## Boletim BiblioCovid v.3 n.2, fevereiro 2022 | Covid-19 e Gestantes

Boletim destinado a apresentação de estratégias e artigos científicos sobre temas relacionados à Covid-19.
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# Covid-19 e Gestantes

### Vocabulário controlado

MeSH – Medical Subject Headings (NLM/NIH)
DeCS

### Bases utilizadas

MEDLINE e LILACS

## Termos Utilizados (com base no Medical Subject Headings – MeSH):

### Descritores e/ou palavras-chave

Sars-Cov-19
Covid-19
Novo coronavírus
Pregnat women
Pregnancy
Gestantes

### Filtros utilizados

ano 2020-2022
Tipo de documento : Artigo
Idioma : Inglês e português

## Estratégias de busca

(sars-cov-2 OR covid-19 OR "novo coronavírus" ) AND ("Pregnant women" OR pregnancy OR gestante*) AND ( fulltext:("1" OR "1" OR "1" OR "1" IOR "1" OR "1" OR "1" OR "1") AND db:("MEDLINE" OR "LILACS") AND mj:("Coronavirus") AND la:("en" OR "pt") AND type:("article")) AND (year_cluster:[2020 TO 2022])

Seleção dos dez artigos mais relevantes, segundo critérios da base de dados Portal regional BVS, incluindo os filtros "ano 2020-2022", "Tipo de documento : Artigo" e "Idioma : Inglês e português".

## 1. The relatıonshıp between pregnant women's anxıety levels about coronavırus and prenatal attachment

**Resumo**

This study aimed to determine the relationship between pregnant women's anxiety levels related to concerns about the effect of coronavirus on prenatal attachment. This a descriptive and correlational design study was conducted from September 2020 to January 2021; it included 101 pregnant women who were more than 20 weeks pregnant. Introductory questionnaire, the Coronavirus Anxiety Scale and the Prenatal Attachment Inventory were used as data collection tools. Results of the participants, 80.2% were 35 years old or younger. The participants' mean Coronavirus Anxiety Scale score was $8.85 \pm 5.02$ (min: 0, max: 17), which was close to the scale's cut-off value. Of the participants, 68.3% had high levels of perceived anxiety about coronavirus. The participants' mean Prenatal Attachment Inventory score was $60.08 \pm 21.26$ (min: 21, max: 84). Of the participants, 54.3% had high levels of Prenatal Attachment Inventory. Correlation analysis found a negative, but significant relationship between the participants' scores on the Coronavirus Anxiety Scale and the Prenatal Attachment Inventory ($r = -244$, $p = 0.014$). Conclusion: The participants' prenatal attachment levels increased as their perceived anxiety scores about coronavirus decreased.

**Referência**

KARACA, P. P.; KOYUCU, R. G.; AKSU, S. C. The relationship between pregnant women's anxiety levels about coronavırus and prenatal attachment. **Archives of Psychiatric Nursing,** [*S. l.*], v. 36, p. 78-84, feb. 2022. Disponível em: https://www.psychiatricnursing.org/article/S0883-9417(21)00181-3/fulltext. Acesso em: 20 fev. 2022.

## 2. Perinatal Transmission of 2019 Coronavirus Disease–Associated Severe Acute Respiratory Syndrome Coronavirus 2: Should We Worry?

**Resumo**

We present 2 cases of coronavirus disease 2019 (COVID-19)–associated severe respiratory syndrome coronavirus 2 (SARS-CoV-2) infection during the third trimester of pregnancy. Both mothers and newborns had excellent outcomes. We failed to identify SARS-CoV-2 in all of the products of conception and the newborns. This report provided evidence of low risk of intrauterine infection by vertical transmission of SARS-CoV-2.

**Referência**

FAN, C.; LEI, D.; FANG, C.; *et al*. Perinatal Transmission of 2019 Coronavirus Disease–Associated Severe Acute Respiratory Syndrome Coronavirus 2: Should We Worry? **Clinical Infectious Diseases**, Chicago, v. 72, n. 5, p. 910, Jan 2021. Disponível em: https://academic.oup.com/cid/article/72/5/862/5809260?login=false . Acesso em: 20 fev. 2022

## 3. A Systematic Review of 571 Pregnancies Affected by COVID-19

**Resumo**

The outbreak of the novel coronavirus 2019 (COVID-19) disease has been severe and a cause for major concern around the world. Due to immunological and physiological changes during pregnancy, pregnant women have a higher risk of COVID-19 morbidity and mortality. The aim of this study was to collect and integrate the results of previous studies to get an accurate representation and interpretation of the clinical symptoms, laboratory and radiological findings, and characteristics of pregnant women with COVID-19. We conducted a scientific search in main databases with a combination of related MESH terms and keywords. The outcomes included common clinical symptoms at the time of onset of the disease, common laboratory and radiological findings, the rates of vaginal delivery and Cesarean section, Cesarean section indications, maternal complications, and vertical transmission rates. A total of 51 studies comprising 571 pregnant women with COVID-19 pneumonia were included in the study. The most common symptoms were fever, cough, and dyspnea, respectively. Elevated C-reactive protein and ground-glass opacities were the most common laboratory and radiological findings of COVID-19 pneumonia, respectively. A total of 114 Cesarean sections were performed due to COVID-19-related concerns. There were 55 cases of intubation (11.6%) and 13 maternal deaths (2.3%). The vertical transmission rate was 7.9%. We conclude that the characteristics of pneumonia caused by COVID-19 in pregnant women do not appear to be different from those in the general population with COVID-19 infections. However, pregnant women with underlying diseases were more likely to develop COVID-19 than others, and, in those infected with the virus, the rate of Cesarean delivery and preterm birth increased.

**Referência**

KARIMI, L.; VAHEDIAN-AZIMI, A.; MAKVANDI, S.; SAHEBKAR, A. A Systematic Review of 571 Pregnancies Affected by COVID-19. In: GUEST, P. C. (ed). Clinical, Biological and Molecular Aspects of COVID-19. **Advances in Experimental Medicine and Biology.** Springer International Publishing, [New York], mar. 2021, v. 1321, n. 9, p. 2348-2361. Disponível em: https://link.springer.com/chapter/10.1007/978-3-030-59261-5_26 . Acesso em: 20 fev. 2022.

## 4. After corona: there is life after the pandemic

**Resumo**

The current pandemic of Coronavirus Disease 2019 (COVID-19) has focused the attention of medical-care providers away from non-life-threatening diseases, including infertility. Although infertility does not jeopardize the physical survival of infertile couples, it does jeopardize their future quality of life. Human infertility can be caused by a number of factors, some of which are age-dependent, and their effects may become irreversible if appropriate measures are not taken in time to prevent irreversible childlessness. Accordingly, each case of infertility should be evaluated comprehensively to establish its position of priority. Assisted reproductive technology (ART) makes it possible to separate fertilization and pregnancy in time. Whereas pregnant women infected with coronavirus may have an increased risk of adverse neonatal outcomes, gametes do not transmit COVID-19. Thus, performing ovarian stimulation and fertilization without delay, freezing the resulting embryos and delaying embryo transfer until the end of the pandemic appears to be the best strategy at present.

**Referência**

TESARIK, J. After corona: there is life after the pandemic. **Reproductive Biomedicine Online**, Amsterdam, v. 40, n. 5, p. 2384-2393, Apr. 2020. Disponível em: https://www.rbmojournal.com/article/S1472-6483(20)30181-4/fulltext. Acesso em: 20 fev. 2022.

## 5. Coronavirus Disease 2019 (COVID-19) and pregnancy: what obstetricians need to know

**Resumo**

Coronavirus disease 2019 is an emerging disease with a rapid increase in cases and deaths since its first identification in Wuhan, China, in December 2019. Limited data are available about coronavirus disease 2019 during pregnancy; however, information on illnesses associated with other highly pathogenic coronaviruses (ie, severe acute respiratory syndrome and the Middle East respiratory syndrome) might provide insights into coronavirus disease 2019's effects during pregnancy. Coronaviruses cause illness ranging in severity from the common cold to severe respiratory illness and death. Currently the primary epidemiologic risk factors for coronavirus disease 2019 include travel from mainland China (especially Hubei Province) or close contact with infected individuals within 14 days of symptom onset. Data suggest an incubation period of ∫5 days (range, 2–14 days). Average age of hospitalized patients has been 49–56 years, with a third to half with an underlying illness. Children have been rarely reported. Men were more frequent among hospitalized cases (54–73%). Frequent manifestations include fever, cough, myalgia, headache, and diarrhea. Abnormal testing includes abnormalities on chest radiographic imaging, lymphopenia, leukopenia, and thrombocytopenia. Initial reports suggest that acute respiratory distress syndrome develops in 17–29% of hospitalized patients. Overall case fatality rate appears to be ∫1%; however, early data may overestimate this rate. In 2 reports describing 18 pregnancies with coronavirus disease 2019, all were infected in the third trimester, and clinical findings were similar to those in nonpregnant adults. Fetal distress and preterm delivery were seen in some cases. All but 2 pregnancies were cesarean deliveries and no evidence of in utero transmission was seen...

**Referência**

RASMUSSEN, S. A.; SMULIAN, J. C.; LEDNICKY, J. A.; WEN, T. S.; JAMIESON, D. J. Coronavirus Disease 2019 (COVID-19) and pregnancy: what obstetricians need to know. **American Journal of Obstetrics & Gyneconology**, Online, v. 222, n. 5, p. 415-426, may 2020. Disponível em: https://www.ajog.org/article/S0002-9378(20)30197-6/fulltext. Acesso em: 20 fev. 2022.

## 6. Laboratory characteristics of pregnant compared to non-pregnant women infected with SARS-CoV-2

**Resumo**

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. 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. 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.

**Referência**

MOHR-SASSON, A.; CHAYO, J.; BART, Y.; *et al*. Laboratory characteristics of pregnant compared to non-pregnant women infected with SARS-CoV-2. **Archives of Gynecology and Obstetrics**, Munchen, v. 302, n. 3, p. 629-634, june 2020. Disponível em: https://link.springer.com/article/10.1007/s00404-020-05655-7. Acesso em: 20 fev. 2022.

## 7. Maternal and infant outcomes of full-term pregnancy combined with COVID-2019 in Wuhan, China: retrospective case series

**Resumo**

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, confrmed 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 confrmed 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 frst 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.

**Referência**

CHEN, Y.; BAI, J. Maternal and infant outcomes of full- term pregnancy combined with COVID- 2019 in Wuhan, China: retrospective case series. **Archives of Gynecology and Obstetrics,** Munchen, v. 302, n. 3, p. 545-551, july 2020. Disponível em: https://link.springer.com/article/10.1007/s00404-020-05573-8. Acesso em: 20 fev. 2022.

## 8. Alterações laboratoriais em gestantes e puérperas com diagnóstico confirmatório de COVID-19

### Resumo

Objetivo: Analisar as alterações de exames laboratoriais de gestantes e puérperas com diagnóstico laboratorial de COVID-19 atendidas em uma maternidade de referência em Fortaleza/Ceará, no período de março a outubro de 2020. Métodos: Trata-se de um estudo retrospectivo, descritivo, com abordagem quantitativa, envolvendo análise de dados dos exames laboratoriais de pacientes com diagnóstico confirmatório para COVID-19 no período de março a outubro de 2020. Os dados foram coletados a partir dos resultados de exames obtidos nas plataformas institucionais, revisão de dados e evoluções do prontuário físico e eletrônico. Resultados: As pacientes apresentaram notória redução de hemoglobina e hematócrito, leucocitose com linfopenia e alteração de parâmetros bioquímicos de função hepática. Na amostra estudada, obteve-se um percentual de óbitos de 5%. Além disso, evidenciou-se alteração de marcadores de inflamação e coagulação, dados que corroboram com os estudos na área. Conclusão: As alterações específicas da COVID-19 foram detectadas nos dois grupos de pacientes, ressaltando-se a importância da realização de novos estudos com enfoque na população gestante e puérpera, pois as consequências da doença nessa população podem afetar diretamente o binômio mãe-bebê.

### Referência

ALBUQUERQUE, J. S. A. de; GOMES NETO, N. F.; DIAS, H. I.; et al. Alterações laboratoriais em gestantes e puérperas com diagnóstico confirmatório de COVID-19. **Rev. Bras. An. Clin**., Online, v. 53, n. 2, p. 148-154, 2021. Disponível em: http://www.rbac.org.br/artigos/alteracoes-laboratoriais-em-gestantes-e-puerperas-com-diagnostico-confirmatorio-de-covid-19/ . Acesso em: 20 fev. 2022.

## 9. Gravidez e infecção por Coronavírus: desfechos maternos, fetais e neonatais – Revisão sistemática

**Resumo**

Introdução: Pouco se sabe sobre os efeitos da Síndrome Respiratória Aguda Grave do Coronavírus (SARS-CoV) durante a gravidez. O objetivo desse trabalho foi descrever os desfechos clínicos durante a gestação em mulheres que tiveram SARS-CoV-1 e SARS-CoV-2 e seu impacto na saúde fetal e do recém-nascido. Materiais e Métodos: Revisão sistemática realizada nas fontes de busca Periódicos Capes, Google Acadêmico, Lilacs e PubMed. Resultados: Foram selecionados 27 artigos científicos. A taxa de mortalidade foi maior em grávidas com SARS-CoV-1 do que SARS-CoV-2. Os sintomas mais relatados nas grávidas com o COVID-19 foram febre e tosse. A maioria dos estudos mostraram testagem negativa para SARS-CoV-1 e SARS-CoV-2 nos recém-nascidos de mães infectadas. Ambos os tipos de infecções causaram retardo do crescimento intrauterino e problemas respiratórios em neonatos. Discussão: As infecções por SARS-CoV-1 e SARS-CoV-2 compartilharam características clínicas comuns em gestantes, tais como, febre, tosse seca, dispneia, pneumonia e admissão em Unidade de Terapia Intensiva (UTI) para ventilação mecânica. Apesar de a literatura apontar a não transmissão vertical do coronavírus, foi encontrado níveis elevados de IgM em amostras de sangue de neonatos de mães que tiveram SARS-CoV-2 durante a gestação. Conclusões: Mais estudos precisam ser realizados para o melhor entendimento dos desfechos clínicos maternos, fetais e neonatais da SARS-CoV-2 durante a gestação, a fim de contribuir para tomada de decisões terapêuticas e de precaução da infecção.

**Referência**

FURLAN, M. C. R. ; JURADO, S. R. ; ULIANA, C. H.; *et al*. Gravidez e infecção por Coronavírus: desfechos maternos, fetais e neonatais – Revisão sistemática. **Revista Cuidarte,** Bucaramanga, v. 11, n. 2, mayo/agosto 2020. Disponível em: https://revistas.udes.edu.co/cuidarte/article/view/1211. Acesso em: 20 fev. 2022.

## 10. Allocation of pharmaceutical resources in maternal and child healthcare institutions during the COVID-19 pandemic

### Resumo

Since the outbreak of a cluster of patients with pneumonia of unknown cause in Wuhan, Hubei Province, China, in December 2019, the disease was later officially named coronavirus disease 2019 (COVID-19) caused by the novel severe acute respiratory syndrome coronavirus (SARS-CoV-2), quickly spreading globally. Pregnant women and children are particularly vulnerable during disasters and emergencies. Comprehensive and applicable emergency preparedness and response are definitely important methods to prevent and contain the COVID-19 pandemic. The rational allocation of pharmaceutical resources plays an important role in the medical emergency plan. This paper aimed to share experiences for the allocation of pharmaceutical resources in hospitals focusing primarily on women and children during the COVID-19 pandemic.

### Referência

CAI, J.; CHEN, W.; YANG, X.; YANG, X.; LI, G. Allocation of pharmaceutical resources in maternal and child healthcare institutions during the COVID-19 pandemic. **Rev. Assoc. Med. Bras.,** São Paulo, v. 66, p. 41-47, set. 2020. Supl. 2. Disponível em: https://www.scielo.br/j/ramb/a/RYwgWVHXVfFH7cDpsTm9Z9S/?lang=en. Acesso em: 20 fev. 2022.

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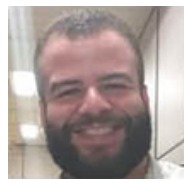**Imagens:** Pixabay

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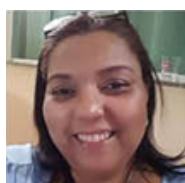Fiocruz Bahia/BibIGM

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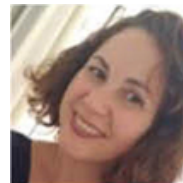Fiocruz PE/BibIAM

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