

Perinatal Anxiety
Stress in Pregnancy
Media Conference
Trainee Guide

Contributors

Gioia Guerrieri, DO, FAPA Lucy Hutner, MD Joanna MacLean, MD

Updated in 2022 by

Lucy Hutner, MD Jasmine Saadatmand, MD

Overview

The biological consequences of perinatal stress are diverse, and our scientific understanding of them continues to evolve. There has been an increasing appreciation of the sequelae of stress in perinatal mental health and wellbeing.

The ability to field patient questions arising from popular culture is an important professional skill for trainees. In particular, trainees should be able to explain data and statistics cited in the lay media in an accurate, reassuring, and clinically relevant manner. Thus, the goal of this module is to have residents build communication skills that enable them to serve as knowledgeable and thoughtful representatives of reproductive psychiatry to a lay audience.

This session consists of three parts:

- 1. Reviewing and critiquing a piece on stress from the popular media (such as from newspaper articles or social media)
- 2. Appraising the comparable medical literature
- 3. Role-playing a psychiatrist/patient interaction that allows for practice communicating this topic

The aim of reviewing the medical literature is to compare peer-review findings with the information portrayed in the media. For this exercise, the most relevant parts of medical literature are the abstract, the introduction, and the discussion. The aim is not to have an in-depth, "journal-club" analysis of the article (an important skill for residents to master elsewhere in their training), but to identify the gaps between the information presented by the media compared with medical literature.

Sessions last approximately 50 minutes, but can be modified depending on the number of media items and articles selected. The media conference is designed for PGY-4 psychiatry residents, but can be tailored to any resident trainee. A small group setting with time and space to work within break-out format is recommended. After a review of the media items and the medical literature, the group will divide up into small groups of 2-3 residents to role-play the clinical interaction.

This module can be tied-in with the statistics modules so that residents can review statistical concepts first then apply them to the media/literature module.

Selection of Content

Content can be selected in advance or at the time of the session. The faculty and residents may pre-select a topic that is of particular interest to the group and distribute the media item and the article 1-2 weeks prior to the session. Alternatively, if there is a media item of particular interest to one or more of the trainees, they can bring the item to the session and the relevant literature can be appraised in real-time by the faculty and trainees, using a laptop and projector.



Learning Objectives

By the end of this module, participants will be able to:

- 1) Demonstrate the ability to analyze issues related to stress in pregnancy, as portrayed in the lay media
- 2) Locate and analyze relevant scientific literature as it relates to the issues of stress raised in the media
- 3) Differentiate perinatal stress from perinatal anxiety
- 4) Communicate thoughtfully and accurately with a lay audience (e.g. a patient in a reproductive psychiatry consultation)

Resources Required

- 1) A faculty moderator
- 2) Samples from media
- 3) Relevant article references
- 4) Laptop (with internet access) and projector

Session

- 1. Presentation of media items (10 minutes): Faculty and residents together will review the media item(s)
- 2. Review of medical literature (10 minutes): Faculty and residents together will briefly assess the comparable medical literature using a structured format
- 3. Role-play with case example (15 minutes): Small groups of residents will role-play a psychiatrist/patient discussion.
- 4. Large group discussion (10 minutes)
- 5. Wrap-up and Q+A (5 minutes)

Presentation of Media Items

Main Media Item

1) CNN: "Stress during pregnancy may harm unborn baby's brain, studies find."

https://www.cnn.com/2020/12/07/health/pregnancy-stress-fetal-impact-study-wellness/index.html

Supplementary Media Items

1) Newsweek: "How stress can affect you and your unborn baby"

http://www.newsweek.com/how-calm-your-anxiety-during-pregnancy-315242

2) The Conversation: "Health Check: can stress during pregnancy harm my baby?"

http://theconversation.com/health-check-can-stress-during-pregnancy-harm-my-baby-81825

3) The New York Times: "Some Pregnant Women in New York City Will Have to Deliver Babies Alone."

https://www.nytimes.com/2020/03/24/parenting/coronavirus-labor-birth.html

Critique of Media Coverage

- 1) What is the central claim of these media pieces?
- 2) How do these media pieces influence (and potentially bias) the lay reader?



3) How accurate is the headline/title of the article in relation to the data discussed?

Read and Review Scientific Literature

Source material for media article: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2773772

De Asis-Cruz J, Krishnamurthy D, Zhao L, et al. Association of Prenatal Maternal Anxiety With Fetal Regional Brain Connectivity. JAMA Netw Open. 2020;3(12):e2022349. doi:10.1001/jamanetworkopen.2020.22349

1) What is the study design? What were the study variables? What were the main conclusions? What are the limitations of this study?

2) How are the main conclusions drawn from the study different from the media article?

Role-Playing Exercise

Trainees should separate into groups of 2 or 3 with one trainee playing the role of reproductive psychiatrist and one or two trainees playing the role of a patient who is experiencing stress/distress.

Sample Clinical Case:

Elizabeth C. is a 32-year-old married Black woman who is 14 weeks pregnant with her first baby (G1P0). She has no history of major depressive episodes, suicide attempts, or hospitalizations. She was briefly treated by her primary care physician with fluoxetine, 20 mg daily for anxiety symptoms in the context of a breakup with a boyfriend in college. She does not believe she was ever diagnosed with a formal anxiety disorder. Since that time up until the present, her anxiety symptoms have not recurred. Her score on the EPDS is 6 (within normal range); her score on the Perinatal Anxiety Screening Scale (PASS) is also within the normal range.

However, she reports that she has been under a particular amount of stress lately, because of multiple psychosocial factors. She just graduated from a master's program in architecture and is starting a new position in several months.. She has heard about how new associates tend to work many hours per day, and she is worried that she won't have time for any self-care activities such as running. Additionally, her mother was recently diagnosed with Stage III breast cancer and is about to undergo intensive treatment. Lastly, the patient and her partner plan to move to a new city for their jobs after they are married, and she is very worried about not being near her family and having to make new relationships over again. She and her partner have considered canceling their plans to move and start the new positions in order to stay nearer to her mother in case her condition should worsen.

During the consultation with the psychiatrist, Elizabeth says "I'm under so much stress that this can't possibly be ok for the baby. I'm running around all the time and my mind is spinning. I can't keep up. I read the article online on



the *CNN* website about how stress will harm my baby, and now this is all that I can think about. I am starting to worry that this level of stress can't be safe for the pregnancy, but then I start to think that stressing so much about my stress is also not good for the pregnancy. I would consider going back on my medication, but I would also feel too stressed about that too. I'm stuck. I got scared when I read that article because I started to think that I should not move to a new city or not work so many hours. And in the back of my mind, I am constantly thinking about my mom and if she will make it through her cancer treatment. How dangerous is it to be under this kind of stress for the baby?"

Sample reproductive psychiatry script

"The issue of how stress affects pregnancies is complex. It is true that some studies have demonstrated that stress in pregnancy can have an impact on the offspring. However, it is more nuanced than what is suggested in the *Newsweek* article. For example, the impact of maternal stress hormones on the pregnancy changes over the course of the pregnancy. Elevated levels of maternal stress hormones may be more significant very early in the pregnancy but may have much less of an impact in the later stages of pregnancy. Additionally, experimental data demonstrating an impact of stress doesn't necessarily translate into something that is clinically meaningful. Lastly, it is hard to conduct these studies because of confounding factors such as depression or socioeconomic pressures. For you, the most important thing we can do is focus on supporting you through this stressful time. We can focus on making sure you have enough support around you, focusing on stress management strategies, screening for anxiety or depression, maximizing support in the postpartum period, and considering further measures such as psychotherapy that can help you navigate these life transitions."

Follow up questions

_	170	hath	00 70
Γ_{I}	17.4	осии	asks:

- 1) Should I go back on my medications?
- 2) What should I do in the meantime?
- 3) Does this stress level mean I am at risk for postpartum depression?
- 4) Elizabeth has been especially worried about restrictions in allowing supportive others to be present in the labor and delivery room in the setting of COVID-19 restrictions as well as disturbing statistics she has learned about regarding maternal mortality in Black women. She expresses concern about the level of support she would have overall during this process, especially in the context of structural racism. She notes "It feels like the odds are against me, no matter how you look at it."

Q+A: Large Group Discussion



Additional Resources

- 1) Reprotox: https://reprotox.org
- 2) MGH website: https://womensmentalhealth.org
- 3) LactMed: https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm
- 4) PubMed: https://www.ncbi.nlm.nih.gov/pubmed
- 5) MotherToBaby www.mothertobaby.org
- 6) <u>https://therapyforblackgirls.com</u>
- 7) https://www.blackdoulas.org

References

Chambers BD, Arabia SE, Arega HA, Altman MR, Berkowitz R, Feuer SK, Franck LS, Gomez AM, Kober K, Pacheco-Werner T, Paynter RA, Prather AA, Spellen SA, Stanley D, Jelliffe-Pawlowski LL, McLemore MR. Exposures to structural racism and racial discrimination among pregnant and early post-partum Black women living in Oakland, California. Stress Health. 2020 Apr;36(2):213-219. doi: 10.1002/smi.2922. Epub 2020 Jan 23. PMID: 31919987; PMCID: PMC7269549.

Christian LM: At the forefront of psychoneuroimmunology in pregnancy: Implications for racial disparities in birth outcomes Part 1: Behavioral risks factors. Neurosci Biobehav Rev S0149-7634(19):30331-8, 2019

Dunkel Schetter C, Tanner L. Anxiety, depression and stress in pregnancy: implications for mothers, children, research, and practice. Curr Opin Psychiatry. 2012 Mar;25(2):141-8. doi: 10.1097/YCO.0b013e3283503680. PMID: 22262028; PMCID: PMC4447112.

Giscombé CL, Lobel M: Explaining disproportionately high rates of adverse birth outcomes among African Americans: the impact of stress, racism, and related factors in pregnancy. Psychol Bull 131:662–683, 2005

Hobel CJ et al. Psychosocial stress and pregnancy outcome. Clin Obstet Gynecol 2008: 51 (2); 333-348.

Littleton HL. Psychosocial stress during pregnancy and perinatal outcomes: a meta-analytic review. J Psychosom Obstetr Gynecol 2010; 31 (4): 219-228.

Monk C et al. Distress during pregnancy: epigenetic regulation of placenta glucocorticoid-related genes and fetal neurobehavior. Am J Psychiatry 2016; 173 (7); 705-713.

Parker Dominguez T, Dunkel Schetter C, Glynn LM, et al: Racial differences in birth outcomes: the role of general, pregnancy, and racism stress. Health Psychol 27:194–203, 2008

Phelan AL et al. Psychosocial stress during first pregnancy predicts infant health outcomes in the first postnatal year. Matern Child Health 2015; 19 (12); 2587-2597.

Shapiro GD et al. Psychosocial stress in pregnancy and preterm birth: associations and mechanisms. J Perinatal Med 2013: 41 (6); 631-645.



Somerville S et al. The perinatal anxiety screening scale: development and preliminary validation. Arch Womens Mental Health 2014: Apr 4 (epub)

Somerville S et al. Detecting the severity of perinatal anxiety with the perinatal anxiety screening scale (PASS). J Affect Disorder 2015; (epub)

Stone SL et al. Stressful events during pregnancy and postpartum depressive symptoms. J Womens Health 2015: 24 (5); 384-393.

Witt WP et al. Measuring stress before and during pregnancy: a review of population-based studies of obstetric outcomes. Matern Child Health 2014; 18 (1): 52-63.