Trauma and the perinatal period: a guide for OB/GYN providers

Contributors

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ESM: this could be elsewhere, but wondering about space to discuss the importance of trauma-informed care? SNY Yes, I believe at some point we discussed a separate module for this. I think this would make sense as it is a big topic and likely should be a stand-alone module.

Disclosures/Disclaimers/Acknowledgments

None



Learning Objectives:

- Define the incidence of trauma in reproductive-aged women
- Recognize risk and protective factors for trauma in a perinatal patient
- Understand the screening tools and diagnostic criteria for experiences of trauma and post-traumatic stress disorder (PTSD)
- Learn common clinical presentations and differential diagnoses of trauma disorders in a perinatal patient
- Understand the biological, psychological and social factors which contribute to the pathophysiology of PTSD
- Learn evidence-based recommendations of PTSD treatment, including pharmacologic, non-pharmacologic, and psychotherapeutic modalities



Notes from review

ESM: are we trying to use gender neutral language as NCRP? If yes, need to take out women SNY: I think much of this module is about gender-linked trauma, so we should keep the word women here and some other areas, in a purposeful way. I have changed the word on select slides.

LH: language: discussion of trauma as experienced in the health care system, not necessarily just PP PTSD? SNY: Yes, I think the book chapter and this module focused on PP PTSD specifically due to our audience, but agree we could add more general language. Not sure where it fits at this point though?

Also, include trauma-informed care? SNY: this is not included in this module, but I do think it should be developed as a separate module.

Outline:

- Introduction
- Epidemiology: rates/incidence, risk factors and screening
- Diagnostic Criteria
- Clinical Features: clinical presentation and course/prognosis
- Differential Diagnosis and Assessment
- Pathophysiology
- Treatment: psychopharmacology and non-pharmacology
- Case Study with questions
- Summary



Introduction:

- The Substance Use and Mental Health Services Administration (SAMHSA) defines trauma as an event, series of events, or set of circumstances that are experienced by an individual as physically or emotionally harmful or threatening, and that have lasting adverse effects on the individuals functioning and physical, social, emotional or spiritual well-being.
- Recognizing and responding to trauma is a critical component of obstetrical care as it can impact one's health, social functioning, and ability to engage in healthy behaviors. Pregnancy introduces special considerations around trauma and intimate partner violence.
- Patients who have experienced traumatic events are at risk for re-traumatization during health care encounters.



https://www.samhsa.gov/trauma-violence

LH: Use DSM diagnosis of trauma first perhaps?

SNY- I've edited the text to signify that this is the SAMHSA definition of trauma. My preference would be to start out with this broad view and then present the DSM definition in the context of PTSD specifically- to give the message that PTSD is only one presentation of the sequelae of trauma.

Introduction

Trauma comes in many forms, from circumscribed events to prolonged experiences. Examples include:

- Early life trauma and adversity. Recent data reported that >75% of individuals seeking obstetrical care in under-resourced communities had ACES >2 and 50% had ACES >4.
- **Sexual assault.** Women are more likely to be victims of sexual assault than men. One in five women in the US have been raped at some point in their lives.
- Intimate Partner Violence (IPV). IPV is more common in pregnant patients than gestational diabetes, preeclampsia or neural tube defects.
- Traumatic delivery. As many as 1/3 of women rate their delivery experience as traumatic.
 Approximately 12-30% of women may experience Postpartum PTSD (PP-PTSD) following a reproductive loss or traumatic delivery. Most women with PP-PSTD have a prior history of PTSD: only 3% of women develop new onset of PTSD after a traumatic childbirth.



Jasthi, Divya L., et al. "Associations between adverse childhood experiences and prenatal mental health and substance use among urban, low-income women." *Community mental health journal* 58.3 (2022): 595-605.

Smith, Sharon G., et al. "The national intimate partner and sexual violence survey: 2015 data brief—updated release." (2018).

Substance Abuse and Mental Health Services Administration. Trauma-Informed Care in Behavioral Health Services: Treatment Improvement Protocol (TIP) Series 57. Rockville (MD): Substance Abuse and Mental Health Services Administration, 2014ef 1 and 6-8.

Epidemiology: Rates and Incidence

Approximately **half** of all women will be exposed to at least one traumatic event in their lifetime.

Posttraumatic Stress Disorder (PTSD): Women are **twice as likely** to develop PTSD after a traumatic event as compared to men, leading to a higher overall rate of PTSD among women (12% lifetime prevalence in women vs. 6% in men).



LH: May want to differentiate more clearly between DSM dx of trauma and other forms - SNY- see response on slide 6.

García-Moreno, Claudia, et al. WHO multi-country study on women's health and domestic violence against women. World Health Organization, 2005.

Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., & Osborne, L. M. (Eds.). (2021). *Textbook of Women's Reproductive Mental Health*. American Psychiatric Pub.

Kessler, Ronald C., et al. "Posttraumatic stress disorder in the National Comorbidity Survey." *Archives of general psychiatry* 52.12 (1995): 1048-1060.

Tolin, David F., and Edna B. Foa. "Sex differences in trauma and posttraumatic stress disorder: a quantitative review of 25 years of research." (2008): 37.

Epidemiology: Risk Factors

PTSD

- The development of PTSD is dependent on both the intensity and type of trauma experienced.
- There are several risk factors that can predispose an individual to developing PTSD after exposure to trauma, including:
 - being female:
 - history of childhood trauma;
 - · lower level of education;
 - exposure to interpersonal violence;
 - · exposure to more than three traumatic events; and
 - premorbid psychiatric diagnoses.
- Specifically, those who have a history of childhood abuse are at an increased risk of developing perinatal-onset PTSD



Ozer, Emily J., et al. "Predictors of posttraumatic stress disorder and symptoms in adults: a meta-analysis." *Psychological bulletin* 129.1 (2003): 52.

Smith, Megan V., et al. "Symptoms of posttraumatic stress disorder in a community sample of low-income pregnant women." *American Journal of Psychiatry* 163.5 (2006): 881-884.

Epidemiology: Risk Factors

- IPV
 - Women of reproductive age have been reported to experience the highest rates of IPV
 - Risk factors for IPV include:
 - younger age;
 - low education level;
 - · unemployment; and
 - low socioeconomic status
 - Populations who are at high risk for experiencing IPV include:
 - · pregnant persons;
 - LGBTQ+ individuals;
 - those who are socially isolated;
 - · those with controlling, angry, or hostile partners;
 - those with a history of abuse; and
 - those with partners who use substances.



Capaldi, Deborah M., et al. "A systematic review of risk factors for intimate partner violence." *Partner abuse* 3.2 (2012): 231-280.

Hahn, Christine K., et al. "Perinatal intimate partner violence." *Obstetrics and Gynecology Clinics* 45.3 (2018): 535-547.

Epidemiology: Risk Factors

- Traumatic Birth
 - Traumatic birth experiences include a wide range of experiences or set of experiences. Examples include:
 - A wide range of medical complications during labor and delivery
 - · Neonatal complications
 - · Poor communication from medical staff
 - · Perception of care received as incompetent or uncaring
 - · Feeling of loss of control during labor and delivery
 - Dissociation
 - Lack of privacy or dignity during birth experience

A woman's personal experience of the event is particularly salient in informing her risk of postpartum traumatic sequelae and may be informed by her history of earlier adversity or trauma.



Daugirdaitė, Viltė, Olga van den Akker, and Satvinder Purewal. "Posttraumatic stress and posttraumatic stress disorder after termination of pregnancy and reproductive loss: a systematic review." *Journal of pregnancy* 2015 (2015).

Haagen, Joris FG, et al. "PTSD after childbirth: A predictive ethological model for symptom development." *Journal of Affective Disorders* 185 (2015): 135-143.

Vignato, Julie, et al. "Correlates of perinatal post-traumatic stress among culturally diverse women with depressive symptomatology." *Issues in mental health nursing* 39.10 (2018): 840-849.

Screening

- The optimal approach to screening for trauma as a component of obstetrical care is an area of active research.
- If performed, screening for traumatic experiences and PTSD is a critical first step and should be to be followed by **evaluation** and **collaborative safety and treatment planning**.
- Disclosing traumatic experiences requires considerable bravery. At the time of disclosure, it is important to highlight the patient's strengths, express a sense of hopefulness, and communicate knowledge of relevant resources.
- Additional considerations may be required for patients of minority backgrounds, including people who identify as a racial minority or LGBTQ+.



ESM: no current ACOG/SMFM/USPSTF recommendation for screening in perinatal populations...so this seems odd to talk about the importance of universal screening. To me, from an OB perspective, beginning with #3 and describing it as "if performed, screening for traumatic experiences and PTSD should be followed by evaluation and collaborative safety and treatment planning". maybe reframing as the optimal approach to screening in OB care is an area of active research? SNY: yes, done

ESM: consider in last bullet point "people who identify as a racial minority or LGBTQ+" SNY: yes, done

Screening

- PTSD
 - Several self-report screening measures for PTSD have been validated for clinical use.
 Commonly used screening tools include:
 - Primary Care PTSD Screen for DSM 5 (PC-PTSD-5)
 - 5-item screen that was designed to identify individuals with PTSD in a primary care setting.
 - PTSD Checklist for DSM 5 (PCL-5)
 - 20-item self-report measure that assesses the 20 DSM-5 symptoms of PTSD
- IPV
 - ACOG recommends screening for IPV at the first prenatal visit, once per trimester, and at postpartum
 - Commonly recommended screening tools include:
 - Humiliation, Afraid, Rape Kick (HARK)
 - · 4 questions that assess emotional, physical and sexual IPV in the past year
 - Hurt/Insult/Threaten/Scream (HITS)
 - 4 items that assess the frequency of IPV
 - Woman Abuse Screening Tool (WAST)
 8 items that assess emotional, physical and sexual IPV



Arkins B, Begley C, Higgins A. Measures for screening for intimate partner violence: a systematic review. Journal of psychiatric and mental health nursing. 2016 Apr;23(3-4):217-35.

ACOG Committee Opinion 518: Intimate Partner Violence. https://www.acog.org/clinical/clinical-guidance/committee-opinion. 2012 Feb, Reaffirmed 2019.

Chen PH, Rovi S, Washington J, Jacobs A, Vega M, Pan KY, Johnson MS. Randomized comparison of 3 methods to screen for domestic violence in family practice. The Annals of Family Medicine. 2007 Sep 1;5(5):430-5.

ESM: perhaps worth adding the ACOG citation in for the recommendation for IPV screening? I think it is helpful for OBs to see what their professional organizations recommend SNY yes, done

Screening

- Postpartum PTSD (PP-PTSD)
 - Relatively few resources exist for screening for PP-PSTD specifically within Ob-Gyn settings. Many clinicians, therefore, utilize screening measures for detecting PTSD more generally.
 - The City Birth Trauma Scale (CBTS) is as 29-item self-report questionnaire that assesses for DSM 5 diagnostic criteria for PTSD specifically in the context of traumatic childbirth.



Ayers, Susan, Daniel B. Wright, and Alexandra Thornton. "Development of a measure of postpartum PTSD: the city birth trauma scale." *Frontiers in psychiatry* (2018): 409.

Diagnostic Criteria: PTSD

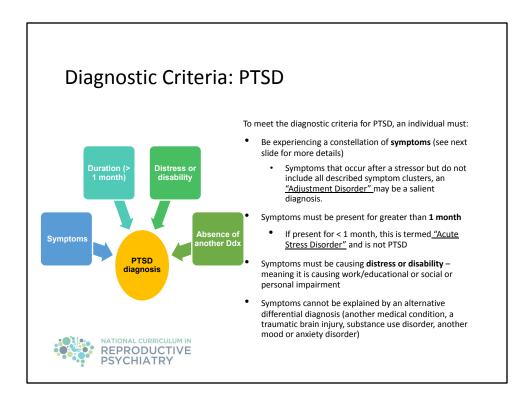
- While traumatic experiences may come in many forms, the DSM-5 specifically recognizes the following as "qualifying traumatic events" for a diagnosis of PTSD:
 - · Actual or threatened death
 - · Serious injury
 - · Sexual violence
- · 4 mechanisms of exposure:
 - Direct exposure
 - Witnessing
 - · Trauma to a close loved one
 - · Repeated extreme exposure to aversive details

NOTE that perinatal (or other medical) events may be perceived differently by the birthing person than by their care team. For example a crash cesarean may be perceived by a birthing person as threatened death to themself or infant, while the care team may not have considered this a critical event.



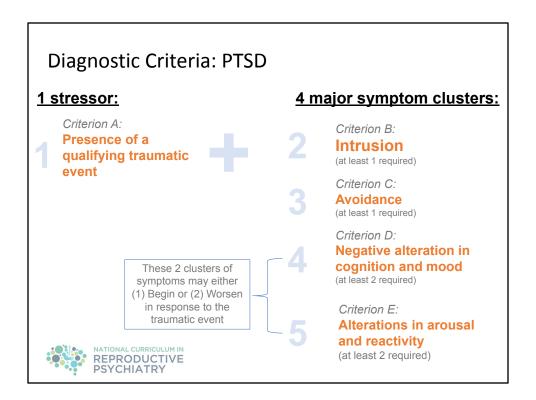
Diagnostic and Statistical Manual of Mental Disorders : DSM-5. Fifth edition. Arlington, VA: American Psychiatric Association, 2013. Print.

ESM: I wonder if there is an opportunity to emphasize again here how perceived perinatal events may diverge from OB perception. For example, a crash cesarean may be perceived by the birthing person as threatened death to her infant. But to the OB team, this wasn't really a major concern. I think that disconnect is challenging for OBs SNY: yes, done.



Diagnostic and Statistical Manual of Mental Disorders : DSM-5. Fifth edition. Arlington, VA: American Psychiatric Association, 2013. Print.

LH: This is great!



LH This is great!

Diagnostic and Statistical Manual of Mental Disorders : DSM-5. Fifth edition. Arlington, VA: American Psychiatric Association, 2013. Print.

Overview:

In order to diagnose PTSD, patients must have experienced a qualifying traumatic event. This event can fall under one of four mechanisms of exposure (as described below in Criterion A): direct exposure, witnessing, trauma to a close loved one, and repeated extreme exposure to aversive details. The patient must then experience distressing/impairing symptoms for > 1 month duration encompassing four mood clusters: intrusion, avoidance, negative alteration in cognition and mood, and alterations in arousal and reactivity (As described below in Criterions B-E). To make the diagnosis, at least one symptom must be reported from each Criterions B through E and furthermore at least two symptoms must be reported from Criterions D and E. Symptoms fulfilling Criterions B and C must begin following exposure to the traumatic event, whereas symptoms in Criterions D and E may either begin or worsen following exposure to the traumatic event.

Criterions for diagnosis are outlined below. Note: The following diagnostic criteria apply to adults, adolescents, and children older than 6 years.

Criterion A: severe trauma (at least one required)

<u>Prior to onset of symptoms</u>, the person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, as follows:

- A1: Directly experiencing the traumatic event
- A2: Witnessing, in person, the traumatic event as it occurred to others
- A3: Learning that a close relative or close friend was exposed to trauma. If the
 event involved actual or threatened death, it must have been violent or
 accidental.
- A4: Repeated or extreme indirect exposure to aversive details of the event(s),
 usually in the course of professional duties (e.g., first responders, collecting
 body parts; professionals repeatedly exposed to details of child abuse). This
 does not include indirect non-professional exposure through electronic media,
 television, movies, or pictures.

Criterion B: intrusion symptoms (at least one required)

Symptoms <u>began after the traumatic</u> event(s) occurred. The traumatic event is persistently re-experienced in the following way(s):

- B1: Recurrent, involuntary, and intrusive memories of the event.
 - recurrent memories of the event that usually include sensory, emotional, or physiological behavioral components
- B2: Traumatic nightmares.
 - distressing dreams that replay the event itself or that are representative or thematically related to the major threats involved in the traumatic event
- <u>B3: Dissociative reactions (e.g., flashbacks)</u>
 - components of the event are relived and the individual behaves as if the event were occurring at that moment
 - may occur on a continuum from brief episodes of visual or other sensory intrusions about part of the traumatic event without loss of reality orientation, to complete loss of awareness of present surroundings/loss of consciousness
- B4: Intense or prolonged distress after exposure to traumatic reminders such as thoughts, memories, or other reminders such as objects, sounds, and sights
- <u>B5: Marked physiologic reactivity</u> (such as rapid heartbeat, feeling dizzy, sweating) after exposure to trauma-related stimuli such as thoughts, memories, or other reminders such as objects, sounds, and sights.

Criterion C: avoidance/emotional distance (at least one required)

Persistent effortful avoidance of distressing trauma-related stimuli after the event that began after traumatic even:

- <u>C1: Trauma-related thoughts or feelings.</u> (e.g., utilizing distraction techniques to avoid internal reminders)
- <u>C2: Trauma-related external reminders (e.g., people, places, conversations, activities, objects, or situations).</u>

Criterion D: negative alterations in cognitions and mood (at least 2 required) Negative alterations in cognitions and mood <u>that began or worsened</u> after the traumatic event:

- <u>D1: Inability to recall key features of the traumatic event</u> (usually dissociative amnesia; not due to head injury, alcohol, or drugs).
- <u>D2: Persistent (and often distorted) negative beliefs and expectations about oneself or the world (e.g., "I am bad," "The world is completely dangerous" "I have always had bad judgment"; "People in authority can't be trusted").</u>
- <u>D3: Persistent distorted blame of self or others for causing the traumatic event or for resulting consequences.</u>
- <u>D4: Persistent negative trauma-related emotions</u> (e.g., fear, horror, anger, guilt, or shame).
- <u>D5: Markedly diminished interest in (pre-traumatic) significant activities.</u>
- <u>D6: Feeling alienated from others (e.g., detachment, distant or estrangement).</u>
- <u>D7: Constricted affect: persistent inability to experience positive emotions</u> (happiness, joy, satisfaction, loving feelings or emotions associated with intimacy, tenderness, and sexuality).

Criterion E: heightened arousal and reactivity (at least 2 required)

Trauma-related alterations in arousal and reactivity that <u>began or worsened</u> after the traumatic event:

- E1: Irritable or aggressive behavior
 - Aggressive verbal and/or physical behavior with little or no provocation (e.g., yelling at people, getting into fights, destroying objects).
- E2: Self-destructive or reckless behavior
 - dangerous driving, excessive alcohol or drug use, or self-injurious or suicidal behavior
- E3: Hypervigilance
 - Being on high alert for threats or danger, constant scanning of surroundings. This can be both related to the stressor (I.e. another motor vehicle accident) or unrelated (i.e. dying of a heart attack)
- E4: Exaggerated startle response

Greatly startled by loud noise or surprise

• E5: Problems in concentration

 Difficulty remembering daily events (e.g., forgetting one's telephone number) or attending to focused tasks (e.g., following a conversation for a sustained period of time)

• <u>E6: Sleep disturbance</u>

Problems falling asleep or staying asleep; having restless sleep

Specifiers

- With dissociative symptoms
 - Depersonalization (This indicates feelings of detachment, as though dreaming, from patient's own mind or body)
 - Derealization (To the patient, the surroundings seem distant, dreamlike, or unreal)
- With delayed expression (symptoms meeting full criteria not present for at least 6 months after the event)

Unspecified trauma-related disorder is a category used to describe clinically significant distress or impairment in functioning that does not meet the full criteria for diagnosis of a trauma disorder based on the scheme described above.

Reference: *Diagnostic and Statistical Manual of Mental Disorders : DSM-5.* Fifth edition. Arlington, VA: American Psychiatric Association, 2013. Print.

Clinical Presentation: PTSD Domains (DSM-5)

Intrusion	Presence of dissociation, including flashbacks Nightmares Unexpected and recurring images and memories of the traumatic event
Avoidance	Avoidance of thoughts, people, feelings, places of physical sensations that are reminders of trauma
Negative alteration in cognition or mood	Elevated negative evaluations of self or the world Inability to remember important aspects of the trauma Persistent negative emotional state
Hyperarousal	Difficulty sleeping Heightened startle response Increased irritability or anger



Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., & Osborne, L. M. (Eds.). (2021). *Textbook of Women's Reproductive Mental Health*. American Psychiatric Pub.

ESM: it would be helpful if these symptoms were in same order as slide 17. This may be the first time many OBs will be seeing this and the re-order makes it harder to see that these are the same. SNY: Yes, complete.

Diagnostic Considerations: PP-PTSD

- Posttraumatic stress disorder (PTSD) is a well-defined mental health disorder which specifically develops in relation to an experience of trauma.
- Postpartum-PTSD (PP-PTSD) is not a distinct diagnosis in the DSM-5. Diagnostic criteria for PTSD in general should be considered in the context of the traumatic delivery as the identified stressor.

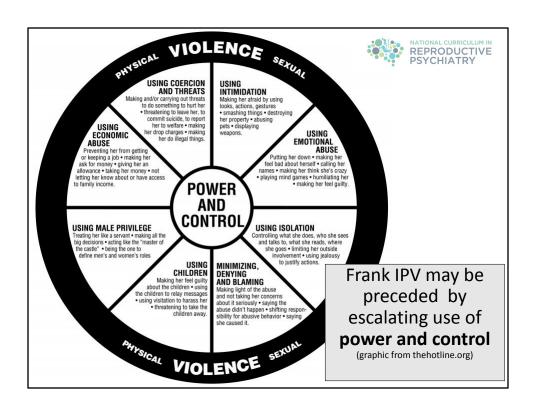


Diagnostic and Statistical Manual of Mental Disorders : DSM-5. Fifth edition. Arlington, VA: American Psychiatric Association, 2013. Print.

Diagnostic Considerations

- In addition to PTSD, those who experience traumatic events are at increased risk for a <u>myriad of other primary mental health disorders</u> such as:
 - Depressive disorders
 - · Anxiety disorders
 - Personality disorders
 - Substance use disorders
- Traumatic sequelae may also include symptoms that do not meet criteria for a mental health disorder <u>however may impact health</u> <u>behaviors and/or ability to engage in healthcare</u>. Examples include:
 - Distrust
 - Non-adherence to prenatal care visits
 - Interpersonal sensitivity
 - Dissociation during painful or emotionally intense experiences
 - Passive interactional style





Clinical Presentation: Intimate Partner Violence/Sexual Trauma

- Physical: Hitting, slapping, punching, shoving, biting, choking, use of weapons
- <u>Psychological</u>: Threats of violence, intimidation, humiliation, feeling controlled, being socially isolated, being stalked, being forced into illegal activity or into substance use
- Sexual: Being forced or coerced into sexual acts, sabotage of contraception, coercion into pregnancy or abortion, intentionally being infected with STIs

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Chisholm, Christian A., Linda Bullock, and James E. Jef Ferguson II. "Intimate partner violence and pregnancy: epidemiology and impact." *American journal of obstetrics and gynecology* 217.2 (2017): 141-144.

Clinical Presentation: PTSD due to IPV

- PTSD experienced as a result of IPV commonly includes:
 - negative cognitive appraisals: self-blame, alienation, fear
 - · dissociation and numbing
 - · avoidance of intimacy OR hypersexuality
 - · difficulty trusting others
 - · maladaptive relationship behaviors
 - self-injurious behaviors
- IPV can also result in chronic health conditions (e.g., chronic pain, fibromyalgia, headaches, TBIs, STIs)



Foa, Edna B., David S. Riggs, and Beth S. Gershuny. "Arousal, numbing, and intrusion: symptom structure of PTSD following assault." *The American Journal of Psychiatry* (1995).

APA

Hebenstreit, Claire L., et al. "Latent profiles of PTSD symptoms in women exposed to intimate partner violence." *Journal of affective disorders* 180 (2015): 122-128.

Clinical Presentation: PP-PTSD

- Presentation of Postpartum PTSD may include:
 - · Re-experiencing: Intrusive thoughts, images, nightmares of delivery
 - Avoidance: may be centered on medical care; of hospitals, physicians, medical staff, outpatient clinics, procedures, pelvic examinations
 - Persistent avoidance

 not wanting future pregnancies or requesting cesarean sections in future pregnancies
 - Negative cognitions:
 - Themes of guilt/shame surrounding motherhood or ability to care for baby
 - Fears about potential for sickness and death in baby



Ayers, Susan, et al. "The aetiology of post-traumatic stress following childbirth: a meta-analysis and theoretical framework." *Psychological medicine* 46.6 (2016): 1121-1134.

Clinical Presentation: PP-PTSD

- Chronic PTSD secondary to childbirth has pervasive adverse effects on health including:
 - · Impaired mother-infant bonding
 - Reduced quality of relationship with significant other
 - · Decreased quality of life
 - Increased risk of comorbid psychiatric illnesses
 - Increased risk of obstetrical complications in future pregnancies



Ayers, Susan, et al. "The aetiology of post-traumatic stress following childbirth: a meta-analysis and theoretical framework." *Psychological medicine* 46.6 (2016): 1121-1134.

Cook, Natalie, Susan Ayers, and Antje Horsch. "Maternal posttraumatic stress disorder during the perinatal period and child outcomes: A systematic review." *Journal of affective disorders* 225 (2018): 18-31.

Hernández-Martínez, Antonio, et al. "Postpartum post-traumatic stress disorder: Associated perinatal factors and quality of life." *Journal of affective disorders* 249 (2019): 143-150.

Rogal, Shari S., et al. "Effects of posttraumatic stress disorder on pregnancy outcomes." *Journal of affective disorders* 102.1-3 (2007): 137-143.

Seng, Julia S., et al. "Posttraumatic stress disorder and pregnancy complications." *Obstetrics & Gynecology* 97.1 (2001): 17-22.

Clinical Presentation: Course

- Trauma may manifest on a spectrum of severity ranging from adjustment disorders to PTSD/other trauma-related disorders
- Trauma from IPV is typically ongoing and repetitive. The course of IPV is influenced by the extent of harm to the victim as well as the risks to others in the family, such as children.
- Over the long-term, sequelae of trauma may present as comorbid conditions, physical pain conditions or sexual dysfunction.



Clinical Presentation: Prognosis

- Prolonging/complicating factors relevant to PTSD:
 - · Premorbid or comorbid disorders
 - Previous traumatic events
 - Repetitive trauma (such as recurrent pregnancy losses or IPV)
- Prolonging/complicating factors relevant to PP-PTSD
 - Twin/multiple gestation pregnancies
 - Medical complications during the pregnancy, labor, or delivery
 - · NICU admission for baby
 - Delayed or inadequate prenatal care and providing childcare to other young children in the home



Grekin, R., & O'Hara, M. W. (2014). Prevalence and risk factors of postpartum posttraumatic stress disorder: a meta-analysis. *Clinical psychology review*, *34*(5), 389-401.

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Seng, J. S., Low, L. M. K., Sperlich, M., Ronis, D. L., & Liberzon, I. (2009). Prevalence, trauma history, and risk for posttraumatic stress disorder among nulliparous women in maternity care. *Obstetrics and gynecology*, *114*(4), 839.

Differential Diagnosis:

In general, the distinguishing characteristic of PTSD from other overlapping disorders includes:

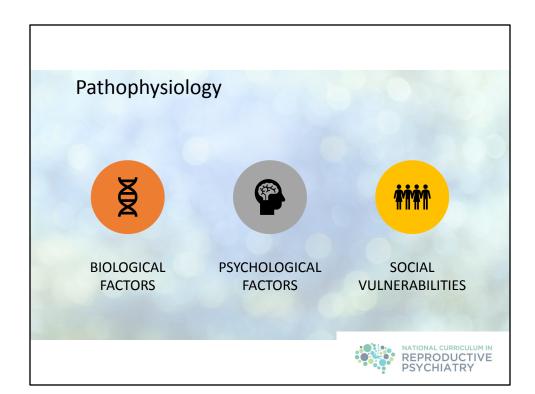
- The relationship between the **onset of symptoms with a** traumatic event or prolonged experience of trauma.
- The **cluster of symptoms** which span intrusion, avoidance, hypervigilance and negative alterations of mood/cognition.

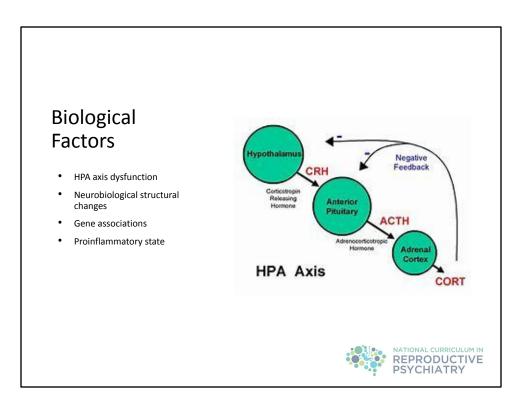


Differential Diagnosis: Overlapping Symptoms

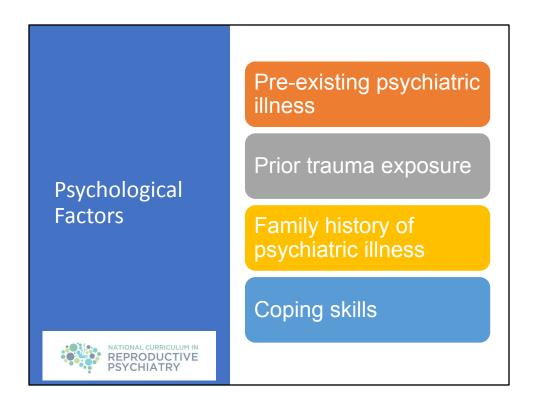
Differential Diagnoses for PTSD in the Perinatal Period	Overlapping Symptoms
Bipolar disorder	Irritability, distractibility, mood lability
Depressive disorders	Appetite changes, Anhedonia, Avolition, Insomnia
Generalized anxiety disorder	Irritability, Fear, Nightmares, Feeling "on edge," Worry
Substance use	Mood swings, erratic behavior, Avoidance, Paranoia
Obsessive Compulsive Disorder	Recurrent, intrusive thoughts; presence of compulsions as reaction to obsessions







Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., & Osborne, L. M. (Eds.). (2021). *Textbook of Women's Reproductive Mental Health*. American Psychiatric Pub.



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Racial differences in trauma exposure.

Although PTSD risk is elevated in Black individuals, race alone is unlikely to be the role mediator. Black women are at higher risk for being a victim of a violent crime and have repeated exposure to racism. Black women also have higher rates of pregnancy complications, putting them at a theoretically higher risk for PP-PTSD.

LGBT+ individuals are at greater risk for chronic stress and structural sigma in health care systems.



ESM: I think we need to be really careful about "racial differences" and emphasize this isn't related to any biologic variable, but rather the social construct. SNY-updated content on this slide.

General principles of treatment

- The importance of treating those who have experienced trauma, PTSD, intimate partner violence, reproductive loss or traumatic birth experience should be underscored.
- Ideally treatment should be a multidisciplinary approach.
- The aim of treatment is to reduce levels of distress and improve function and quality of life with minimal adverse effects.
- Most evidence is drawn from studies on treatment efficacy in patients with non-childbirth-related PTSD, however it is suggested many of these non-childbirth related modalities may also be used effectively for PP-PTSD



Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., & Osborne, L. M. (Eds.). (2021). *Textbook of Women's Reproductive Mental Health*. American Psychiatric Pub.

ESM: you might be "should be underscored"? SNY: Yes, fixed.

Treatment: Psychotherapy

- The 2017 Veterans Health Administration/Department of Defense (VHA/DOD) Clinical Practice Guideline for PTSD recommends trauma focused psychotherapy as the 1st line treatment for PTSD over pharmacotherapy
- Psychotherapeutic modalities include:
 - Cognitive Behavioral Therapy (CBT)
 - Prolonged Exposure (PE)
 - Cognitive Processing Therapy (CPT)
 - Eve movement desensitization and reprocessing (EMDR)
 - Interpersonal Psychotherapy (IPT)
 - Written Exposure Therapy (WET)
- Other Talk Therapies include:
 - · social problem solving
 - · listening visits
 - supportive therapy
 - psycho-education



Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., & Osborne, L. M. (Eds.). (2021). *Textbook of Women's Reproductive Mental Health*. American Psychiatric Pub.

Sloan, D. M., & Marx, B. P. (2019). Written exposure therapy for PTSD: A brief treatment approach for mental health professionals. American Psychological Association.

ESM: what about written exposure therapy? hasn't that been studied as more specific to perinatal? SNY: I actually could not find any published material about WET in the perinatal period specifically. I can add it as a modality with evidence to support its use in the general population.

Treatment: Pharmacologic therapies

- First-Line Medications
 - Sertraline 50-200mg daily (FDA approved for PTSD)
 - Paroxetine 20-50mg daily (FDA approved for PTSD)
 - Fluoxetine 20-80mg (Evidence supports off-label use)
 - Venlafaxine 75-225mg daily (Evidence supports off-label use)
- · Other Medication
 - Prazosin 3-15mg hs (divided doses (afternoon and hs) above 5mg) (evidence to support off-label use for PTSD related nightmares)



ESM: I wonder if the mechanisms information at the top is too much for the OB audience? SNY: yes, removed.

ESM: the last set of information reads (to me) as if the first list of SSRIs would NOT be expected to treat PTSD SNY: Yes, I re-worked this slide entirely.

ESM: any information to share about dosing? perhaps that will be elsewhere, but pragmatic information like that might be very helpful to the OB audience SNY: Yes, added

Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., & Osborne, L. M. (Eds.). (2021). *Textbook of Women's Reproductive Mental Health*. American Psychiatric Pub.

Treatment: Alternative and complementary medicine therapies

- Yoga
- Mindfulness
- Massage
- Acupuncture
- Light therapy
- · Omega 3 fatty acids



Boyd, J. E., Lanius, R. A., & McKinnon, M. C. (2018). Mindfulness-based treatments for posttraumatic stress disorder: a review of the treatment literature and neurobiological evidence. *Journal of Psychiatry and Neuroscience*, 43(1), 7-25.

Cramer, H., Anheyer, D., Saha, F. J., & Dobos, G. (2018). Yoga for posttraumatic stress disorder—a systematic review and meta-analysis. *BMC psychiatry*, 18(1), 1-9.

Treatment of PP-PTSD

- Evidence remains limited for PP-PTSD-specific treatments, but includes:
 - Individual trauma-focused psychotherapy
 - Eye movement desensitization and reprocessing (EMDR)
 - Trauma-focused cognitive behavioral therapy (CBT)
 - Immediate debriefing interventions and non-trauma-focused psychotherapy has not been shown to be helpful



Cirino, N. H., & Knapp, J. M. (2019). Perinatal posttraumatic stress disorder: a review of risk factors, diagnosis, and treatment. *Obstetrical & Gynecological Survey*, 74(6), 369-376.

de Bruijn, L., Stramrood, C. A., Lambregtse-van den Berg, M. P., & Rius Ottenheim, N. (2020). Treatment of posttraumatic stress disorder following childbirth. *Journal of Psychosomatic Obstetrics & Gynecology*, *41*(1), 5-14.

ESM: perhaps ignore my prior comment about WET and consider it here? SNY: I was not able to find a reference for WET in women with PP-PTSD. Let me know if you have one.

Case study by Brandon Hage MD and Elyse Watson MD

- 29 year old G2P1001 woman presents for prenatal care at 8 weeks by LMP. Pregnancy unplanned but desired.
- Delivered son 20 months ago, that pregnancy was complicated by gestational diabetes
 - Obstetrician recommended primary C-section for macrosomia, patient chose trial of labor.
 - Had emergency C-section for NRFHRT during labor which was complicated by postpartum hemorrhage from uterine atony, required massive transfusion protocol and ICU admission. Infants APGARs were 5 and 8, he is now a healthy toddler meeting developmental milestones.
- In the office today, VSS and physical exam normal.
- Bedside USN showed IUP with cardiac activity consistent with LMP dating
- · You review her medication list:
 - · Sertraline 200 mg daily
 - Prazosin 2 mg qHS
 - Clonazepam 0.5 mg BID PRN anxiety
 - · Prenatal vitamin
- Patient reports she stopped all her psychiatric medications 3 weeks ago with a + home UPT



ESM: I took liberty of making some changes in the OB language :-)

Case study (continued)

- Patient reports experiencing a panic attack when she had a
 positive pregnancy test and felt "like it was happening all over
 again."
- · Since stopping meds, experiencing:
 - · Persistent difficulty falling asleep
 - · Increased irritability
 - · Persistent feelings of guilt and shame
 - Intrusive and distressing thoughts, most often memories of her son's birth
 - Waking up from nightmares about her delivery leaves her exhausted during the day
 - Hard to concentrate at work (as an accountant) and she is concerned about the quality of her work
- Did not attend postpartum visits after her son was born; had to take clonazepam before her appointment today because of severe anxiety about being "in an OB place"
- Reports feeling terrified this pregnancy will have the same outcome as her last one, or that she or the baby may end up dying this time.



What is the differential diagnosis for this patient based off this information? What is the most likely diagnosis and why?

- a) Posttraumatic Stress Disorder (PTSD)
- b) Adjustment disorder
- c) Acute Stress Disorder
- d) Major depressive disorder
- e) Generalized Anxiety Disorder

What other information might be useful to know for diagnosis and clinical decision-making?



Authors: Brandon Hage MD and Elyse Watson MD

ESM: may be worth a slide to go through each diagnosis option and talk about what overlaps or what does not overlap. Since, at this point in the case, we don't know as much, maybe emphasizing how it is hard to have a diagnosis at this point? SNY: Yes, added more slides.

What is the differential diagnosis for this patient based off this information? What is the most likely diagnosis and why? **PTSD**

Intrusion	Intrusive and distressing thoughts, most often memories of her son's birth Waking up from nightmares about her delivery leaves her exhausted during the day
Avoidance	Did not attend postpartum visits after her son was born; had to take clonazepam before her appointment today because of severe anxiety about being "in an OB place"
Negative alteration in cognition or mood	Persistent feelings of guilt and shame
Hyperarousal	Persistent difficulty falling asleep Increased irritability Hard to concentrate at work



Case Presentation Differential Dx

Adjustment disorder has onset within 3 months of stressor, and <u>does</u> <u>not persist beyond 6 months</u> after a stressful event has occurred. This diagnosis does not include intrusion and avoidance symptoms, and is a diagnosis of exclusion (disturbance does not meet criteria for another mental health disorder).

Acute Stress Disorder occurs at least 3 days and $\underline{\text{up to 1 month}}$ after a traumatic event.

Major depressive disorder includes symptoms which may overlap with PTSD (excessive guilt, changes in sleep, problems with concentration) however does not typically include intrusion and avoidance symptoms.

Generalized Anxiety Disorder includes symptoms which may overlap with PTSD (difficulty with sleep and concentration) however are centered around the experience of excessive worry



What other information might be useful to know for diagnosis and clinical decision-making?

- Past psychiatric history-specifically what happened after the delivery, what psychiatric symptoms were present
- •Co-morbid psychiatric symptoms: depression, anxiety, mania, psychosis
- •Medication history: number of medication trials, how long she has been on medications, what other medications she has tried
- Previous experiences with therapy/counselling
- •Lethality-SI and HI, access to firearms
- Who prescribed the psychiatric medications and were they consulted about cessation?
- Family history, son's health, and development
- •Substance use, PDMP, clonazepam usage



What are the risks of abrupt discontinuation of SSRIs?

- Discontinuation syndrome, especially at high doses of SSRI
 - Flu-like symptoms, shock-like sensations, insomnia, vivid dreaming, irritability, crying spells, dizziness exacerbated by movement are most common
 - Movement disorders, impairment in concentration in memory less common
 - Paroxetine and venlafaxine are biggest offenders
- · Relapse/recurrence of symptoms being treated



Case Study (continued)

- · You ask about the postpartum period following her son's delivery
- About 2-3 weeks postpartum, patient began to experience recurrent nightmares about delivery, as well as intrusive thoughts and reminders throughout the day
- Developed persistent sleep disturbances, depressed mood, anhedonia. Also experienced intense guilt and horror over the event, feeling as though she was at fault for what occurred.
- Though son is healthy and meeting developmental milestones, she is convinced that he would never growth up normally or be healthy and that the C-section "had ruined him for life."
- Felt extremely anxious that something terrible would happen to him and refused to be separated from him. This delayed her return to work once her parental leave ended.
- Her husband reported he would often have to take the baby monitor away from her because she would watch and listen to it obsessively to make sure her son was well
- She would have extreme irritability, often directed towards her husband or other family members
- These symptoms persisted for several months



Case Study (continued)

- At 10 months postpartum (about 1 year ago), she saw a psychiatrist at the insistence of her husband
- Was first prescribed fluoxetine. This was chosen because her sister had done well on it for treatment of anxiety/depression
- After 2 months at a dose of 60 mg daily, she was switched to sertraline due to lack of response.
- About 4 months ago, she was referred to a therapist and began attending weekly visits
- She last saw her psychiatrist 3 months ago at which time sertraline was increased to 200 mg daily due to only partial relief of her symptoms at a lower dose. She was also started on PRN clonazepam for anxiety and reports using 1-3 times per week.
- Review of the prescription monitoring database results in no concern for misuse or abuse
- Currently denies symptoms consistent with mania, psychosis, or OCD now or in her past
- Drinks one glass of wine about 2-3 times per week until + home UPT when she completely stopped
- Denies passive death wish, SI, or HI. No thoughts or desires to harm the pregnancy. No access to any firearms.



Authors: Brandon Hage MD and Elyse Watson MD

ESM: consider "aberrant entries" instead of "red flags" to make the language less colloquial? SNY: edited

What are the potential risks of untreated PTSD in pregnancy? What are the potential risks of untreated PTSD regardless of pregnancy status?

- Risks of PTSD in pregnancy-mixed from studies but most consistently have shown LBW, reduced rates of breastfeeding; evidence on association and/or impact on preterm birth, fetal growth, head circumference, mother-infant interaction are contradictory¹
- General risks of PTSD-Increased risk of SI/suicide attempts, substance use, increased rates of depression and anxiety, poor interpersonal and occupational functioning.



Cook N, Ayers S, Horsch A. Maternal posttraumatic stress disorder during the perinatal period and child outcomes: A systematic review. J Affect Disord. 2018 Jan 1;225:18-31.

What are the recommended treatments for PTSD?

- First-line medications: sertraline, paroxetine, fluoxetine and venlafaxine.
- Trauma-focused psychotherapy alone often recommended for first-time treatment of PTSD in adults though access and availability might be a limiting factor
- In general, concurrent psychotherapy and medications are often superior to either alone
- If no response to first SSRI, may consider switch to different SSRI or venlafaxine
 - When switching antidepressant medication, most experts recommend a cross-titration over 2-4 weeks (depending on starting dose)
- Prazosin often adjunct for treatment of nightmares, hyperarousal
- VA clinical guidelines do not recommend benzodiazepines or cannabis for treatment of PTSD. In some states (PA included), PTSD is on the list of approved conditions for medical marijuana treatment.



VA/DoD Clinical Practice Guidelines. Management of Posttraumatic Stress Disorder and Acute Stress Reaction. 2017.

Watts BV, Schnurr PP, Mayo L, Young-Xu Y, Weeks WB, Friedman MJ.

Meta-analysis of efficacy of treatments for post-traumatic stress disorder. J
Clin Psychiatry. 2013 Jun;74(6):e541-50.

ESM: may consider either adding information about how to switch to different SSRI (or, if this is in another ppt, reference that). Cross-tapering is an area where most OBs are not familiar. SNY: added a bit of info about

What are your thoughts on the length of the patient's medication trial for PTSD? What is the recommended length of treatment for PTSD? What is a therapeutic trial of medication?

- 200 mg of sertraline appeared to achieve symptom resolution (considered a robust response), but she was only on it for 3 months. Evidence indicates patients should be on maintenance medication for at least 6 months to prevent relapse.
- Therapeutic trial is considered 8-10 weeks at <u>maximum tolerated dose</u> within therapeutic range (varies for different meds). Very important to consider when deciding to switch or augment medications and determining if a medication was truly trialed.



Davidson J, Pearlstein T, Londborg P, Brady KT, Rothbaum B, Bell J, Maddock R, Hegel MT, Farfel G. Efficacy of sertraline in preventing relapse of posttraumatic stress disorder: results of a 28-week double-blind, placebo-controlled study. Am J Psychiatry. 2001;158(12):1974.

Case Study (continued)

- The patient reports she did not consult her psychiatrist before stopping all medications. This is partly because the psychiatrist left the practice and she hasn't been able to find another psychiatrist
- She is concerned the being on medication while pregnant will harm the baby or lead to miscarriage
- She feels bad enough that she took a clonazepam in order to get to this appointment
- At the same time, she does not want to experience the same symptoms she had following the birth of her son.
- She tearfully asks you what you recommend for her...



How would you address this patient's concerns? What approach would be best in this situation?

- · Validation, empathy
- Review risks of untreated PTSD in pregnancy and, in general, impact on quality of life
 - · Risks of untreated PTSD in pregnancy
 - · Associated with low birth weight and reduced rates of breastfeeding
 - Contradictory or inconclusive data on association with preterm birth, fetal growth, head circumference, mother-infant interactions, child development
 - Untreated PTSD in general carries increased risk of co-morbid depression, anxiety, substance use disorder, suicidality, impaired occupational and social functioning
- Risk/benefit discussion regarding SSRI in pregnancy



Which SSRI would you recommend for this patient?

Patient did well on sertraline so this would be first consideration though
it was not explicitly stated if she had any side effects, which would be
worth exploring.



Watts BV, Schnurr PP, Mayo L, Young-Xu Y, Weeks WB, Friedman MJ.

Meta-analysis of efficacy of treatments for post-traumatic stress disorder. J Clin Psychiatry. 2013 Jun;74(6):e541-50.

What are the potential side effects of benzodiazepines and prazosin? What are the potential risks to a developing baby during pregnancy and after delivery?

Benzodiazepines:

- Physiological dependence, misuse potential, sedation, dizziness, impaired coordination, disinhibition, hypotension, confusion, depression, memory impairment, respiratory depression, rebound anxiety (more likely with shorter-acting benzodiazepines)
- No significant risk of somatic teratogenesis in cases of fetal exposure
 - Previous data suggesting association with oral clefting has not been shown in meta analyses
- Neonatal sequelae of maternal benzodiazepine use:
 - Neonatal withdrawal syndrome: Restlessness, hypertonia, hyperreflexia, tremulousness, apnea, diarrhea, vomiting
 - Floppy infant syndrome reported: hypothermia, lethargy, poor respiratory effort, feeding difficulties
 - Neurobehavioral impact of prenatal exposure is unclear but unlikely to be impacted based on the current data



What are the potential side effects of benzodiazepines and prazosin? What are the potential risks to a developing baby during pregnancy and after delivery? (continued)

Very little data on prazosin in pregnancy

- No increase in teratogenicity based on animal studies
- Reported cases of prazosin use during pregnancy are often in the setting
 of hypertensive disorders and/or co-administration with other
 anti-hypertensive agents. This limits ability to distinguish effects of
 prazosin therapy versus adverse effects of hypertensive disorder itself on
 gestational outcomes.



How would you counsel this patient about using benzodiazepines in pregnancy?

- Risk/benefit discussion; discuss side effects and risks as above
- Benzodiazepines are not generally recommended for treatment of PTSD, but are sometimes used in clinical practice for comorbid panic and anxiety symptoms
- If a benzodiazepine is clinically indicated and the patient did well on clonazepam, this is still a valid option



Case Study (continued)

- After risk/benefit discussion of medication versus untreated illness, the patient decides to restart sertraline since she has done well on it before.
- She asks if she can breastfeed on this medication. She did not breastfeed her son and wants to try with her second child.



What is an appropriate starting dose and titration schedule? What is considered to be a therapeutic dose?

- May consider starting dose of 25 mg daily x 5-7 days, then increase to 50 mg daily x 5-7 days, then increase to 100 mg daily. May continue for 4 weeks at 100 mg daily, then increase to 150 mg daily or above if still symptomatic
- Therapeutic range for sertraline is 50 mg-200 mg daily (250 mg sometimes used in practice and have provided benefit-mostly anecdotal).



ESM: the starting dose of 12.5mg is not consistent with other documents. we should come up with a way to ensure consistency across documents SNY: Yes, removed the 12.5mg starting dose above.

Summary National curriculum in REPRODUCTIVE PSYCHIATRY

- A history of trauma is common in reproductive age women, and may arise from prior early life trauma/adversity, sexual assault, intimate partner violence, traumatic childbirth/reproductive loss, or other exposure to other events.
- Screening for trauma and PTSD during routine obstetrical care can be accomplished with a validated screening tool such as the PCL-5.
- Following a positive screening test, patients should undergo a diagnostic assessment, ideally with a psychiatrist.
- Diagnostic criteria for PTSD include a specific constellation of symptoms lasting > 1 month, causing distress or disability, and not explained by a medical condition.
- Peripartum/postpartum PTSD is not a formal condition in the DSM-V, but should be a diagnosis considered in the context of a traumatic delivery.
- There are high rates of both overlapping symptoms as well as co-morbid mood, anxiety, or substance use disorders in patient with PTSD.
- The aim of treatment is to reduce levels of distress and improve function and quality of life with minimal adverse effects. First line treatment includes psychotherapy and SSRIs with a multidisciplinary approach.

ESM: as previously, I don't think there is a formal recommendation for PTSD screening during routine OB care SNY: yes, edited.

ESM: while ideal is for evaluation by a psychiatrist, this is not always achievable. Perhaps, since this is for OBs, "patients should undergo a diagnostic assessment, ideally with a psychiatrist"? SNY: Yes, edited

ESM: I think bullet 4 should be "and not explained by an alternative <u>medical</u> condition" SNY: yes, edited

Key references

Canfield, Dana MD; Silver, Robert M. MD Detection and Prevention of Postpartum Posttraumatic Stress Disorder, Obstetrics & Gynecology: November 2020 - Volume 136 - Issue 5 - p 1030-1035 doi: 10.1097/AOG.000000000000004093

ACOG Committee Opinion #825: Caring for Patients Who Have Experienced Trauma (April 2021)

ACOG Committee Opinion #547: Health Care for Women in the Military and Women Veterans (December 2012)

ACOG Committee Opinion #498: Adult Manifestations of Childhood Sexual Abuse (August 2011)

Ades, V; Wu, SX; Rabinowitz, E; Chemouni Bach, S; Goddard, B; Pearson A, Savannah; Greene, J. An Integrated, Trauma-Informed Care Model for Female Survivors of Sexual Violence, Obstetrics & Gynecology: 133(4), April 2019 - p 803-809



Resources

Information on how to perform a trauma-informed pelvic exam

- <u>Dr Lauren Owens: Trauma-Informed Care for the Obstetrician-Gynecologist</u>
- Tillman, S. (2020), Consent in Pelvic Care. Journal of Midwifery & Women's Health, 65: 749-758.

Didactic module: assessing and responding to trauma history in pregnant patients:

 Stevens NR, Holmgreen L, Hobfoll SE, Cvengros JA. Assessing Trauma History in Pregnant Patients: A Didactic Module and Role-Play for Obstetrics and Gynecology Residents. MedEdPORTAL. 2020;16:10925. Published 2020 Jul 20. doi:10.15766/mep 2374-8265.10925

National Center for PTSD: <u>Sexual Trauma</u>: <u>Information for Women's Medical Providers</u>



LH: do we want to include trauma informed care?