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Implementing Patient-Centered Trauma-Informed Care for the Perinatal Nurse

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ABSTRACT

Adverse childhood experiences and trauma significantly impact physical and mental health. Increased maternal perinatal depression/anxiety, preterm labor, and low birth weight, as well as infant morbidity and mortality, are some examples of the impact of trauma on perinatal health. Trauma-informed care begins with knowledge about trauma, the ability to recognize signs of a trauma response, responding to patients effectively, and resisting retraumatization. As holistic providers, perinatal nurses can create safe care environments, establish collaborative patient relationships based on trust, demonstrate compassion, offer patients options when possible to support patient autonomy, and provide resources for trauma survivors. This can prevent or reduce the negative impact of trauma and improve the health and well-being of infants, mothers, and future generations. This clinical article outlines key strategies for implementation of patient-centered trauma-informed perinatal nursing care.

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Exposure to, or personal experience with, trauma (ie, interpersonal, institutional, and community) are common among people of all ages.[1] Trauma includes adverse childhood experiences (ACEs).[2] Traumatic experiences, including ACEs, can have a lifelong impact on a person's neurodevelopment, stress response, coping mechanisms, social behavior, and mental and physical health.[1,2] The long-term effects associated with trauma can ultimately lead to an early death.[1,2] Pregnant women and infants are no exception, and are 2 of the most vulnerable populations in relation to the impact of trauma for the individual over a lifetime and future generations. Trauma-informed care (TIC) can guide the healthcare provider's approach to care, being grounded in the understanding of trauma and its impact on behavior and overall health.[3] The need for TIC is clearly documented in the literature due to the myriad of adverse health effects associated with trauma.[2,4–7] Nurses are central to healthcare and have an enormous impact on the outcome and quality of patient care. As frontline healthcare providers with regular patient contact, nurses provide and direct most of the care patients receive, particularly in the inpatient setting. The purpose of this article is to provide perinatal nurses with foundational information about ACEs and describe the trauma-informed clinical approach and strategies for implementation of patient-centered trauma-informed nursing care.[4]

BACKGROUND

The Substance Abuse and Mental Health Services Administration[8] defines trauma as "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."[8] There are multiple types of trauma, including physical violence, sexual violence, neglect, exposure to war, community violence and safety issues, incarceration of a parent, time spent in a juvenile justice facility, and being removed from the home as a child, among others.[2] The impact of and response to trauma is dependent on a number of factors, including when it occurs, where it occurs, and how often, as well as the type and severity of trauma.[8] These factors are known as the 3 "E's" of trauma: the event, the experience, and the effect.[8] An individual's trauma response is multifaceted and connected to compounding factors such as personal vulnerabilities and risk factors and mitigating factors such as the availability of resources and support.[9]

Trauma has been shown to have a lasting impact on an individual's mental and physical health.[2] Adverse childhood experiences are the most well studied form of trauma in the literature. The original ACE study found a significant graded relationship with the number of ACEs and worsening of health, meaning as the number of ACEs increases, the associated health risks and adverse outcomes also increase.[2,3] For example, individuals with 4 or more ACEs were found to have 1.4 to 1.6 times the rate of increased inactivity and severe obesity; 2 to 4 times increase in poor self-rated health and smoking; and 4 to 12 times the rate of alcoholism and drug abuse.[2] Furthermore, those with 4 or more ACEs were found to be 4 to 12 times more likely to experience depression, suicidality, and increased suicide attempts.[2] Beyond that, they were found to have an increased risk of chronic disease as well as increased morbidity and mortality from chronic lung disease, liver disease, ischemic heart disease, skeletal fractures, and cancer.[2,8]

Survivors of trauma have short- and long-term effects associated with that trauma. Short-term effects are often seen as a normal response in the body, mind, and emotions in response to an abnormal experience.[8] One role of the human brain is to rapidly respond to stressful situations for survival.[1] In situations that the brain determines to be life-threatening, the physiologic stress response is activated in the hypothalamic-pituitary-adrenal (HPA) axis and autonomic nervous system.[5] When the HPA axis is activated, the body releases stress hormones including cortisol.[5] Cortisol signals the autonomic nervous system to produce quick reactions in the body to prepare to fight, run, freeze, or faint.[6] In people without a history of trauma, the body will return to its normal state once the stressor is removed.[6]

Long-term effects associated with trauma can occur when the body and mind develop new maladaptive responses to stressful stimuli, which can in turn affect relationships, coping, and achieving developmental tasks throughout life.[8] Individuals who have experienced trauma may develop a hyperreactive stress response as a result of changes within the brain's structures and function.[6] In these individuals, the brain can develop long-standing changes where the HPA axis and the autonomic nervous system become chronically activated.[7,10] When the HPA axis and the brain are chronically activated, an individual's perception of stressful stimuli is altered and develops into a maladaptive process, causing the brain to identify routine activities as stressful.[6] This results in the signaling of the stress response and release of stress hormones.[6]

TRAUMA AND THE PERINATAL PERIOD

Perinatal health can be impacted by various forms of trauma, ACEs, and trauma experienced prior to or during pregnancy, including perinatal trauma.[11] The life course theory provides valuable insight to how trauma impacts overall health, well-being, and the health of future generations.[11] Trauma can precede pregnancy, sometimes much earlier in life, yet can still impact pregnancy outcomes.[11] Trauma alters normal brain development and physiology leading to maladaptive stress responses within the body, and those biological changes can also influence pregnancy and delivery outcomes.[11] The life course theory considers the impact of chronic dysregulation of the HPA axis and autonomic nervous system on fetal development and pregnancy outcomes.[5] It is hypothesized that the impaired maternal stress response (HPA axis and autonomic nervous system) has a negative impact on the developing fetus's stress response, which can continue well beyond the prenatal period.[7,9]

While the exact mechanisms and physiologic causes are unknown, women with a history of ACEs and trauma have been found to have poor pregnancy and birth outcomes.[11–16] An integrative review of pregnancy outcomes associated with ACEs, outlines physiologic, psychological, social, and behavioral pregnancy risks and pregnancy-related outcomes impacted by ACEs.[16] Women with ACEs have greater odds of having preexisting or new health problems during pregnancy, high cortisol levels from the dysregulation of the HPA axis, increased pain intensity in the third trimester of pregnancy, and poorer subjective sleep quality.[16] Women with ACEs were 4.2 times more likely to experience prenatal and postpartum depression, and ACEs were found to be significantly associated with pregnancy-related anxiety and posttraumatic stress disorder (PTSD).[16,17]

Adverse childhood events were found to be a predictor of household dysfunction associated with stress, mental health problems, poor social support, lower income, and marital status. Additional social risks included increased odds of young age at first pregnancy, lower educational attainment, and lower income in young women with higher ACEs.[16] Women with ACEs have increased odds of alcohol use during pregnancy increasing with each additional ACE.[16] Women with 2 or more ACEs were found to have higher odds of preterm birth, and the odds of fetal death ranged between 1.2 and 1.8 times higher for each increase in ACE score.[16] Women who are survivors of trauma may delay prenatal care, which is associated with poor birth outcomes, including preterm birth, low birth weight, delivery complications, need for neonatal intensive care for the infant, and even neonatal death.[7,17]

Women with a history of trauma have lower rates of breastfeeding, and are at risk for impaired infant-mother bonding.[7,17] Impaired maternal-infant bonding is thought to be the result of the mother's emotional availability and mental health. Additionally, maternal-infant bonding is affected by the mother's parenting attitudes, beliefs, and behaviors, as she tries to evaluate her experiences being parented with how she wants to parent her own child.[7]

Given the pervasiveness of trauma, it is possible for traditional healthcare experiences to inadvertently retraumatize patients.[18] Patients often have a subservient role in healthcare making them dependent on healthcare providers. Patients may feel they have little choice in the type of care they receive or how the care is delivered. Individuals with a history of trauma may feel especially vulnerable and powerless when receiving healthcare, particularly those accessing perinatal, pregnancy, delivery, and postpartum care.[7,18] The general physical examination, sensitive physical exams, invasive procedures, and even care that appears routine (ie, the weight of an x-ray apron or the squeezing of the blood pressure cuff) may cause negative emotions and be both distressing and triggering for survivors of trauma.[18] When a survivor is triggered by an event or experience, the stress response is activated, which can make the individual feel as if the traumatic event from the past is actively happening.[3] When a person is triggered and using the survival mode of the brain, the higher brain functions may be cut off, making it difficult to use advanced reasoning or problem-solving.[3] Survivors must feel safe in order for the brain to deactivate the HPA axis and autonomic nervous system to be able to use higher brain functions, which are necessary for active participation in healthcare.[3]

Survivors of sexual violence may be triggered by having to undress, wearing a hospital gown, and feeling exposed.[19] Genital, pelvic, or cervical examinations can be particularly triggering for survivors of sexual assault.[19] Survivors of intimate partner or childhood physical violence could be triggered by sensations of restraint. The feeling of restraint may come from having side rails up on a hospital bed, or being confined to the hospital bed by medical equipment such as fetal monitors, leads, belts, or an intravenous line. Further, having to wait in an unfamiliar room behind a closed door can be distressing for patients with PTSD.[19] Sexual assault survivors might be triggered by the pain and stretching felt in the perineum during the second stage of labor.[19] It can be difficult for nurses to anticipate what situations or procedures could be triggering for any one patient.[3,18] Yet, when nurses possess the knowledge and skills to identify signs that a patient may be experiencing physical or emotional distress associated with trauma, they can modify and individualize care.

Perinatal birth trauma is another form of trauma women can experience that impacts maternal and infant health.[20] Perinatal trauma can occur when the delivery is traumatic, when there is a negative perception of the birth, birth outcomes do not meet prior expectations, and the woman feels disaffirmed by members of the health care team.[20] A birth may be traumatic for women when there is a real or perceived threat to their life, the infant's life, or when a woman experiences a serious injury when giving birth.[21] Further, some women can experience birth trauma when they envisioned a delivery with limited intervention, but the actual delivery resulted in an instrument-assisted delivery or an emergency cesarean section.

Disaffirmation occurs when a woman's physical and emotional experiences are discounted by the healthcare team. The healthcare team often views the delivery of a healthy infant, regardless of how the delivery transpired for the woman, as a successful birthing experience.[21] The mismatch between the woman's physical and emotional experience of the delivery and the perception of the healthcare team creates a negative birth experience and disaffirmation.[22] Disaffirmation can significantly break down maternal self-confidence and self-image, leading to emotional and mental vulnerability, depression, and ultimately perinatal trauma.[20] Women who have experienced perinatal trauma and disaffirmation have described feeling invisible, abandoned, powerless, and having lost their dignity.[21] Perinatal trauma and associated depression can impede the essential connection needed for healthy maternal-infant bonding between the mother and infant for the infant to continue to grow, develop, and thrive.[20] Women with low self-confidence and depression may have limited emotional availability to care for an infant, leading to

weak or disrupted maternal-infant connection and impaired coregulation.[20] Mothers need to feel safe, secure, supported, affirmed, cared for, and listened to in order to gain self-confidence, comfort, and autonomy in caring for an infant. When they do, they are more likely to take an active role in the care of their infant, be more relaxed, and in turn the infant will experience less stress and have better physiologic and emotional regulation.[17] Perinatal nurses have a role in preventing disaffirmation by supporting mothers in accepting the reality of the birth experience, validating that experience, and helping reframe the experience separate from prior expectations.[20] Doing so will subsequently improve the development of long-term well-being for the infant, family, and future generations.

TRAUMA-INFORMED CARE

Trauma-informed care first begins with foundational knowledge of trauma, including types of trauma, the prevalence of trauma, and the impact of trauma on neurodevelopment, behavior, and both physical and mental health.[3,19] Addressing the impact of trauma on perinatal patients, by providing TIC, is important for maternal and infant health.[19] With TIC, nurses respect patients and work to create a safe and secure environment for care.[19] The 4 "R's" of TIC include (*a*) "realizing" the tremendous and far-reaching impact of trauma, (*b*) "recognizing" or identifying how a patient with a history of trauma may present in healthcare or react when being triggered or retraumatized, (*c*) "responding" by using key principles into patient care delivery, and (*d*) attempting to thoughtfully and intentionally "resist retraumatization."[3,22]

Values of patient-centered care align with TIC.[19] With patient-centered care, nurses ensure that the patient's values, needs, and preferences are heard and respected. The main tenets of patient-centered TIC include safety, trust, compassion, communication, collaboration, autonomy, empowerment, and provision of resources.[18,23] Nurses create safety through the physical and emotional environment, by demonstrating compassion, being trustworthy, and being responsive to the patient's physical and emotional needs.[3,22,24] Clear communication is an essential component to patient-centered TIC, keeping patients informed about their care, particularly when care needs evolve. Partnering and collaborating with patients respects their autonomy, empowers them to be actively involved in their care, and leads decision-making. Ensuring patients have adequate access to appropriate tangible and care resources and referral to specialty care as indicated is also important when providing patient-centered TIC. See Figure 1 for a brief outline of the steps to provide patient-centered TIC.

Trauma-informed perinatal care includes ensuring patient safety by screening for current trauma or intimate partner violence (IPV), screening for past trauma, such as ACEs, prevention of future trauma, avoiding retraumatization, and referral to trauma-specific care

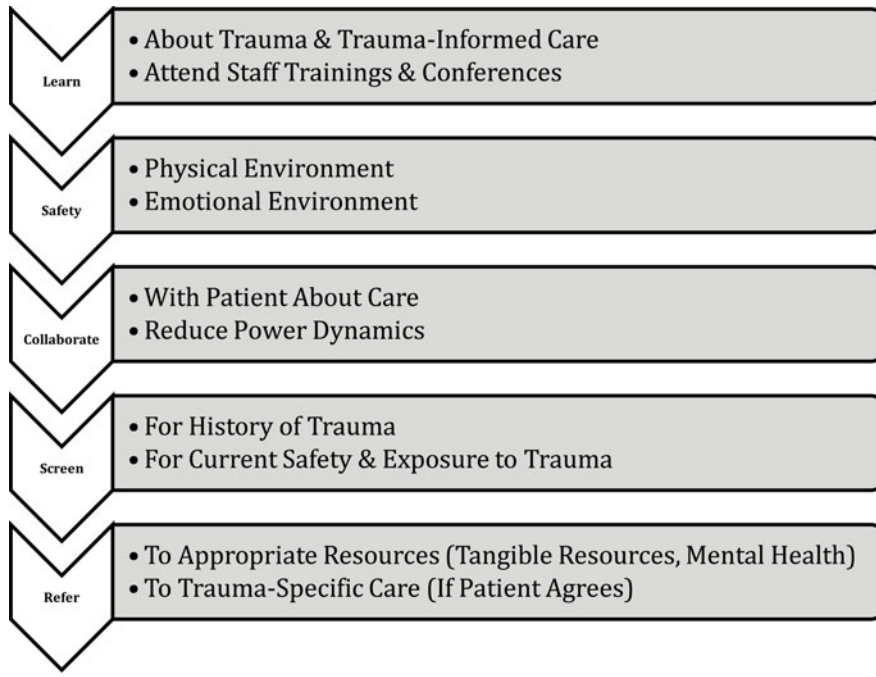

Figure 1. Steps for providing trauma-informed care.

when indicated.[19] Screening for new or recent history of IPV or sexual violence can help identify patients in unsafe situations, which is necessary to be able to offer support and resources. There are a number of effective, evidence-based tools available to screen for current trauma, including IPV and sexual violence. A patient must be alone and privacy assured when screening for sensitive issues such as IPV and sexual violence. If another person is in the room, they need to be respectfully directed to leave the room. An example of a screening question for IPV is, "Are you in a relationship with someone who has pushed, hit, kicked, or otherwise physically hurt you?"[25] An example of a screening question for sexual violence is, "Have you ever been forced or pressured to engage in sexual activities when you did not want to?"[26]

Individuals respond to trauma in unique ways, making it difficult to predict how an individual with a history of trauma will respond to their experiences when accessing healthcare.[18] However, identifying individuals with a history of trauma and ACEs through routine screening may provide helpful insight into general risks for individual survivors and potentially help healthcare providers understand behaviors of patients and families, as well as provide patient resources and referrals to trauma-specific specialty care when applicable.[18] Most pregnant women receive some form of prenatal care and interact with the healthcare system during delivery and in the postpartum period.[16] Therefore, pregnancy is an ideal time to screen women for IPV, sexual assault, trauma, and ACEs to identify risks, provide a safe care environment, help women who are currently experiencing violence or abuse, and provide appropriate resources for safety.[16]

Very few clinicians, including perinatal care providers, routinely screen for trauma and ACEs.[27] Currently, there is limited research on what is the best, most efficient, and most effective method for screening for trauma and ACEs.[27] However, early evidence shows promising results. Flanagan et al[27] evaluated the feasibility and acceptability of screening for ACEs and resilience during routine prenatal care. They screened 480 pregnant women during the second trimester of pregnancy for ACEs and resilience during a 4-month pilot study.[27] In a follow-up survey most respondents felt comfortable completing the screening assessment (91%), discussing the results (93%) with their healthcare provider, and felt it was important to screen for ACEs (85%).[27] The clinicians involved felt comfortable and confident discussing the results of the screening, educating patients, and providing resources to patients about ACEs.[27] They outlined several strategies for success: receiving appropriate training on ACEs and implementation of the screening tool, the need to screen for resilience, having adequate resources and a strong referral network, and having workflow support from administration.[27]

There are currently no standard recommended screening tools for trauma and ACEs; however, there are a variety of tools available. One example of a screening tool for ACEs is the Behavioral Risk Factor Surveillance System (BRFSS) Adverse Childhood Experience (ACE) Module from the Centers for Disease Control and Prevention.[28] See the Appendix for the full version of the BRFSS ACE assessment module.[28] This tool is shared as an example of a screening tool that could be used in practice. The BRFSS survey is used for cross-sectional state-level population-based data collection conducted by multiple states to identify specific population health risks.[28] This assessment tool is freely available through the Centers for Disease Control and Prevention Web site and is not copyrighted.

Not all survivors will disclose a personal history of trauma; therefore, it is crucial for nurses to observe and respond to the nonverbal cues of the patient. Some examples of nonverbal indicators of distress from being triggered include body tension, restlessness, poor eye contact, aggressive behavior, or rapid breathing.[18] If such signs are observed, the nurse should be flexible and prepared to modify the approach to care and the type of care they provide to actively prevent retraumatization.[18] Survivors need to trust healthcare providers (nurses), feel safe and secure, and feel empowered to actively participate in care.[3,18] In order to build trust, beyond being professionally competent, nurses need to demonstrate reasonable personal interest in the patient they care for, show compassion, have strong interpersonal communication skills, and display active listening with open body language.[3,18] Building a meaningful relationship with patients, specifically with trauma survivors, is beneficial to both the nurse and the patient.[3,18,23]

While there is an innate power imbalance in healthcare between patients and caregivers, nurses can actively work to reset the power dynamic in favor of an equal partnership.[29] Creating collaborative relationships with patients is done by sharing information, offering options, and taking into consideration the goals, preferences, knowledge, and skills of the patients when determining the plan of care.[19,29] As partners with patients and families, the nurse's role is to advise and support patients and families in making treatment decisions.[18] Supporting autonomy, while minimizing distress of patients, is central to patient-centered TIC.[18] To minimize patient distress, nurses describe the necessity of the care, discuss alternatives, and explain the components of an examination or procedure prior to beginning.[16,18,19] To support autonomy,

nurses obtain permission, when possible, for various components of care before beginning and throughout the process.[18] Before beginning an examination or procedure, it is helpful to describe how the examination or procedure might feel, and to give patients permission to openly express when they feel uncomfortable and ask for breaks.[18] Keeping patients informed throughout care and empowering patients to be involved helps to reduce patient distress, particularly when under stressful circumstances or when more interventions are needed.[19]

DISCUSSION

Perinatal nurses are well positioned to provide TIC to patients to help prevent and mitigate the negative impact of trauma and toxic stress, thus improving the health and well-being of mothers, infants, and future generations. Nurses use the 4 "R's" to provide patient-centered TIC. Perinatal nurses "realize" the widespread impact of trauma on general and perinatal health. Perinatal nurses "recognize" signs that a patient has been triggered while receiving care. Perinatal nurses need foundational information, tools, and resources to "respond" by providing trauma-informed nursing care and "resisting retraumatization." See Table 1 for a list of resources and organizations that are experts in TIC.

One key strategy for perinatal nurses is to individualize care. Nurses evaluate whether or not the emotional impact associated with a medical procedure or health promotion activity outweighs the overall health benefit.[18,19] Medical practices that are done routinely should have a distinct benefit for each individual patient.[18,19] When procedures are essential to care, patients should be offered alternatives or modifications when possible within the range of safety to reduce distress and improve comfort when possible. A female sexual assault survivor who is pregnant and requires a pelvic examination could be given the option to modify how the examination is performed.[18,19] If feasible, allow a woman to wear as much clothing as possible during a pelvic examination or use a cloth gown and sheet. The pelvic examination could be performed either with a patient in the side-lying position or allowing her to place her legs on the table extension with feet together rather than using stirrups.[18,19] Such modifications might improve patient comfort and reduce distress.

Another key strategy is to clearly communicate with the patient and healthcare team.[30] Survivors of trauma, including sexual violence, prefer the clinical team to communicate a disclosed history of trauma among care providers, so they do not have to redisclose to multiple team members.[30] Many survivors want control over who is present in the room during sensitive components of care.[30] They would like to be asked whether or not they prefer a male provider when possible and if there is no option for the gender of the care provider, offer to have a woman present in the room to provide reassurance to the survivor.[30] Survivors want respectful support for breastfeeding without feeling forced or judged.[30]

Supporting patient autonomy and self-efficacy are fundamental parts of patient-centered TIC.[3] One key strategy to support patient autonomy and self-efficacy is encouraging women to complete a birth plan while discussing typical methods of care delivery, options for modification, as well as planning and preparing for possible emergencies. This can help women be active partners in their care. If a woman completes a birth plan, it should be acknowledged and respected as much as possible.[19] A doula, who is trained to support and advocate for birthing women, can help make a safe, comforting environment and be a bridge between the birthing woman and the healthcare team.[19] Doulas can be particularly valuable for survivors of trauma to help support and enhance their self-efficacy.

While it is possible for perinatal nurses to provide patient-centered TIC, there are challenges and barriers to the routine implementation of TIC. The main barrier to broad implementation of patient-centered TIC is the general nature of the birthing and labor environment and experience.[19] The pain women experience during labor from contractions can be very severe and make it difficult for women to collaborate and be actively involved in care decisions.[19] Further, birthing is a dynamic process that can evolve rapidly from a stable birth to need for urgent intervention. When the safety of the patient or infant is at risk, patients often lose choices and autonomy.[19] In these situations, nurses need to have a conscious realization that certain nursing acts designed to maintain safety might be triggering to survivors and should be prepared to respond.

There are challenges to implementing patient-centered TIC, yet perinatal nurses can overcome these barriers. Nurses are holistic, compassionate, experienced care providers who can navigate the complicated care environment to individualize care and support patient autonomy and choice. Using their knowledge, skills, and expertise, perinatal nurses can find appropriate times to include patients in the care decision-making. For example, an ideal time to seek patient input during labor is between contractions and in earlier phases of labor, when possible. While emergency situations can make it challenging to include patients in decision-making, perinatal nurses can ensure that patients are kept informed of the progress of labor, explain any concerns, and describe next steps when emergent intervention is needed. Further, perinatal nurses can remain with patients, provide support,

Table 1. **Resources for implementation of trauma-informed care**

Name	Description	Web site/details
The Jed Foundation	Guidance on addressing trauma as an individual and community	https://www.jedfoundation.org/taking-care-others-tragic-traumatic-event/
Resources for Child Trauma-Informed Care	Resources relating to bullying, child welfare, drug addiction, domestic violence, early childhood, justice system, and prevention	https://www.samhsa.gov/childrens-awareness-day/past-events/2018/child-traumatic-stress-resources
SAMHSA/HRSA Center for Integrated Health Solutions (CIHS)	Resources related to ACEs, intimate partner violence, and integrating care into the community	https://www.integration.samhsa.gov
Key Ingredients for Successful Trauma-Informed Care Implementation	Framework for organizational and clinical changes to implement trauma-informed care	https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf
Trauma Informed Care: Perspectives and Resources	Video-based tools to assist in implementation	https://gucchdtacenter.georgetown.edu/TraumaInformedCare/#_ga=2.134329009.1395090522.1524072578-1633872401.1521657899
Advancing Trauma-Informed Care	Initiative through Center for Healthcare Strategies on understanding how to effectively implement trauma-informed care	https://www.chcs.org/project/advancing-trauma-informed-care/
The BHARP System of Care Trauma Resources	Resource on understanding trauma and addressing its impact	http://bharpsystemofcare.org/trauma-resources/
The National Child Traumatic Stress Network	Variety of resources on childhood trauma, for both caregivers and parents	NCTSN.org
Trauma Transformed: Organizational Assessment Grid	Provides training and policy guidance to organizations on trauma-informed care	https://traumatransformed.org/tools/organizational-assessment-grid/
ProQOL	Tool for providers to self-assess the negative and positive effects of caring for those who have experienced trauma	proqol.org
The Sidran Traumatic Stress Network	This nonprofit organization provides education on traumatic stress and resources for those affected by trauma	www.sidran.org
The National Center for Trauma Informed Care	The center provides technical support and programs to increase knowledge surrounding trauma-informed care to various other service-providing systems	http://www.samhsa.gov/nctic
Survivor Moms' Companion	This program is designed to help prospective mothers who have experienced trauma	www.survivormoms.org
Protecting Children and Young People: Trauma Informed Care in the Perinatal Period	This book is an excellent resource for anyone wanting deeper knowledge about trauma-informed care in the perinatal period	ISBN-13: 978-1780460536
Trauma-Informed Healthcare Approaches	This book is an excellent resource for anyone wanting broader knowledge about trauma-informed healthcare	ISBN 978-3-030-04342-1
Motherhood in the Face of Trauma	This book is an excellent resource for anyone wanting deeper knowledge in how to support survivors of trauma to improve their health and the health of future generations	ISBN-13: 978-3319657226

Abbreviation: ACEs, adverse childhood experiences.

advocate for them, communicate with them, and validate their emotions and experience when there are emergent changes in the birth plan. Implementation of patient-centered trauma-informed nursing care is possible and can be an important component of care to create safe, supportive, healing environments with all patients.

CONCLUSION

Perinatal nurses are holistic caregivers central to patient- and family-centered TIC and can prevent or reduce the negative impact of trauma and improve the health and well-being of mothers, infants, and future generations. When supported in a safe healing environment, by a compassionate nurse who communicates and collaborates with patients, it is possible for survivors of trauma to have a healthy pregnancy, positive delivery, and healthy postpartum outcomes.

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APPENDIX. CDC Behavioral Risk Factor Surveillance System Adverse Childhood Experience Module

Prologue: I'd like to ask you some questions about events that happened during your childhood. This information will allow us to better understand problems that may occur early in life, and may help others in the future. This is a sensitive topic and some people may feel uncomfortable with these questions. At the end of this section, I will give you a phone number for an organization that can provide information and referral for these issues. Please keep in mind that you can ask me to skip any question you do not want to answer. All questions refer to the time period before you were 18 years of age. Now, looking back before you were 18 years of age—

1. Did you live with anyone who was depressed, mentally ill, or suicidal?
2. Did you live with anyone who was a problem drinker or alcoholic?
3. Did you live with anyone who used illegal street drugs or who abused prescription medications?
4. Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
5. Were your parents separated or divorced?
6. How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?
7. Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. Would you say—
8. How often did a parent or adult in your home ever swear at you, insult you, or put you down?
9. How often did anyone at least 5 years older than you or an adult, ever touch you sexually?
10. How often did anyone at least 5 years older than you or an adult, try to make you touch sexually?
11. How often did anyone at least 5 years older than you or an adult, force you to have sex?

Response options		
Questions 1-4	**Question 5**	**Questions 6-11**
1 = yes	1 = yes	1 = never
2 = no	2 = no	2 = once
7 = DK/NS	8 = parents not married	3 = more than once
9 = refused	7 = DK/NS	7 = DK/NS
	9 = refused	9 = refused

Abbreviations: DK, don't know; NS, not sure.
Centers for Disease Control and Prevention.[28]