The intersection of psychological trauma and childbirth.

The what, how, and why now of trauma-informed care.

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Disclosures

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Learning Objectives

- Recognize signs and symptoms of unresolved psychological traumatic stress in patients and ourselves
- Identify the types and frequency of interpersonal traumas that impact our obstetric patients
- Recall the consequences of a traumatic birth on the patient, the infant, the family, and society
- Utilize basic trauma-informed care principles to improve communication and develop trust with patients

An Interesting Situation

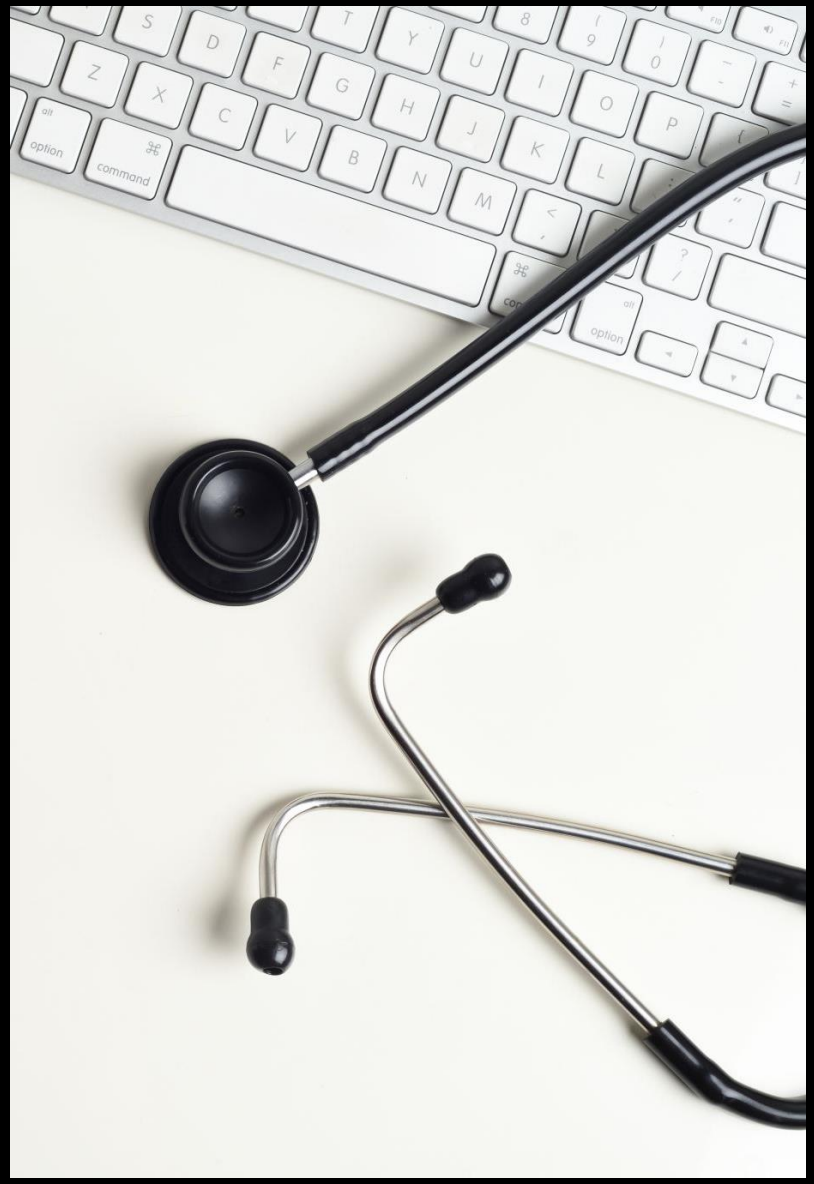
- An individual (G1P0) with preeclampsia with severe features
- Transferred from a midwife center
- Refusing all standard treatment modalities
- Her “irrational” behavior prompted requests for consultation with the psychiatric service, the hospital’s ethics committee, social services, and the legal department.
- She had no documented history of any mental health issues, but she did have a remote history of abuse

Implications

- Risk for harm for the mother and the child
- Extensive utilization of resources
- Calls into question the legal rights of this mom- do fetal rights trump maternal rights?
- Negative impact on the staff
- Many providers are ill-equipped to identify the risks, signs and symptoms of psychological disease processes

Another Interesting Situation…

- “B” is taken to the operating room for a scheduled cesarean delivery of twins, both in the breech position
- She receives a subarachnoid block for the surgery
- At incision, she tells providers that she can feel it, she states that she is unable to breathe, experiences panic and feels that her “heart is not right”
- She receives anxiolytics but felt that her pain was “dismissed” by providers
- Postoperatively she experiences severe pain, feels like she is in “shock”, and ultimately develops severe mental health complications



What is trauma?

- *"Psychological trauma is an affliction of the powerless. At the moment of trauma, the victim is rendered helpless by overwhelming force. When the force is that of nature, we speak of disasters. When the force is that of other human beings, we speak of atrocities.* ***Traumatic events overwhelm the ordinary systems of care that give people a sense of control, connection, and meaning….*** *Traumatic events are extraordinary, not because they occur rarely, but rather because they overwhelm the ordinary human adaptations to life…. They confront human beings with the extremities of helplessness and terror and evoke the responses of catastrophe."*

- Judith Lewis Herman, *Trauma and Recovery The Aftermath of Violence - From Domestic Abuse to Political Terror*

Trauma from the Past

- DSM V Definition
  - The person was exposed to death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, in the following way(s):
    - Direct exposure
    - Witnessing the trauma
    - Learning that a relative or close friend was exposed to a trauma
    - Indirect exposure to aversive details of the trauma, usually in the course of professional duties (e.g., first responders, medics)

What is Trauma?

Individual vs. collective

- Individual-any trauma that affects the individual uniquely including childhood adversity and abuse, intimate partner violence, sexual assault and rape, birth trauma, medical trauma
- Collective-trauma that impacts the communities or specific groups of individuals that includes historical trauma such as racial trauma, public experience of trauma, war, natural disasters

Trauma-awareness as part of a cultural change

- A system that is not “trauma-aware” is “trauma-denied”[1]

1 Elliott DE, Bjelajac P, Fallot RD, et al. Trauma-informed or trauma-denied: principles and implementation of trauma-informed services for women. J Community Psychol 2005;33(4):461–77.

What is Trauma?

Individual Trauma as the "3 E's"

*"Individual trauma results from an **event,** series of events, or set of circumstances that is **experienced** by an individual as physically or emotionally harmful or life threatening and that has lasting adverse **effects** on the individual's functioning and mental, physical, social, emotional, or spiritual well-being."*

Substance Abuse and Mental Health Services Administration.

Interpersonal Trauma

- Approximately 20-33% of females will be the victims of childhood sexual trauma [1]
- Approximately 33% of female veterans will self-report a history of military sexual trauma [2]
- 1 in 4 women will experience severe physical violence from IPV in their lifetime [3]
- Up to 44% of women report their birth experiences as traumatic [4]
- Pregnant teens have a mean ACE (Adverse Childhood Experiences) score of 5.1 [5]

1 US Department of Justice, Sobel, et al. *Obstet Gynecol* 2018, Seng ,et al. *J Midwifery Womens Health* 2013, Felitti, et al. *Am J Prev Med* 1998

2 Sadler, et al. *J Womens* Health 2011

3 CDC's National Intimate Partner and Sexual Violence Survey 2017

4 de Graaff, et al. *Acta Obstet Gynecol Scand* 2017

5 *Millar HC, et al. J Ped and Adolescent Gynecology 2021*

Interpersonal Trauma

- 9% will meet criteria for a diagnosis of PTSD when they present to an obstetric provider during pregnancy [1]
- Many adult survivors have unaddressed and unresolved trauma issues

1 Seng ,et al . *Obstet Gynecol* 2009.

DSM Diagnostic Criteria

Criteria	**Real life Behaviors**
Stressor	
Re-experiencing	Flashbacks/nightmares/triggers
Avoidance &Numbing	Passive, “check out/dissociate” No attention to danger Often the victims in relationships People pleaser, sacrifices their own feelings
Arousal	Hypervigilant Hostile Panic behaviors Paranoid
Negative cognitions and mood	Guilt/negative feelings about oneself/lost interest in activities
Duration, Disability	

TRAUMA CYCLE

Trauma

PTSD

- Negative or lack of coping mechanisms
- Disconnected

Re-Traumatized

Vulnerability to Re-traumatization

Adverse Childhood Experience (ACE) Study

- Physical abuse
- Sexual abuse
- Emotional abuse
- Physical neglect
- Emotional neglect

- Mother treated violently
- Household substance abuse
- Household mental illness
- Parental separation or divorce
- Incarcerated household member

Felitti, et al. *Am J Prev Med* 1998

ACE Study Results

- Smoking
- Obesity
- Physical Inactivity
- Depression
- Suicide

- Alcoholism
- Illicit Drug Use
- Injected Drug Use
- 50+ sexual partners
- STDs

Philadelphia Expanded ACE Study

7/10 adults had experienced one ACE 2/5 had experienced four or more.

Philadelphia Expanded ACE Questions look at Community-Level Adversity	
Witness Violence	How often, if ever, did you see or hear someone being beaten up, stabbed, or shot in real life?
Felt Discrimination	While you were growing up...How often did you feel that you were treated badly or unfairly because of your race or ethnicity?
Adverse Neighborhood Experience	Did you feel safe in your neighborhood? Did you feel people in your neighborhood looked out for each other, stood up for each other, and could be trusted?
Bullied	How often were you bullied by a peer or classmate?
Lived in Foster Care	Were you ever in foster care?

Findings from the Philadelphia Urban ACE Survey. September 2013

Long term Effects of Unresolved Trauma

- Sleeping difficulties
- PTSD
- Dissociation
- Substance Use Disorders/Addictive behaviors/Eating disorders
- Anxiety/depression
- Decreased Self Esteem
- Suicidal ideation
- Fatigue
- Physical Issues -hypertension, gastrointestinal problems, migraines, chronic pain conditions including pelvic pain, poor immune function, fibromyalgia, decreases in cognitive function, earlier hysterectomy in female veterans

van der Kolk, et al. Traumatic Stress. Guilford 2007
Felitti, et al. *Am J Prev Med* 1998
Herman, J. Trauma and Recovery. Basic Books 2015
Chichowski S, et al. *Military Medicine* 2017

What happens when survivors get pregnant and present for delivery?

MimiPrints

Prior Sexual Trauma and the Parturient

- Intrinsic Triggers
  - Painful contractions
  - Nausea and vomiting
  - Bloody excretions
  - Instinctual reactions (moaning, grunting)
  - Change in appearance

Simpkin P, Klaus P. When survivors give birth. Seattle, Washington: Classic Day Publishing, 2004

Prior Sexual Trauma and the Parturient

- Extrinsic Triggers
  - Sights, smells, sounds of the hospital environment
  - Hospital environment, beeping equipment, bright lights
  - Lack of privacy
  - Lack of respect for the woman's modesty
  - Separation from loved ones
  - Vaginal exams, injections, arm straps, physical restraint

Simpkin P, Klaus P. When survivors give birth. Seattle, Washington: Classic Day Publishing, 2004

The New York Times

For Serena Williams, Childbirth Was a Harrowing Ordeal. She's Not Alone.

TODAY

Olympic star Allyson Felix speaks out about her traumatic birth experience

JOURNAL MOTHERS REPORT ON

Cruelty in Maternity Wards

By GLADYS DENNY SHULTZ

Various Types of Birth Trauma

- Obstetric Related
  - Severe Hemorrhage
  - Emergency situations
  - Severe maternal complication/illness
- Anesthesia Related[3]
  - Inadequate anesthesia for surgical delivery
  - Needle trauma/difficulty with block/neurologic complications
  - Severe headache
- Fetal/Neonatal
  - Intrapartum emergency events
  - Unexpected diagnosis/ loss of a child (at any time during pregnancy)
  - Loss of a child to Child Protective Services [6]

Contributing Factors: [1-5]

- Feelings of helplessness/loss of control
- Minimal support during childbirth
- Fear
- Negative subjective experience of childbirth

1 Farren J, Jalmbrant M, Ameye L, Mitchell-Jones N. Post-traumatic stress, anxiety and depression following miscarriage or ectopic pregnancy: a prospective cohort study. Am J Obstet Gynecol 2020; 222:367.e1-367.e22.
2 Andersen LB, Melvaer LB, Videbech P, Lamont RF. Risk factors for developing post-traumatic stress disorder following childbirth: a systematic review. Acta Obstet Gynecol Scand 2012; 91:1261-72.
3 Lopez U, Meyer M, Loures V, Iselin-Chaves I. Post-traumatic stress disorder in parturients delivering by caesarean section and the implication of anaesthesia: a prospective cohort study. Health Qual Life Outcomes 2017;15:118.
4 Soet JE, Brack GA, DiIorio C. Prevalence and predictors of women's experience of psychological trauma during childbirth. Birth 2003;30:36-46.
5 Simpkin P, Klaus P. When survivors give birth. Seattle, WA: Classic Day Publishing, 2004.
6 Wall-Wieler,E, et al. Mortality among mothers whose children were taken into care by Child Protection Services: A Discordant Sibling Analysis. *Amer J of Epidemiology* 2018; 187:1182-88.

Unresolved Trauma and the Parturient

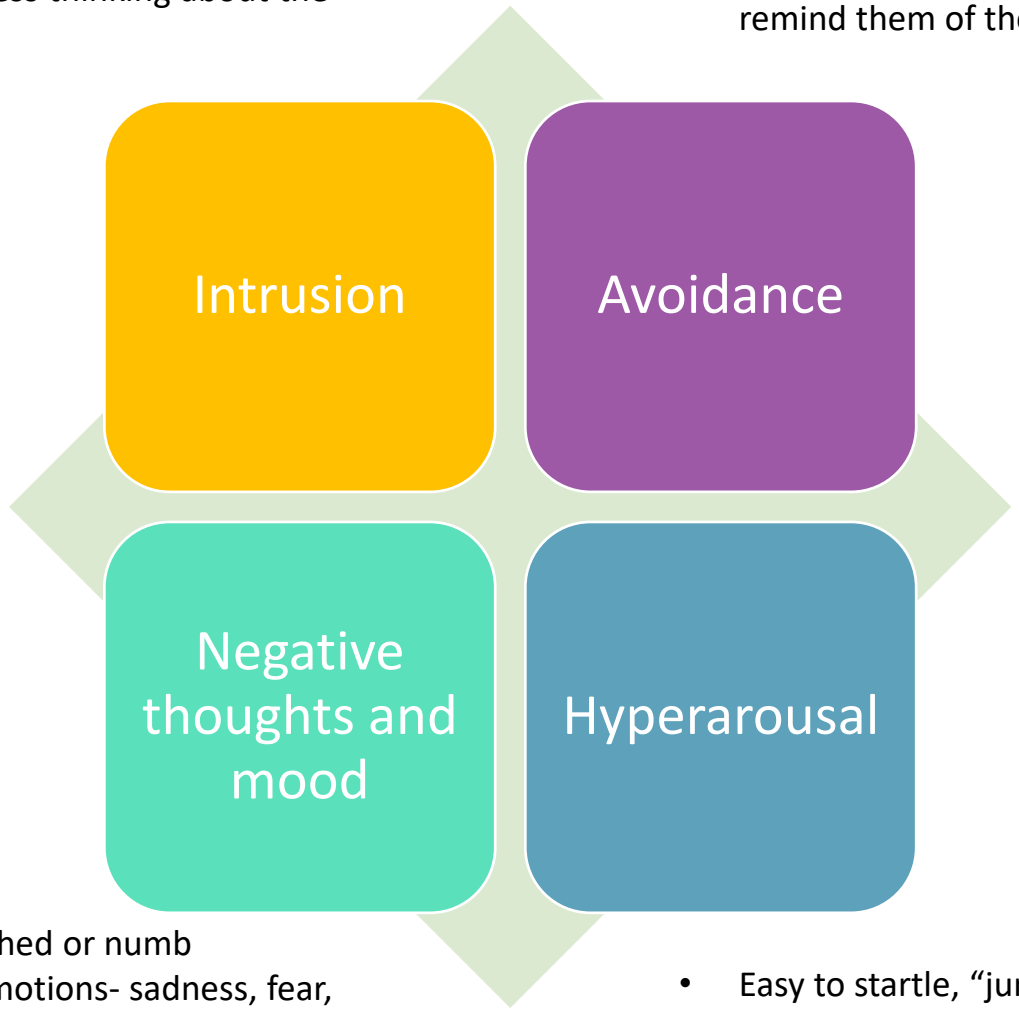
What might we see as providers?

- Anxiety/depression
- Substance Use Disorders
- Fear of losing control or of being strapped down
- Resistance to vaginal/cervical exams
- Refusal of care
- Request for general anesthesia
- Anger and hostility
- Detailed/extensive birth plans
- Phobias
- Unusual affect
- Request for no male providers
- Physical issues- hypertension, tachycardia

Stress Responses: Acute

- Recurring thoughts
- Nightmares/flashbacks
- Physical distress thinking about the trauma

- Avoiding memories, talking about the event
- Avoiding places and people that remind them of the trauma



- Feeling detached or numb
- Conflicting emotions- sadness, fear, guilt, terror, anger, embarrassment, confusion and joy, elation at the same time
- Difficulty experiencing joy

- Easy to startle, “jumpy” ,shaking
- Increased heart rate
- Difficulty sleeping or concentrating

Consequences of a traumatic birth experience on the trauma survivor:

- Dissociation with no memory of the childbirth experience
- Hyper-arousal with agitation/ anger with caregivers/ hostility
- Psychological harm impairing the maternal-fetal, and maternal-neonatal bond
- Increased risk for maternal mental health complications
- Negative alterations in pain perception
- Lifelong negative association during the anniversary of the trauma
- Negative impact on future reproduction
- Avoidance of the operating room

Vogel T, et al. *Br J Anaesth* 2020
Vogel T. *Curr Anesthesiol Rep* 2021)
Beck CT. *J Perinat Educ*. 2017
Lopez, U. *Health Qual Life Outcomes*. 2017.

Consequences on the **provider**:

- Hyper-arousal with agitation/ anger with patients/ hostility/ distrust
- Increased risk for mental health complications
- Increased risk of job dissatisfaction/burnout

Yates, S. *The Amer J of Medicine* 2020

Maternal Mortality due to trauma-related conditions

- Mental health problems, SUD, and IPV are preceding circumstances to pregnancy-associated suicide and homicide [1]
- One-third of all maternal deaths occurred outside of a medical facility [2]
  - Domestic violence, homicide, suicide, and illegal drug use are modifiable social factors
- CDC Data from MMRCs in 36 states, 2017-2019 [3]

  For the 1st time mental health conditions were a leading underlying cause of deaths

  Reflective of the largest number of deaths among white, Hispanic, and American Indian or Alaska Native populations

1 Modest A. et al. Pregnancy-associated Homicide and Suicide. *Obstet Gynecol* 2022;140:565-73

2 Burgess, et al. Pregnancy-related mortality in the United States, 2003-2016: age, race, and place of death. *Am J of Obstet & Gynecol.* 2020;222:489.e1-8

3 Trost SL, Beauregard J, Njie F, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017–2019. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Service 2022

Costs of Unresolved Trauma

- 3.5% higher probability of cesarean delivery for primagravidas with a history of perinatal mood disorders [1]
- 12-fold increased risk for cesarean delivery/13-fold increased risk for instrumental delivery for survivors of adult rape versus controls [2]
- Female trauma survivors may avoid seeking preventative medical care including mammograms, cancer screenings, prenatal care, dental care[3]
- Individuals with histories of trauma are often high-utilizers of healthcare dollars[3]
  - Sick visits
  - Emergency care
- New cases of PTSD as a result of sexual assault
  Total cost per assault is $138,204 with a total cost to society per year of $3.6 billion.[4]

[1] *Zochowski, et al. Health Affairs 2021*
[2] *Nerum, et al. BJOG 2013*
[3] Raja S, et al. F*am Community Health* 2015
[4] Ferris, et al. *Rand Study* 2013

Costs of Unresolved Trauma

- **Fetal**
  - Intrauterine growth restriction
  - Preterm delivery : The hospital cost per survivor at 25 weeks gestation was found to be $292,000 and $124,000 at 28 weeks /mean cost savings of about $35,000–39,750 for every 1-week increase in gestational age at birth [1]
  - Exposure to illicit substances/ less likely to receive preventative prenatal care
- **Neonatal**
  - Oxytocin deficiency transmission and intergenerational transmission of psychiatric (trauma) pathology [2]
  - Behavioral challenges
  - Societal impact

[1] *Phibbs et al.NICU 2019*

[2] *Vogel TM, et al. BJA 2020.*

What does Trauma Informed Care look like on L&D?

- A shift in practice paradigms from “what I am going to do *to you*” to “what can we do *together*” to achieve mutual goals based on each person’s individual cultural context
- Multi-disciplinary planning/ on-site discussions with consistency of communication
- Focus on giving the patient some sense of choice and control of their situation
- Focus on creating an environment of psychological safety

Trauma Informed Care

- **Realizes** the widespread impact of trauma and understands potential paths for recovery
- **Recognizes** the signs and symptoms of trauma in patients, families, staff, and others involved with the system
- **Responds** fully integrating knowledge about trauma into policies, procedures, and practices
- Actively seeks to **resist re-traumatization**

Substance Abuse and Mental Health Services Administration

Trauma-informed Care Principles

https://www.cdc.gov/cpr/infographics/6principlestraumainfo.htm

ACOG
The American College of Obstetricians and Gynecologists

- It is important for obstetrician–gynecologists and other health care practitioners to recognize the prevalence and effect of trauma on patients and the health care team and incorporate trauma-informed approaches to delivery of care.
- Obstetrician–gynecologists should become familiar with the trauma-informed model of care and strive to universally implement a trauma-informed approach across all levels of their practice with close attention to avoiding stigmatization and prioritizing resilience.
- Obstetrician–gynecologists should build a trauma-informed workforce by training clinicians and staff on how to be trauma-informed.

ACOG
The American College of Obstetricians and Gynecologists

- Feelings of physical and psychological safety are paramount to effective care relationships with trauma survivors, and obstetrician–gynecologists should create a safe physical and emotional environment for patients and staff.
- Obstetrician–gynecologists should implement universal screening for current trauma and a history of trauma.
- In the medical education system, the benefit of trainee experience must be balanced with the potential negative effect on and re-traumatization of patients through multiple interviews and examinations.

Unresolved Trauma and the Parturient

- Qualitative Studies
  - Trusting environment
  - Communication of disclosure
  - Concise, but specific birth plans outlining collaborative goals/expectations
  - Clear explanations when and how procedures are to be done
  - Acknowledgement that women have control over timing, pace, termination of exams
  - Minimal number of examinations and examiners

- Sobel, et al. *Obstet Gynecol* 2018
- Roller, et al. *J Midwifery Womens Health* 2011

Unresolved Trauma and the Parturient

- Qualitative Studies
  - Respect for privacy- knock before entering
  - Ability to wear their clothes/ minimize bodily exposure
  - Consider elective cesarean section after appropriate counseling
  - Recognize some women are comfortable with male providers, but routine assessment is important
  - Some women with a history of sexual abuse may choose not to breastfeed

- Sobel, et al. *Obstet Gynecol* 2018
- Roller, et al. *J Midwifery Womens Health* 2011

A Proposed Trauma-informed Care Practice for Obstetric Providers

- *Realize* that a significant proportion of women are survivors of trauma and that their previous trauma can negatively impact their current childbirth experience
- *Recognize* established risk factors and identify vulnerable populations early in pregnancy/ plan for consultation in a high-risk obstetric clinics (including OB Anesthesia clinics) to facilitate shared-decision making and development of mutually acceptable care plans that address fears and triggers

A Proposed Trauma-informed Care Practice for Obstetric Providers

- *Recognize* acute stress reactions during labour and delivery and establish a plan for the pharmacologic and non-pharmacologic management of these
- *Respond and resist traumatization and re-traumatization*

Vogel TM 2019

Resist Re-traumatization

- Antepartum
  - Plan for early consultation
  - Elucidate fears/concerns and identify known triggers, any history of panic and any established coping mechanisms
  - Explain the purpose, risks, benefits of low dose anxiolytics including the risk to the individual of withholding them
  - Discuss pain expectations and management options including how you will test any neuraxial blocks. Give the patient the option of a general anesthetic.
  - Discuss the role of the significant other and any need for private space
  - Offer an opportunity for the patients to familiarize themselves with the hospital space and the teams
  - Establish best practice for communication of her history to the care teams

Vogel, T. *Anesthesiol* Clinics 2021.

Resist Re-traumatization

- Intrapartum
  - Minimize the number of providers
  - If planning a neuraxial technique: optimize success- Ultrasound/most experienced provider/time/quiet operating room (count instruments prior to entering) to allow for good communication, low-dose anxiolytics, give the patient control of the pace of things, keep the support person with her, appreciate and respect that this process is most likely terrifying for her
  - Convince the patient and yourself that the block is working using evidence-based approaches
  - Remember that individuals with preexisting anxiety, PTSD, other mental health issues may have altered pain perception and may need unique strategies to prevent intra and postoperative pain (IT clonidine, CSE technique, LA injection into the incision)

Vogel, T. *Curr Anesesthesiol* Rep 2021

Plaat, F, et al. *Anaesthesia* 2022

An Interesting Situation

Utilizing trauma-informed care principles, we were able to develop a plan that was mutually acceptable to her and her providers. She consented to the cesarean section and felt that it was her choice.

Her significant other was in the room with her the entire time

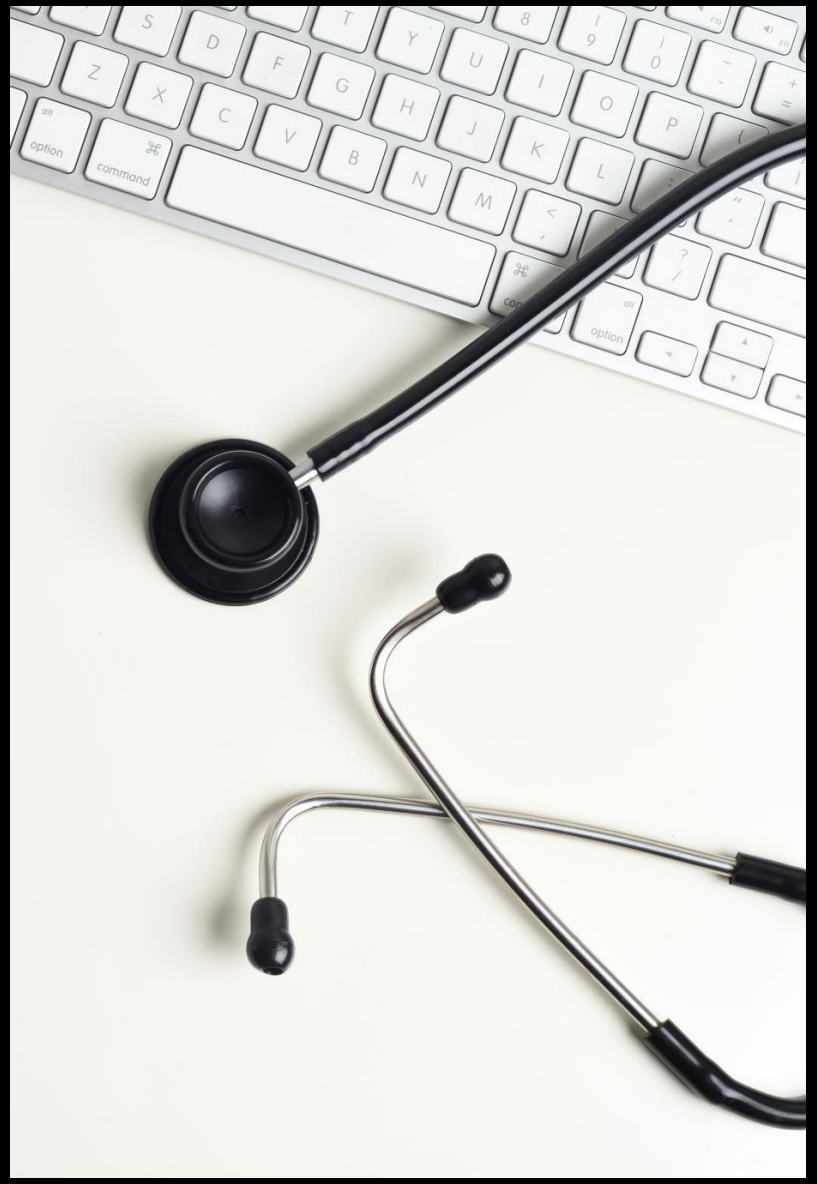
We removed the arm boards from the operating room table, and she kept her arms on her chest throughout the case

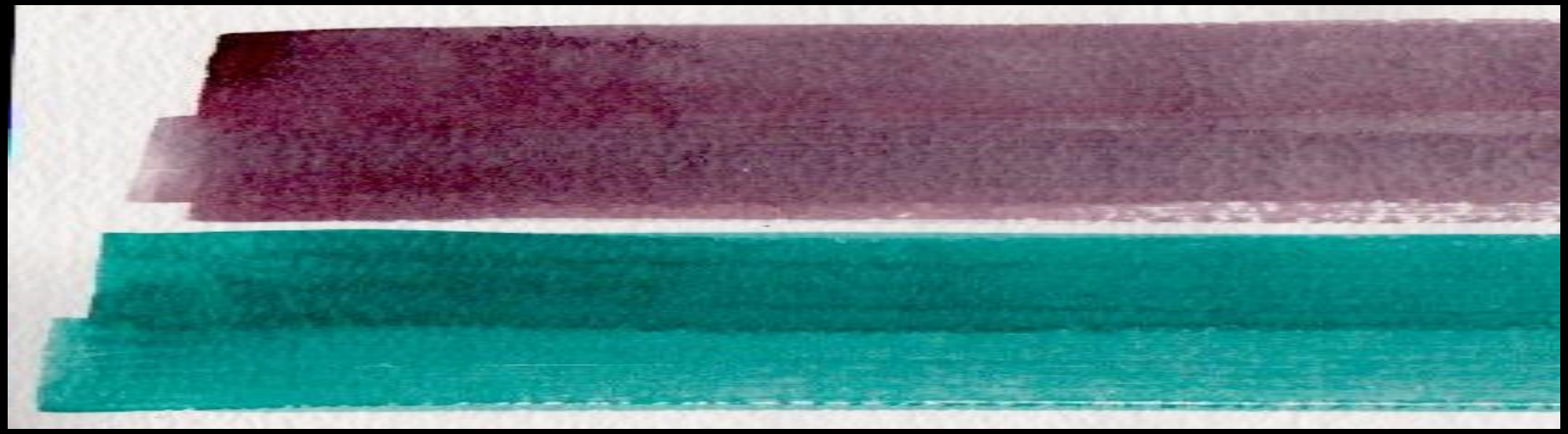
She received small doses of midazolam upon her request and had no face mask.

She enjoyed skin-to-skin bonding with her baby and was tremendously grateful for what we helped her to do.

Another Interesting Situation…

- Patient never received validation for her painful and traumatizing experience
- Postpartum she had difficulties with severe sleep disruption, avoidance of thinking about the birth, negative mood and guilt, and significant episodes of panic at home
- Her significant other was also traumatized
- Plan to submit a grievance to the hospital
- Visit to our Perinatal TIC Clinic:
  - Validation
  - Screening for PTS symptom type and severity
  - Referral for trauma-specific mental health support/interventions
  - Plan for a trauma-informed delivery plan for any subsequent pregnancies





We speak of “pain during cesarean delivery.”

The patient speaks of “lifelong traumatic stress.”