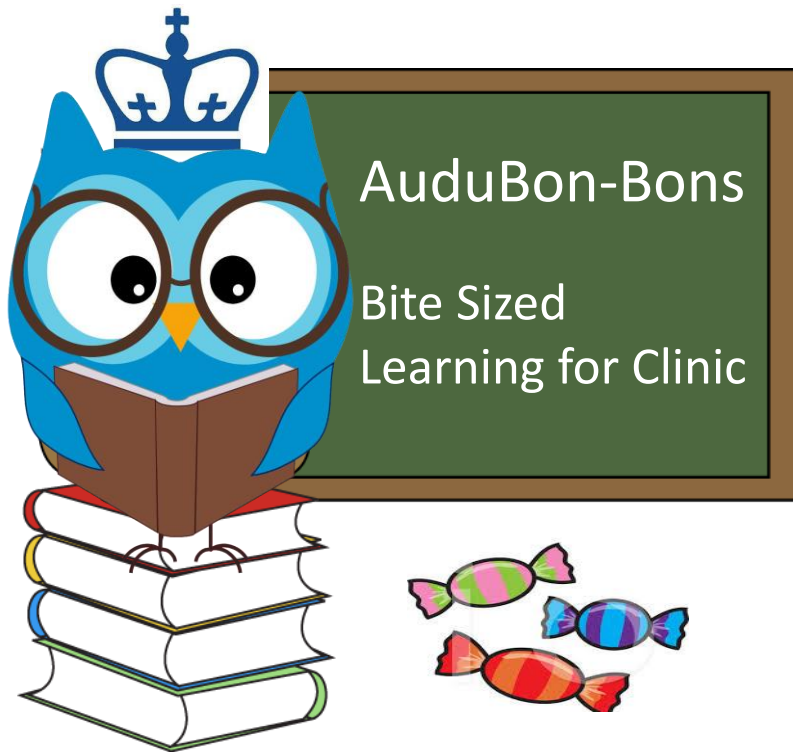


COVID-19 AND PRENATAL CARE

Fall 2021

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Reading Assignment:
ACOG Practice Advisories
- Novel Coronavirus 2019 (COVID-19), Nov 2020
- COVID-19 Vaccination Considerations for Obstetric-
Gynecologic Care, Dec 2020



LEARNING OBJECTIVES



- To review the background, epidemiology, and evaluation of COVID-19 disease in the obstetric patient population
- To understand and be comfortable counseling patients on the benefits of vaccination against COVID-19 during
 - Preconception care
 - Prenatal visits
 - Postpartum care



CASE VIGNETTE

- Ms. N.C. is a 30yo G1P1001 woman who presents to your office for an annual well-woman visit and offers no complaints.
- As you begin to take a history, she mentions that she tested positive for COVID-19 five months ago. She reports her symptoms all resolved and she has been feeling well for the past few months.
- She and her partner have recently decided to discontinue contraception in hopes of conceiving again. As a result of this and the fact that she was already infected with COVID-19, she's hesitant to get the COVID vaccine despite hearing from her PCP and several local & national PSA's that she should receive it.



FOCUSED HISTORY

- **What elements of this patient's history would you reference in your counseling?**
 - POB: 1 FT NSVD
 - GYN: Regular menses/Q30d x 4d
No cysts/fibroids/STI
No abnormal pap smears - Last done 1 year ago NILM/HPV(-)
 - **PMH: Asthma**
 - PSH: None
 - Meds: PNV, Albuterol PRN
 - ALL: NKDA
 - FamHx: No hx Breast/Uterine/Ovarian/Colon cancer



PERTINENT PHYSICAL EXAM FINDINGS

What elements of the patient's physical exam are most relevant?

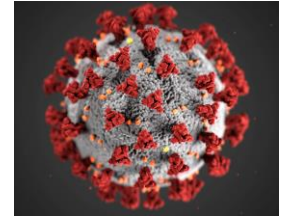
- VS: P 76 BP 117/74 Wgt: 92kg Hgt: 160cm BMI: 36
- CV: RRR, no M
- Resp: CTAB
- Abd: Soft, NT/ND, +BS x 4Q
- Pelvic: Vulva: Normal external female genitalia; No lesions
Vagina: Healthy-appearing mucosa, No discharge
Cervix: Parous os; L/C/P
Uterus: NT, ~8wk size, anteverted
Adnexae: No mass/tenderness b/l
- Ext: No calf tenderness b/l



BACKGROUND

- **What is COVID-19?**

- Coronavirus disease 2019 is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
- SARS-COV-2 is a positive-stranded RNA virus



- **How is SARS-CoV-2 transmitted?**

- Respiratory transmission via close-range (six feet/2 meters) contact
- Possible through contact via touching mucosal membranes after touching contaminated surfaces
- Possible airborne transmission albeit evidence not consistent

- **When is it most infectious?**

- Models have shown greatest infectiousness at least 2 days before and 1 day after symptom onset, when viral RNA load is highest, with decline in infectiousness within 7 days

- **How long can SARS-CoV-2 remain on surfaces without disinfection?**

- 6-9 days

- **What is the risk of reinfection in the short-term?**

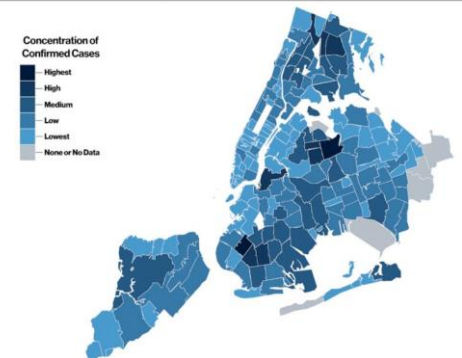
- Low; prior infection reduces short-term reinfection in the following 6-7 months by 80-85%



COVID-19 AND PREGNANCY

- **Are pregnant women at risk of more severe illness than nonpregnant women with COVID-19?**
 - YES
- **What maternal complications can pregnant women experience with severe COVID-19?**
 - Increased risk for ICU admission, need for mechanical ventilation, ventilatory support such as ECMO, and death
 - Absolute risks are still low
- **What perinatal complications can pregnant women experience with severe COVID-19?**
 - Increased risk of adverse perinatal outcomes overall, increased risk of hypertensive disorders of pregnancy, preterm delivery and cesarean delivery, VTE
 - These risks are not usually increased in mild-to-moderate severity cases
- **Are certain comorbidities associated with increased risk of severe COVID-19 illness?**
 - Yes: obesity, diabetes, hypertension, lung disease, advanced maternal age (more moderate disease for AMA, as well)
- **Are there ethnic differences in those who experience severe COVID-19 or mortality?**
 - Yes; Black and Hispanic pregnant women have disproportionate infection and mortality rates

Concentration of COVID-19 Cases
BY NYC ZIP CODE



SOURCE: CENSUS AMERICAN COMMUNITY SURVEY

COVID-19 VACCINES



- **What are the current vaccines available against COVID-19?**
 - The US Food and Drug Administration (FDA) issued an Emergency Use Authorization (EUA) for the following vaccines:
 - **Pfizer-BioNtech** mRNA vaccine (BNT162b2): for use in individuals age 12 years and older as a 2-dose regimen given 3 weeks (21 days) apart
 - **Moderna** mRNA-1273 vaccine: for use in individuals age 18 and older as a 2-dose regimen given 1 month (28 days) apart
 - **Janssen Biotech, Inc. (Johnson & Johnson)** Ad26.COV2.S vaccine: for use in individuals age 18 and older as a single dose regimen

As of Aug 23, 2021, the US FDA approved the Pfizer-BioNTech COVID-19 Vaccine, now marketed as Comirnaty, for the prevention of COVID-19 disease in individuals 16 years of age and older



COVID-19 VACCINE AND PREGNANCY

ACOG recommends all pregnant individuals be vaccinated against COVID-19

- Is written permission of a documentation of a discussion with the clinical care team required for pregnant patients to receive a COVID-19 vaccine?
 - No, however pregnant individuals are encouraged to discuss vaccination considerations with their clinical care team when feasible
- If an individual becomes pregnant after the first dose of a 2-dose COVID-19 vaccine, should the second dose be administered as indicated?
 - Yes
- Should there be a period of waiting between COVID-19 vaccines and the administration of other vaccines routinely given during pregnancy, such as influenza and Tdap?
 - No, COVID-19 vaccines may be administered simultaneously with other vaccines
- For an individual who is planning or has recently received a COVID-19 vaccine, should Anti-D immunoglobulin be withheld?
 - No, it will NOT interfere with the immune response to the vaccine



LACTATION and PRECONCEPTION COUNSELING

ACOG recommends all lactating individuals be vaccinated against COVID-19

Is there a need to avoid initiation or discontinue breastfeeding in patients who receive a COVID-19 vaccine?



- No. While there is little plausible risk for the child, there is plausible benefit
- Following vaccination against other viruses, IgA-Ab's are detectable in milk withing 5-7 days

ACOG recommends all individuals who are actively trying to become pregnant or contemplating pregnancy be vaccinated against COVID-19

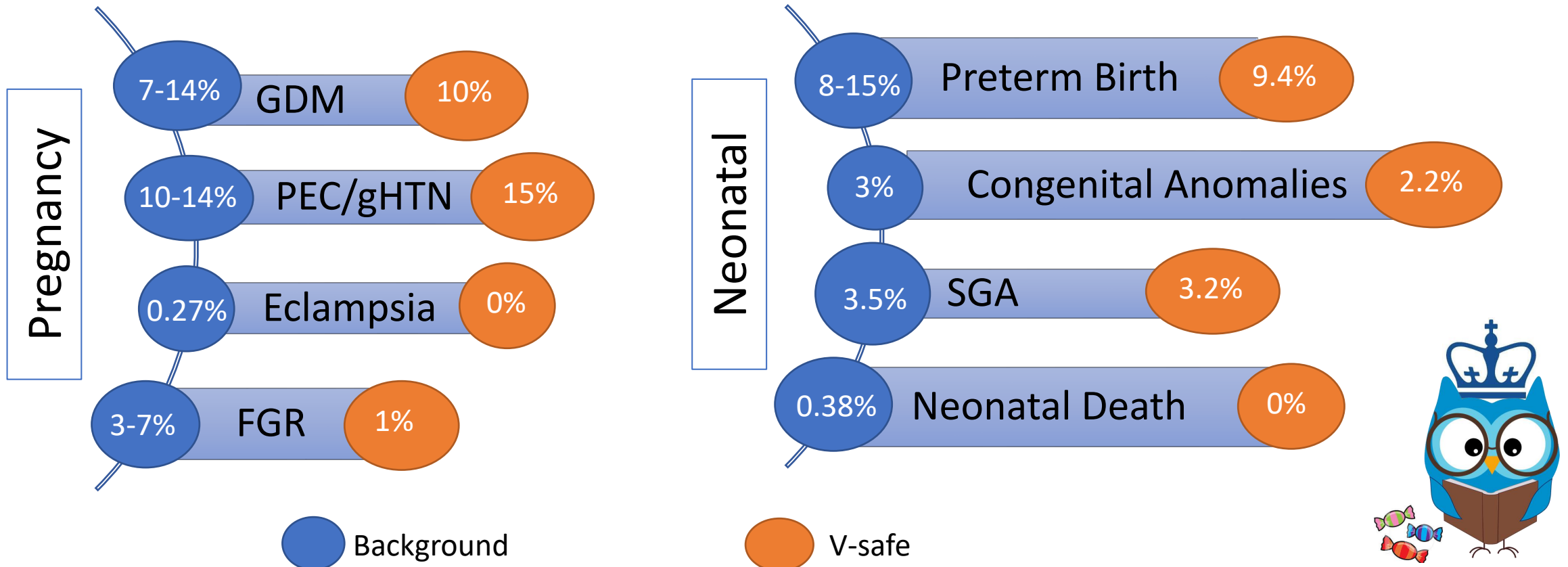
How would you counsel a patient about vaccine-related concerns in the context of anticipating a pregnancy?

- Claims linking COVID-19 vaccines to infertility are unfounded and have no scientific evidence supporting them
- It is not necessary to delay pregnancy after completing both doses of the vaccine
- There is no pregnancy testing requirement prior to receiving any EUA-approved COVID-19 vaccine

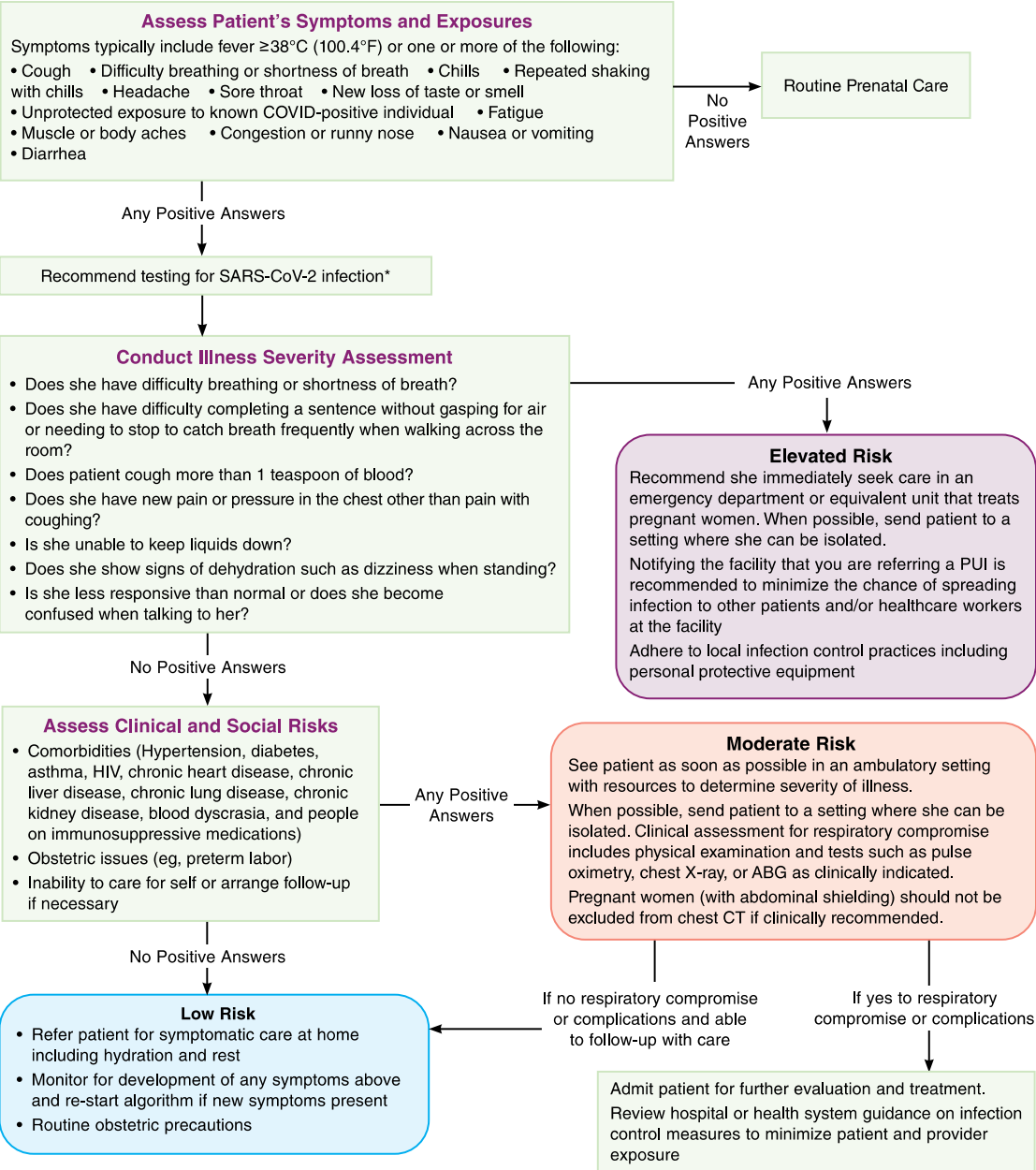


COVID-19 VACCINE and OUTCOMES

- What were pregnancy and neonatal outcomes of interest among COVID-19 vaccinated pregnant individuals in the V-safe pregnancy registry?
- How do their rates compare to background rates?



TRIAGING COVID-19 IN PREGNANCY



COVID-19 AND PREGNANCY

What is the optimal maternal oxygen saturation in those who are COVID+?

- 95% or higher is recommended to maintain adequate oxygenation
- Other societies recommend a goal of 90-92%

Patients reporting which symptoms require discharge with a pulse oximeter after either admission or triage evaluation?

- Dyspnea, cough, hemoptysis
- Pneumonia that doesn't require oxygen supplementation and patient is afebrile
- Chest tightness/pain, underlying respiratory conditions

What symptoms that antepartum COVID+ pregnant patients may experience require urgent evaluation?

- O2 saturation < 95%
- Heart rate > 110 bpm
- Signs of dehydration
- New onset or worsening chest pain
- Altered mental status
- Lethargy
- Obstetrical concerns



SOCIAL DETERMINANTS OF HEALTH

Women of color (Black, Hispanic, Asian American, Pacific Islander, Native American) disproportionately account for infection, morbidity and mortality rates associated with COVID-19

These also represent how communities of color are already subject to worse health outcomes due to underlying disparities in care

Vaccination efforts may be hindered in some communities due to historic unethical medical experimentation due to systemic racism and current disparities in provision of care due to institutional racism

Listen and validate your patients' concerns regarding vaccination efforts- Start and continue the dialogue with your patients to build trust so that life-saving public health interventions can actually be implemented



EPIC .PHRASE

.BBonCOVID19

Description: COVID-19 counseling in the outpatient setting

We discussed the symptoms, work-up, testing, and prognosis of COVID-19, specifically in the pregnant population. We reviewed the comorbidities associated with more severe illness as well as poorer prognosis. We discussed the increased risks of adverse perinatal outcomes in pregnant women with severe COVID-19 illness.

We also discussed appropriate hygiene and preventive measures that the patient and their family can take to reduce spread.

We also discussed the risks/benefits/alternatives to COVID-19 vaccination, including the safety evidence supporting vaccination during pregnancy.



BILLING AND CODING

- U07.1: COVID-19
- O98.51: Other viral disease complication pregnancy



EVIDENCE

- References

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