3, June 2020, pp 465-466
Available from: https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/ajo.13173
Full URL: https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/ajo.13173
The novel coronavirus termed SARS-CoV-2 is a major public health challenge. Many maternity units around the country are currently considering management protocols for these patients. We report a case from a tertiary Australian

hospital describing an uncomplicated vaginal birth in a SARS-CoV-2 positive mother. To our knowledge this is also the first case described of a mother with COVID-19 not separated from her infant. Management provided supports the current Royal College of Obstetricians and Gynaecologists and World Health Organization guidelines suggesting that it is possible to consider rooming in post delivery for COVID-19 positive parents. Encouragement of breast feeding appears possible and safe when viral precautions are observed. (Author)

20200423-6*

A Research Agenda on the Sexual and Reproductive Health Dimensions of the COVID-19 Pandemic in Africa. Ahonsi B (2020), African Journal of Reproductive Health vol 24, no 1, March 2020, pp 22-25
Available from: https://www.ajrh.info/index.php/ajrh/article/view/2064
Full URL: https://www.ajrh.info/index.php/ajrh/article/view/2064

The outbreak of the novel coronavirus disease, COVID-19, was first reported in Wuhan in Hubei province of China in December 2019. It has since spread across the world, and as of 30th March 2020 reached over 150 countries, with a total of 693,224 confirmed cases and 33,106 deaths1. Of these totals, 42 countries in Africa had reported 3,486 confirmed cases and 60 deaths. The epicenter of the epidemic has shifted several times since mid-February 2020 from China to Iran, and then to Western Europe (Italy and Spain in particular), and is presently in the United States of America. The expectation is that the next big waves of infections will be in Africa and South America2. In the absence of an effective therapy or vaccine and without pre-existing immunity there are several reasons to anticipate more severe adverse consequences of large outbreaks of COVID-19 in Africa including for the sexual and reproductive health of vulnerable women and young people. The high burden of communicable and non-communicable diseases like malaria, HIV, tuberculosis, Lassa fever and diabetes as well as weak and under-resourced health systems, high levels of poverty, poor housing, limited access to clean water and sanitation, inadequate transport and energy infrastructure, and high population mobility would inevitably result in far more devastating economic, social and health fall-outs from the pandemic in Africa3. This near-inevitability of disproportionate COVID-associated social, health and economic adversities even if some African countries end up with relatively small total numbers of confirmed cases is because the huge health system deficits, weak national economies, and lower standards of living far outweigh all of the hypothesized advantages from having younger populations and hotter climatic conditions. (Author)

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
Available from: https://doi.org/10.1016/j.jogc.2020.03.012
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)

20200422-36*

Corticosteroid Guidance for Pregnancy during COVID-19 Pandemic. McIntosh JJ (2020), American Journal of Perinatology vol 37, no 8, June 2020, pp 809-812
Available from: https://doi.org/10.1055/s-0040-1709684
Full URL: https://doi.org/10.1055/s-0040-1709684

The novel coronavirus disease 2019 (COVID-19) pandemic is causing a necessary, rapid adjustment within the field of obstetrics. Corticosteroid use is a mainstay of therapy for those women delivering prematurely. Unfortunately,

corticosteroid use has been associated with worse outcomes in COVID-19 positive patients. Given this information, it is necessary that obstetricians adjust practice to carefully weigh the fetal benefits with maternal risks. Therefore, our institution has examined the risks and benefits and altered our corticosteroid recommendations. (Author)

20200421-7*

Pregnancy and Sars-Cov-2: A Novel Virus in a Unique Population. Mahony R (2020), Irish Medical Journal vol 113, no 4, April 2020, P49
Available from:
http://imj.ie/wp-content/uploads/2020/04/Pregnancy-and-Sars-Cov-2-A-Novel-Virus-in-a-Unique-Population.pdf
Full URL:
http://imj.ie/wp-content/uploads/2020/04/Pregnancy-and-Sars-Cov-2-A-Novel-Virus-in-a-Unique-Population.pdf
This editorial discusses the current evidence on Sars-Cov-2 and pregnancy. The author highlights studies on neonatal infection in utero, symptoms in pregnant women and physical distancing in maternity units. (LDO)

20200421-42*

Advice for people at higher risk: Coronavirus (COVID-19). NHS (2020), London NHS 21 April 2020
Available from: https://www.nhs.uk/conditions/coronavirus-covid-19/advice-for-people-at-high-risk/
Full URL: https://www.nhs.uk/conditions/coronavirus-covid-19/advice-for-people-at-high-risk/
Coronavirus can make anyone seriously ill. But some people are at a higher risk and need to take extra steps to avoid becoming unwell.. Guidance from the NHS, for people who are at increased risk of contracting COVID-19: those aged 70 and over; pregnant women; those with an underlying health condition. (Author, edited)

20200421-35*

How can we avoid research waste during the covid-19 pandemic and plan for the future?. Clarke M (2020), BMJ Opinion 21 April 2020, online
Available from:
https://blogs.bmj.com/bmj/2020/04/21/mike-clarke-avoid-research-waste-covid-19-pandemic-plan-future/
Full URL:
https://blogs.bmj.com/bmj/2020/04/21/mike-clarke-avoid-research-waste-covid-19-pandemic-plan-future/
Around the world and across disciplines, researchers have turned their attention to covid-19, but we need to ensure this effort is a help rather than a hindrance, says Mike Clarke. (Author)

20200420-35*

Clinical Characteristics of Pregnant Women with Covid-19 in Wuhan, China. Chen L, Li Q, Zheng D, et al (2020), New England Journal of Medicine vol 382, no 25, 18 June 2020, p e100
Available from: https://doi.org/10.1056/NEJMc2009226
Full URL: https://doi.org/10.1056/NEJMc2009226
Presents the results of a small study examining the epidemiologic, clinical, laboratory, and radiologic characteristics, treatment, and outcomes of 118 pregnant women with Covid-19. (MB)

20200420-24*

Coronavirus disease 2019 pandemic: staged management of surgical services for gynecology and obstetrics. Lebrun EEW, Moawad NS, Rosenberg EI, et al (2020), American Journal of Obstetrics & Gynecology (AJOG) vol 223, no 1, July 2020, pp 85.e1-85.e19

The coronavirus disease 2019 pandemic warrants an unprecedented global healthcare response requiring maintenance of existing hospital-based services while simultaneously preparing for high-acuity care for infected and sick individuals. Hospitals must protect patients and the diverse healthcare workforce by conserving personal protective equipment and redeployment of facility resources. While each hospital or health system must evaluate their own capabilities and surge capacity, we present principles of management of surgical services during a health emergency and provide specific guidance to help with decision making. We review the limited evidence from past hospital and community responses to various health emergencies and focus on systematic methods for adjusting surgical services to create capacity, addressing the specific risks of coronavirus disease 2019. Successful strategies for tiered reduction of surgical cases involve multidisciplinary engagement of the entire healthcare system and use of a structured risk-assessment categorization scheme that can be applied across the institution. Our institution developed and operationalized this approach over 3 working days, indicating that immediate implementation is feasible in response to an unforeseen healthcare emergency. (Author)

20200420-18*

COVID-19 Technical brief for antenatal care services. United Nations Population Fund (UNFPA) Afghanistan (2020), UNFPA April 2020. 20 pages

Available from: https://www.unfpa.org/resources/covid-19-technical-brief-antenatal-care-services

Full URL: https://www.unfpa.org/resources/covid-19-technical-brief-antenatal-care-services

Technical briefing from UNFPA, prepared in collaboration with the Burnet Institute, Australia, giving guidance on providing respectful and individualised antenatal care to women during the COVID-19 pandemic. (JSM)

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

Available from: https://doi.org/10.1111/aogs.13836

Full URL: https://doi.org/10.1111/aogs.13836

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)

20200417-8

That pesky nucleic acid molecule in a protein coat. Hanley J (2020), Journal of Health Visiting vol 8, no 4, April 2020

In March it seemed not only surreal but impossible to comprehend that the coronavirus would ever venture near our shores - and yet here it is. Jane Hanley looks at the effects of the pandemic on the emotional wellbeing of parents and professionals alike. (Author)

20200416-7*

From the frontline of COVID-19 - How prepared are we as obstetricians? A commentary. Chua MSQ, Lee JCS, Sulaiman S, et al (2020), BJOG: An International Journal of Obstetrics and Gynaecology vol 127, no 7, June 2020, pp 786-788

Available from: https://doi.org/10.1111/1471-0528.16192

Full URL: https://doi.org/10.1111/1471-0528.16192

The authors review the current literature and guidelines on COVID-19 and share their experiences as frontline obstetricians at KK Women's and Children's Hospital (KKH) in Singapore. (LDO)

20200416-4*

An Uncomplicated Delivery in a Patient with Covid-19 in the United States. Iqbal SN, Overcash R, Mokhtari N, et al (2020), New England Journal of Medicine vol 382, no 16, 16 April 2020, p e34

Available from: https://doi.org/10.1056/NEJMc2007605
Full URL: https://doi.org/10.1056/NEJMc2007605

To rapidly communicate information on the global clinical effort against Covid-19, the Journal has initiated a series of case reports that offer important teaching points or novel findings. The case reports should be viewed as observations rather than as recommendations for evaluation or treatment. In the interest of timeliness, these reports are evaluated by in-house editors, with peer review reserved for key points as needed. (Author)

20200416-2*

Universal Screening for SARS-CoV-2 in Women Admitted for Delivery. Sutton D, Fuchs K, D'Alton M, et al (2020), New England Journal of Medicine vol 382, no 22, 28 May 2020, pp 2163-2164

Available from: https://doi.org/10.1056/NEJMc2009316
Full URL: https://doi.org/10.1056/NEJMc2009316

Presents the results of a small study of 215 pregnant women who were admitted to two New York City hospitals to give birth. The study found that nearly 90% of the women who tested positive for SARS-CoV-2 had no symptoms of the infection. (MB)

20200416-18*

The Novel Coronavirus (2019-nCoV) in pregnancy: what we need to know. Saccone G, Carbone F, Zullo F (2020), European
Journal of Obstetrics & Gynecology and Reproductive Biology vol 249, June 2020, pp 92-93

Available from: https://doi.org/10.1016/j.ejogrb.2020.04.006
Full URL: https://doi.org/10.1016/j.ejogrb.2020.04.006

Discusses the existing literature on the novel coronavirus in pregnancy. The authors recommend the strict monitoring of women with suspected 2019-nCoV. (LDO)

20200416-14*

Health anxiety and behavioural changes of pregnant women during the COVID-19 pandemic. Corbett GA, Milne SJ, Hehir MP, et al (2020), European Journal of Obstetrics & Gynecology and Reproductive Biology vol 249, June 2020, pp 96-97

Available from: https://doi.org/10.1016/j.ejogrb.2020.04.022
Full URL: https://doi.org/10.1016/j.ejogrb.2020.04.022

The authors present the results of a questionnaire on COVID-19 and its psychological impact on pregnant women. 63.4% of participants reported heightened anxiety about their unborn baby and 66.7% reported concern about their other children. (LDO)

20200415-33*

Guidance for virtual infant feeding support during the COVID-19 outbreak. Guidance sheet 2: Antenatal conversations. UNICEF UK Baby Friendly Initiative (2020), Baby Friendly Initiative April 2020. 1 page

Available from:
https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2020/03/Unicef-UK-Baby-Friendly-Initiative-Guidance-Sheet-2-Antenatal-Conversations.pdf?utm_source=Unicef_UK&utm_medium=Email&utm_campaign=bfi_AprilCovid19_uukloyalty

Guidance from the Unicef UK Baby Friendly Initiative on holding antenatal conversations, for healthcare professionals delivering Baby Friendly services during the COVID-19 pandemic. (JSM)

20200414-6*

Coronavirus and your maternity care. AIMS (2020), AIMS 11 April 2020
Available from: https://www.aims.org.uk/information/item/coronavirus
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)

20200414-1*

Clinical Features and Outcomes of Pregnant Women Suspected of Coronavirus Disease 2019. Yang H, Sun G, Tang F, et al (2020), Journal of Infection vol 81, no 1, July 2020, pp E40-E44
Available from: https://doi.org/10.1016/j.jinf.2020.04.003
Full URL: https://doi.org/10.1016/j.jinf.2020.04.003

Background
2019 novel coronavirus disease (COVID-19) has become a worldwide pandemic. Under such circumstance pregnant women are also affected significantly.
Objective
This study aims to observe the clinical features and outcomes of pregnant women who have been confirmed with COVID-19.
Methods
The research objects were 55 cases of suspected COVID-19 pregnant women who gave a birth from Jan 20th 2020 to Mar 5th 2020 in our hospital-a big birth center delivering about 30,000 babies in the last 3 years. These cases were subjected to pulmonary CT scan and routine blood test, manifested symptoms of fever, cough, chest tightness or gastrointestinal symptoms. They were admitted to an isolated suite, with clinical features and newborn babies being carefully observed. Among the 55 cases, 13 patients were assigned into the confirmed COVID-19 group for being tested positive sever acute respiratory syndrome coronavirus 2(SARS-CoV-2) via maternal throat swab test, and the other 42 patients were assigned into the control group for being ruled out COVID-19 pneumonia based on new coronavirus pneumonia prevention and control program(the 7th edition).
Results
There were 2 fever patients during the prenatal period and 8 fever patients during the postpartum period in the confirmed COVID-19 group. In contrast, there were 11 prenatal fever patients and 20 postpartum fever patients in the control group (p>0.05). Among 55 cases, only 2 case had cough in the confirmed group. The imaging of pulmonary CT scan showed ground- glass opacity (46.2%, 6/13), patch-like shadows(38.5%, 5/13), fiber shadow(23.1%, 3/13), pleural effusion (38.5%, 5/13)and pleural thickening(7.7%, 1/13), and there was no statistical difference between the

confirmed COVID-19 group and the control group (p>0.05). During the prenatal and postpartum period, there was no difference in the count of WBC, Neutrophils and Lymphocyte, the radio of Neutrophils and Lymphocyte and the level of CRP between the confirmed COVID-19 group and the control group(p<0.05). 20 babies (from confirmed mother and from normal mother) were subjected to SARS-CoV-2 examination by throat swab samples in 24 hours after birth and no case was tested positive.
Conclusion
The clinical symptoms and laboratory indicators are not obvious for asymptomatic and mild COVID-19 pregnant women. Pulmonary CT scan plus blood routine examination are more suitable for finding pregnancy women with asymptomatic or mild COVID-19 infection, and can be used screening COVID-19 pregnant women in the outbreak area of COVID-19 infection. (Author)

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, online
Available from:
https://theconversation.com/coronavirus-while-pregnant-or-giving-birth-heres-what-you-need-to-know-133619
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)

20200408-16*

Coronavirus: 'pregnancy during a pandemic is terrifying'. Casas A (2020), BBC News 6 April 2020
Available from:
https://www.bbc.co.uk/news/av/world-us-canada-52157823/coronavirus-pregnancy-during-a-pandemic-is-terrifying
Full URL:
https://www.bbc.co.uk/news/av/world-us-canada-52157823/coronavirus-pregnancy-during-a-pandemic-is-terrifying
States that over 250,000 cases of Covid-19 have been confirmed in the United States, with the epicentre being in New York. In this video by Angélica Casas, produced with Chloe Kim and Cody Godwin, three pregnant women express their concerns and discuss how the pandemic is making them review their birth plans. (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), MedRxiv 13 March 2020, online
Available from: https://doi.org/10.1101/2020.03.10.20033605
Full URL: https://doi.org/10.1101/2020.03.10.20033605

Background: The ongoing epidemics of coronavirus disease 2019 (COVID-19) have 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, maternal and neonatal outcomes of pregnant women with and without COVID-19 pneumonia. Results: During January 24 to February 29, 2020, there were sixteen pregnant women with confirmed COVID-19 pneumonia and eighteen suspected cases who were admitted to labor in the third trimester. Two had vaginal delivery and the rest took cesarean section. Few patients presented respiratory symptoms (fever and cough) on admission, but most had typical chest CT images of COVID-19 pneumonia. Compared to the controls, COVID-19 pneumonia patients had lower counts

of white blood cells (WBC), neutrophils, C-reactive protein (CRP), and alanine aminotransferase (ALT) on admission. Increased levels of WBC, neutrophils, eosinophils, and CRP were found in postpartum blood tests of pneumonia patients. There were three (18.8%) and two (10.5%) of the mothers with confirmed or suspected COVID-19 pneumonia had preterm delivery due to maternal complications, which were significantly higher than the control group. None experienced respiratory failure during hospital stay. COVID-19 infection was not found in the newborns and none developed severe neonatal complications. Conclusion: Severe maternal and neonatal complications were not observed in pregnant women with COVID-19 pneumonia who had vaginal delivery or caesarean section. Mild respiratory symptoms of pregnant women with COVID-19 pneumonia highlight the need of effective screening on admission. (Author) [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].

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
Available from: https://doi.org/10.1016/j.ajog.2020.03.021
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)

20200402-57*

NHS trusts begin suspending home births due to coronavirus. Davis NKS (2020), The Guardian 27 March 2020
Available from:
https://www.theguardian.com/world/2020/mar/27/nhs-trusts-suspending-home-births-coronavirus
Full URL: https://www.theguardian.com/world/2020/mar/27/nhs-trusts-suspending-home-births-coronavirus

Reports that some NHS Trusts have taken guidance from professional organisations and are advising women to give birth in hospital during the current coronavirus pandemic. It is believed suspending home birth as an option will ease pressure on resources, especially in hospitals where staff are on sick leave or self-isolating because of COVID-19. Includes comments from Birte Harlev-Lam from the Royal College of Midwives. (JSM)

20200402-5*

Coronavirus Disease 2019 (COVID-19) and Pregnancy: Responding to a Rapidly Evolving Situation. Rasmussen SA, Jamieson DJ (2020), Obstetrics and Gynecology vol 135, no 5, May 2020, pp 999-1002

As the world confronts coronavirus disease 2019 (COVID-19), an illness caused by yet another emerging pathogen (severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2]), obstetric care providers are asking what this means for pregnant women. The global spread has been swift, and many key questions remain. The case-fatality rate for persons cared for in the United States and whether asymptomatic persons transmit the virus are examples of questions that need to be answered to inform public health control measures. There are also unanswered questions specific to pregnant women, such as whether pregnant women are more severely affected and whether intrauterine transmission occurs. Although guidelines for pregnant women from the American College of Obstetricians and Gynecologists and the Centers for Disease Control and Prevention have been rapidly developed based on the best available evidence, additional information is critically needed to inform key decisions, such as whether pregnant health care workers should receive special consideration, whether to temporarily separate infected mothers and their newborns, and whether it is safe for infected women to breastfeed. Some current recommendations are well supported, based largely on what we know from seasonal influenza: patients should avoid contact with ill persons, avoid touching their face, cover coughs and sneezes, wash hands frequently, disinfect contaminated surfaces, and stay home when sick. Prenatal clinics should ensure all pregnant women and their visitors are screened for fever and respiratory symptoms, and symptomatic women should be isolated from well women and required to wear a mask. As the situation with COVID-19 rapidly unfolds, it is critical that obstetricians keep up to date. (Author)

20200402-32*

Pregnancy and coronavirus: information for pregnant women and new mums. Anon (2020), Tommy's Pregnancy Hub 1 April 2020
Available from:
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)

20200401-2*

The Abortion Act 1967 - Approval of a Class of Places. Department of Health and Social Care (2020), London: DHSC 30 March 2020

Available from:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/876740/30032020_The_Abortion_Act_1967_-_Approval_of_a_Class_of_Places.pdf

Provides approval for medical abortion to be carried out in the home of a pregnant women who wishes to terminate her pregnancy, during this current coronavirus pandemic. This approval supersedes the approval of 27 December 2018. This approval expires on the day on which the temporary provisions of the Coronavirus Act 2020 expire, or the end of the period of 2 years beginning with the day on which it is made, whichever is earlier. (Author, edited)

20200401-1*

Coronavirus: Home abortions approved during outbreak. Connolly J (2020), BBC News 31 March 2020

Available from: https://www.bbc.co.uk/news/newsbeat-52092131

Full URL: https://www.bbc.co.uk/news/newsbeat-52092131

Reports that the Government has amended it's abortion policy to allow medical abortion to take place at home to avoid women who wish to terminate their pregnancy to avoid going to a clinic during the current coronavirus pandemic. Explains that the procedure, whereby women take two pills at home, is only a temporary measure, and must only be done following a telephone or e-conversation with a doctor. (JSM)

20200331-9*

Guidance for maternal medicine in the evolving coronavirus (COVID-19) pandemic: Information for healthcare professionals [Last updated 24 April 2020]. Royal College of Obstetricians and Gynaecologists (2020), Royal College of Obstetricians and Gynaecologists (RCOG) 30 March 2020

Available from:

https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-30-guidance-for-maternal-medicine-in-the-evolving-coronavirus-covid-19-pandemic.pdf

Guidance on the adaptation of maternal medicine services during the coronavirus pandemic, and advice for healthcare professionals caring for pregnant women with suspected or confirmed COVID-19. (LDO)

20200331-14*

Guidance for antenatal screening and ultrasound in pregnancy in the evolving coronavirus (COVID-19) pandemic: Information for healthcare professionals. Jolly M, Taylor M, Fisher J, on behalf of the Royal College of Obstetricians and Gynaecologists (2020), Royal College of Obstetricians and Gynaecologists (RCOG) 23 March 2020

Available from:

https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-25-covid19-antenatal-screening.pdf

Full URL:

https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-25-covid19-antenatal-screening.pdf

Guidance on fetal anomaly screening, infectious disease in pregnancy screening and sickle cell and thalassaemia screening during the COVID-19 pandemic. (LDO)

20200331-13*

Guidance for fetal medicine units (FMUs) in the evolving coronavirus (COVID-19) pandemic: Information for healthcare professionals. Jolly M, Taylor M, Fisher J, on behalf of the Royal College of Obstetricians and Gynaecologists (2020),
Royal College of Obstetricians and Gynaecologists (RCOG) 23 March 2020
Available from:
https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-25-covid19-fetal-medicine.pdf
Full URL: https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-25-covid19-fetal-medicine.pdf
Guidance on referrals, screening and modified services for fetal medicine units (FMUs) during the COVID-19 pandemic. (LDO)

20200331-11*

Self-monitoring of blood pressure in pregnancy: Information for healthcare professionals. Royal College of Obstetricians and Gynaecologists (2020), Royal College of Obstetricians and Gynaecologists (RCOG) 30 March 2020
Available from:
https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-30-self-monitoring-of-blood-pressure-in-pregnancy.pdf

Guidance on the implementation of home blood pressure monitoring and which groups of women self-monitoring should be offered to. (LDO)

20200326-42*

COVID-19 virus infection and pregnancy: Occupational health advice for employers and pregnant women during the COVID-19 pandemic [Last updated 27 April 2020]. Royal College of Obstetricians and Gynaecologists, Royal College of Midwives (2020), Royal College of Obstetricians and Gynaecologists (RCOG) 26 March 2020
Available from:
https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-26-covid19-occupational-health.pdf
Full URL:
https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-26-covid19-occupational-health.pdf
Guidance on COVID-19 in pregnancy and recommendations for pregnant healthcare workers. (LDO)

20200326-14*

Coronavirus infection and pregnancy. Royal College of Obstetricians and Gynaecologists (2020), London: RCOG 26 March 2020
Available from:
https://www.rcog.org.uk/en/guidelines-research-services/guidelines/coronavirus-pregnancy/covid-19-virus-infection-and-pregnancy/

These Q&As relate to the Coronavirus (COVID-19) infection and pregnancy - guidance for healthcare professionals: Version 8 - 17 April 2020 and Occupational health advice for employers and pregnant women during the COVID-19 pandemic: Version 3 - 21 April 2020 published by the Royal College of Obstetricians and Gynaecologists, Royal College of Midwives and Royal College of Paediatrics and Child Health, with input from the Royal College of Anaesthetists, the Obstetric Anaesthetists' Association, Public Health England and Health Protection Scotland. (Author)

20200325-3*

Clinical features and obstetric and neonatal outcomes of pregnant patients with COVID-19 in Wuhan, China: a retrospective, single-centre, descriptive study. Yu N, Li W, Kang Q, et al (2020), The Lancet Infectious Diseases vol 20, no 5, May 2020, pp 559-564

Available from: https://doi.org/10.1016/S1473-3099(20)30176-6

Full URL: https://doi.org/10.1016/S1473-3099(20)30176-6

Background

In December, 2019, coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in Wuhan, China. The number of affected pregnant women is increasing, but scarce information is available about the clinical features of COVID-19 in pregnancy. This study aimed to clarify the clinical features and obstetric and neonatal outcomes of pregnant patients with COVID-19.

Methods

In this retrospective, single-centre study, we included all pregnant women with COVID-19 who were admitted to Tongji Hospital in Wuhan, China. Clinical features, treatments, and maternal and fetal outcomes were assessed.

Findings

Seven patients, admitted to Tongji Hospital from Jan 1, to Feb 8, 2020, were included in our study. The mean age of the patients was 32 years (range 29-34 years) and the mean gestational age was 39 weeks plus 1 day (range 37 weeks to 41 weeks plus 2 days). Clinical manifestations were fever (six [86%] patients), cough (one [14%] patient), shortness of breath (one [14%] patient), and diarrhoea (one [14%] patient). All the patients had caesarean section within 3 days of clinical presentation with an average gestational age of 39 weeks plus 2 days. The final date of follow-up was Feb 12, 2020. The outcomes of the pregnant women and neonates were good. Three neonates were tested for SARS-CoV-2 and one neonate was infected with SARS-CoV-2 36 h after birth.

Interpretation

The maternal, fetal, and neonatal outcomes of patients who were infected in late pregnancy appeared very good, and these outcomes were achieved with intensive, active management that might be the best practice in the absence of more robust data. The clinical characteristics of these patients with COVID-19 during pregnancy were similar to those of non-pregnant adults with COVID-19 that have been reported in the literature.

Funding

National Natural Science Foundation of China, Hubei Provincial Natural Science Foundation of China. (Author)

20200325-10*

Babyscripts Lowers Prenatal In-Person Visits During COVID-19 Outbreak. Pennic J (2020), HiT Consultant 24 March 2020

Available from:
https://hitconsultant.net/2020/03/24/babyscripts-covid-19-outbreak-prenatal-in-person-visits/#.Xns2tkB2vid

Full URL:
https://hitconsultant.net/2020/03/24/babyscripts-covid-19-outbreak-prenatal-in-person-visits/#.Xns2tkB2vid

Describes how Babyscripts, a virtual care platform for pregnancy and obstetrics, is helping to reduce the number of antenatal in-person visits from the average 12-14 to 4-6, during the current COVID-19 outbreak. (JSM)

20200324-62*

MFM Guidance for COVID-19. Boelig RC, Saccone G, Bellussi F, et al (2020), American Journal of Obstetrics & Gynecology MFM
vol 2, no 2, suppl, May 2020, 100106

Available from: https://doi.org/10.1016/j.ajogmf.2020.100106

Full URL: https://doi.org/10.1016/j.ajogmf.2020.100106

The World Health Organization (WHO) has declared COVID-19 a global pandemic. Healthcare providers should prepare internal guidelines covering all aspect of the organization in order to have their unit ready as soon as possible. This document addresses the current COVID-19 pandemic for maternal-fetal medicine (MFM) practitioners. The goals the guidelines put forth here are two fold- first to reduce patient risk through healthcare exposure, understanding that asymptomatic health systems/healthcare providers may become the most common vector for transmission, and second to reduce the public health burden of COVID-19 transmission throughout the general population. (Author, edited)

20200324-3*

Covid-19 and reproductive health: What can we learn from previous epidemics?. Black B, McKay G (2020), BMJ 19 March 2020, online

Available from:
https://blogs.bmj.com/bmj/2020/03/19/covid-19-and-reproductive-health-what-can-we-learn-from-previous-epidemics/

Benjamin Black and Gillian McKay argue that there is enough global precedence to prepare for many of the indirect consequences this pandemic will bring. (Author)

20200324-26*

Understanding the coronavirus. Duncan D, Lyall G (2020), British Journal of Midwifery vol 28, no 3, March 2020

The death of a baby is one of the most profoundly traumatic experiences a family can experience. Chris Binnie from Beyond Bea Charity discusses why accepting support is better than being silent (Author)

20200324-2*

Emma Doble: Living in a high-risk group for covid-19. Doble E (2020), BMJ 23 March 2020, online
Available from: https://blogs.bmj.com/bmj/2020/03/23/emma-doble-living-in-a-high-risk-group-for-covid-19/
Full URL: https://blogs.bmj.com/bmj/2020/03/23/emma-doble-living-in-a-high-risk-group-for-covid-19/

Emma Doble, freelance patient editor for The BMJ. who is pregnant and has type 1 diabetes, describes what it is like being in a high risk group for covid-19. (MB)

20200324-1*

Covid-19: doctors in final trimester of pregnancy should avoid direct patient contact. Rimmer A (2020), BMJ vol 368, no 8239, 23 March 2020, m1173
Available from: https://doi.org/10.1136/bmj.m1173
Full URL: https://doi.org/10.1136/bmj.m1173

Reports that women who are more than 28 weeks pregnant should avoid direct contact with patients, advice comes from updated guidance from the Royal College of Obstetricians and Gynaecologists (RCOG), the Royal College of Midwives, and the Royal College of Paediatrics and Child Health. (MB)

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)

20200318-9*

Coronavirus: Pregnant women 'should keep antenatal appointments'. BBC News (2020), BBC News 17 March 2020
Available from: https://www.bbc.co.uk/news/uk-51925455
Full URL: https://www.bbc.co.uk/news/uk-51925455

Pregnant women are being urged to attend antenatal appointments as normal after the government said they should be shielded from coronavirus.
The Royal College of Midwives said the appointments were 'essential to ensure the wellbeing of pregnant women and their babies'. The government says limited evidence suggests there are no coronavirus-related complications in pregnancy. But pregnant women are being advised to limit their social contact. Further guidance for pregnant women from three Royal Colleges is due to be published shortly. (Author)

20200318-10*

Professional bodies' response to government coronavirus advice for pregnant women to reduce social contact. Royal College of Obstetricians and Gynaecologists, Royal College of Midwives, Royal College of Paediatrics and Child Health (2020), Royal
College of Obstetricians and Gynaecologists (RCOG) 17 March 2020, online
Available from:
https://www.rcog.org.uk/en/news/professional-bodies-response-to-government-advice-for-pregnant-women-to-self-isolate/

Following the new measures outlined by the Prime Minister yesterday, particularly those suggesting that pregnant women reduce social contact, the Royal College of Obstetricians and Gynaecologists, the Royal College of Midwives and the Royal College of Paediatrics and Child Health are working to reassure pregnant women and those who care for them.

The three Royal Colleges, who between them care for and support women and their babies throughout pregnancy, birth and childhood, reiterate that there is currently no new evidence to suggest that pregnant women are at greater risk from coronavirus (COVID-19) than other healthy individuals, or that they can pass the infection to their baby while pregnant.
Yesterday's announcement is purely a precautionary measure, to reduce the theoretical risk to the baby's growth and a risk of preterm birth should the mother become unwell. Guidance will continue to be updated. (Author)

20200310-9*

Guidelines for pregnant women with suspected SARS-CoV-2 infection. Favre G, Pomar L, Qi X, et al (2020), The Lancet Infectious Diseases vol 20, no 6, June 2020, pp 652-653
Available from: https://doi.org/10.1016/S1473-3099(20)30157-2
Full URL: https://doi.org/10.1016/S1473-3099(20)30157-2

Proposes a management algorithm for health-care providers caring for pregnant women at risk of SARS-Cov-2 infection. (6 references) (MB)

20200213-7*

Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. Chen H, Guo J, Want C, et al (2020), The Lancet 12 February 2020, online
Available from: https://doi.org/10.1016/S0140-6736(20)30360-3
Full URL: https://doi.org/10.1016/S0140-6736(20)30360-3

Background
Previous studies on the pneumonia outbreak caused by the 2019 novel coronavirus disease (COVID-19) were based on information from the general population. Limited data are available for pregnant women with COVID-19 pneumonia. This study aimed to evaluate the clinical characteristics of COVID-19 in pregnancy and the intrauterine vertical transmission potential of COVID-19 infection.
Methods
Clinical records, laboratory results, and chest CT scans were retrospectively reviewed for nine pregnant women with laboratory-confirmed COVID-19 pneumonia (ie, with maternal throat swab samples that were positive for severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2]) who were admitted to Zhongnan Hospital of Wuhan University, Wuhan, China, from Jan 20 to Jan 31, 2020. Evidence of intrauterine vertical transmission was assessed by testing for the presence of SARS-CoV-2 in amniotic fluid, cord blood, and neonatal throat swab samples. Breastmilk samples were also collected and tested from patients after the first lactation.
Findings
All nine patients had a caesarean section in their third trimester. Seven patients presented with a fever. Other symptoms, including cough (in four of nine patients), myalgia (in three), sore throat (in two), and malaise (in two), were also observed. Fetal distress was monitored in two cases. Five of nine patients had lymphopenia ($<1{\cdot}0 \times 10^9$ cells per L). Three patients had increased aminotransferase concentrations. None of the patients developed severe COVID-19 pneumonia or died, as of Feb 4, 2020. Nine livebirths were recorded. No neonatal asphyxia was observed in newborn babies. All nine livebirths had a 1-min Apgar score of 8-9 and a 5-min Apgar score of 9-10. Amniotic fluid, cord blood, neonatal throat swab, and breastmilk samples from six patients were tested for SARS-CoV-2, and all samples tested negative for the virus.
Interpretation
The clinical characteristics of COVID-19 pneumonia in pregnant women were similar to those reported for

non-pregnant adult patients who developed COVID-19 pneumonia. Findings from this small group of cases suggest that there is currently no evidence for intrauterine infection caused by vertical transmission in women who develop COVID-19 pneumonia in late pregnancy.
Funding
Hubei Science and Technology Plan, Wuhan University Medical Development Plan. (19 references) (Author)

20200210-26*
2019-nCoV epidemic: what about pregnancies?. Favre G, Pomar L, Musso D, et al (2020), The Lancet vol 395, no 10224, 22 February 2020, p E40
Correspondence commenting on the pathogenic potential of novel coronavirus (2019-nCoV) in pregnancy. (5 references) (MB)

20200122-1*
Inadvertent vaccination in pregnancy (VIP) [Last updated 3 March 2021]. Public Health England (2010), London: PHE 1 May 2010
Available from: https://www.gov.uk/guidance/vaccination-in-pregnancy-vip
Full URL: https://www.gov.uk/guidance/vaccination-in-pregnancy-vip
Advice for health professionals on pregnant women who are inadvertently vaccinated against coronavirus (COVID-19), chicken pox (varicella), shingles or measles, mumps, rubella. (Author)