Review

Integrating Trauma-Informed Care Into Maternity Care Practice: Conceptual and Practical Issues



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Adverse childhood experiences have a strong negative impact on health and are a significant public health concern. Adverse childhood experiences, including various forms of child maltreatment, together with their mental health sequelae (eg, posttraumatic stress disorder, depression, dissociation) also contribute to adverse pregnancy outcomes (eg, preterm birth, low birth weight), poor postpartum mental health, and impaired or delayed bonding. Intergenerational patterns of maltreatment and mental health disorders have been reported that could be addressed in the childbearing year. Trauma-informed care is increasingly used in health care organizations and has the potential to assist in improving maternal and infant health. This article presents an overview of traumatic stress sequelae of childhood maltreatment and adversity, the impact of traumatic stress on childbearing, and technical assistance that is available from the National Center for Trauma-Informed Care (NCTIC) before articulating some steps to conceptualizing and implementing trauma-informed care into midwifery and other maternity care practices.

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A related patient education handout can be found at the end of this issue and at www.sharewithwomen.org

INTRODUCTION

One in 5 women worldwide has a history of childhood maltreatment.¹ Forms of maltreatment include physical, sexual, and emotional abuse, and physical and emotional neglect. Childhood maltreatment constitutes a subset of a broader category of what the Centers for Disease Control and Prevention (CDC) call adverse childhood experiences (ACEs). They have defined ACEs as the 5 forms of maltreatment and also 5 other potentially traumatic circumstances: parental mental illness, substance abuse, incarceration, domestic violence, and loss of a parent.² In a major US study of middle-class adults, 26% had experienced one ACE, and 12.5% had experienced 4 or more.³

Maltreatment and other ACEs can lead to chronic and multiple adverse mental health sequelae, including depression, anxiety, and posttraumatic stress disorder (PTSD).^{3,4} Both ACEs^{3,5} and the mental health sequelae of these experiences⁶ have been associated with negative physical health outcomes, including alterations in stress physiology, chronic diseases, accelerated aging, and premature death.⁷⁻⁹ There has been a shift in mental health and addiction care settings to providing trauma-informed care to better address these problems.¹⁰ Trauma-informed care, which recognizes the impact of trauma and its signs and symptoms, and responds by integrating knowledge of trauma in a comprehensive way in service delivery, is spreading to primary care settings to address these individual and population-level physical health sequelae.11

There is mounting evidence that maltreatment, adversity, and the mental health sequelae of these experiences also adversely affect perinatal health risks¹² and outcomes,^{13–15} maternal postpartum mental health and bonding,16 and parenting.¹⁷ Many survivors of maltreatment and adversity in childhood are resilient or have recovered by the time they begin childbearing. But one-third of those who experience maltreatment are affected with the trauma- and stressor-related condition of PTSD,18 often in complex presentations involving comorbidities.¹⁹ Given the rates of maltreatment and adversity as well as prevalence and burden of the sequelae, it is important to consider how these experiences affect women during the childbearing year and how midwives and other maternity care providers can better support these women and families.

The purpose of this article is to 1) present current perspectives on trauma-related sequelae of maltreatment and adversity, 2) briefly review their impact on childbearing outcomes, 3) summarize technical assistance available about traumainformed care, 4) discuss examples of conceptualizations that lend themselves to tailoring trauma-informed care for maternity care, and 5) consider practical aspects of implementing trauma-informed care.

CURRENT PERSPECTIVES ON TRAUMA-RELATED SEQUELAE OF MALTREATMENT AND ADVERSITY

In the 1980s and 1990s, mental health research demonstrated associations among maltreatment, family context, and psychiatric conditions. Current population studies using the questionnaire to collect trauma history data are demonstrating similar relationships between ACEs and such mental health outcomes as PTSD, depression, substance misuse, and suicide attempts. These associations are found as early as adolescence with as few as one ACE, and they occur in a dose-response relationship.²⁰

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Quick Points

- Translating trauma-informed care for midwifery care can help address the impact of maltreatment, other adverse childhood experiences, and traumatic stress sequelae on childbearing outcomes.
- In midwifery practice, trauma-informed care could involve relationship-based themes that have been broadly applied to maternal and child health (eg, attachment, dyadic regulation, holding environment)
- Trauma-informed care can be tailored to address labor-related needs using 6 themes distilled from a qualitative metasynthesis: need for control, difficulties with disclosure, struggling with dissociation, hoping for healing, coping with remembering, and the discomfort that comes with vulnerability.
- Interprofessional approaches to trauma-informed care from mental health and other health care settings could also be successful in maternity care and capitalize on the perinatal care team.
- Very few trauma-informed models of midwifery and trauma-specific interventions have been developed and tested for pregnant and postpartum women; collaborations to build an evidence base are needed.

In the 1990s, this work was extended to document ill effects of maltreatment and PTSD on physical health.⁶ Health care disciplines have caught up with this information thanks to the ACE study now being heavily disseminated by the CDC and the American Academy of Pediatrics.^{2,3,9} The original ACE study was funded by the CDC and Kaiser Permanente and remains one of the largest investigations into childhood maltreatment and its later effects on health and well-being. Originally conducted with more than 17,000 health maintenance organization members in California from 1995 to 1997, it demonstrated early morbidity occurring in a dose response in relation to a wide variety of health and mental health outcomes, such as alcoholism, pulmonary disease, liver disease, depression, suicide attempts, and risk for sexual violence.² It is useful to use both the maltreatment and ACE vocabularies to facilitate interprofessional work, as the patterns of impact on subsequent health outcomes are much the same.

Effects of Childhood Maltreatment and Adversity on Women

Childhood maltreatment occurs at very high rates. The US National Survey of Children's Exposure to Violence reported the lifetime rate of childhood maltreatment trauma among girls from birth to age 17 years was 26.1%, and global rates are similar.^{1,21} Thus, the number of childbearing women affected by a history of childhood maltreatment is significant. In the mental health fields, maltreatment is viewed as a trauma exposure that could lead to adverse outcomes via the main sequela of PTSD, associated features such as dissociation and somatization, comorbid conditions such as depression, and risks such as substance use.¹⁹ In health care settings, this complexity is being simplified; ACEs cause toxic or traumatic stress.²² ACEs are associated with early physical morbidity and early mortality—an average of 20 years sooner for people with 6 or more ACEs.² The concept of stress is important because stress per se and posttraumatic stress are plausible biologic pathways that link an experience to subsequent disease.^{22,23} Based on research synthesized across numerous disciplines, maltreatment and the toxic stress that results from it are considered major public health challenges^{9,24}: They are strongly associated with very adverse outcomes, including early death³; they affect a large proportion of the population²; and ACEs and their sequelae contribute to health disparities seen in disadvantaged populations.^{25,26} In addition, both abuse and mental health vulnerability can be an intergenerational pattern.^{16,17}

Salience of Sexual Abuse to the Childbearing Year

The ACE studies use a simple count of the number of types of ACEs an individual is exposed to rather than distinguishing among them. But childhood sexual abuse in particular has captured the attention of midwives and other maternity care providers early on and for good reasons.²⁷ Intimate contact during well woman and perinatal care can trigger PTSD symptoms (eg, flashbacks, hyperarousal, avoidance). So a history of sexual trauma comes to the fore in health care encounters with sexual abuse survivors. Sexual abuse often occurs in a context of more pervasive maltreatment and adversity, so it also is associated with more pervasive sequelae that can complicate care.²⁸ Thus, childhood sexual abuse has been and remains an important specific trauma history that midwives and other maternity care providers need to understand in order to provide care for these women.

Trauma- and Stressor-Related Mental Health Sequelae, Particularly PTSD

With the 2013 publication of the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*, 6 conditions have been categorized as trauma- and stressorrelated. PTSD²⁹ is the predominant one encountered in primary care settings (Table 1). The hallmark feature of PTSD is intrusive reexperiencing of memories of the traumatic event alongside physiologic and psychologic reactions as though the trauma were happening again. For example, a woman who was healthy before giving birth may have acute stress disorder when she experiences a traumatic birth. Acute stress disorder may become PTSD if it persists longer than one

Table 1. Overview of Trauma- and Stressor-Related Disorders per DSM-5,³⁰ Focusing on PTSD

DSM-5 wording explaining this category of diagnoses:

"Trauma- and stressor-related disorders include disorders in which exposure to a traumatic or stressful event is listed explicitly as a

diagnostic criterion. These include

Reactive attachment disorder,

Disinhibited social engagement disorder,

Posttraumatic stress disorder

Acute stress disorder, and

Adjustment disorders.

Placement of this chapter reflects the close relationship between these diagnoses and disorders in the surrounding chapters on anxiety disorders, obsessive-compulsive and related disorders, and dissociative disorders."

Posttraumatic stress disorder (PTSD): Symptoms are a consequence of exposure to a traumatic event. The syndrome involves symptoms across 4 clusters:

Intrusive reexperiencing: Feeling psychologically or physically as though the trauma is happening again, in response to triggered memories, nightmares, or flashbacks.

Avoidance: Avoiding people, places, thoughts, or feelings that trigger reexperiencing. This can lead to feelings of alienation from others.

Negative mood and cognitions: Feeling self-blame, shame, and helplessness or hopelessness as well as low mood and living with a pervasive sense that the world is a dangerous place.

Hyperarousal: Readiness for fight or flight including exaggerated startle reflex, hypervigilance, inability to stay or fall asleep, irritability and anger, impulsive and self-harming behaviors.

Dissociative subtype: Under stress, approximately15% of individuals with PTSD also experience depersonalization (ie, out-of-body sensation) or derealization (ie, sense that what is happening is like a movie or play and not real).

Abbreviation: DSM-5, Diagnostic and Statistical Manual of Mental Disorders.

month. Three other trauma-related diagnoses—adjustment disorder, reactive attachment disorder, and disinhibited social engagement disorder—are less often recognized in health care settings.

Dissociative Subtype of PTSD

Approximately one in 6 individuals with PTSD have a dissociative subtype.³⁰ Dissociation, including depersonalization (out-of-body experiences) and derealization (feeling that what is happening is unreal), occurs as a coping response to childhood maltreatment trauma.³¹ Dissociation may come to the attention of a maternity care provider if a woman with this way of coping becomes overwhelmed by labor or other situations that trigger a trauma response.^{32,33}

PTSD, Depression, and Anxiety

The *DSM-5* PTSD diagnosis now incorporates the low mood and negative cognitions of depression into PTSD when these symptoms are related to the traumatic event.²⁹ Women with PTSD also often meet the full diagnostic criteria for major depression,³⁴ and this appears to be the case in pregnancy as well.³⁵ Depression co-occurs in 40% of pregnant women who meet PTSD diagnostic criteria.¹⁴ PTSD diagnosis also includes elements of anxiety such as hypervigilance, trouble concentrating, and sleep disorders. Current practice for perinatal mental health screening does not usually include screening for trauma history and

PTSD.³⁵ It is still rare for assessment to distinguish whether the woman sees her depression and anxiety as related to trauma. Evidence-based psychological treatments for PTSD, depression, and anxiety differ but can be compatible and likely are synergistic.³⁶

IMPACT OF PTSD ON CHILDBEARING OUTCOMES AND CARE

A growing body of research is showing that the effects of maltreatment, adversity, and PTSD on pregnancy parallel the effects of maltreatment and adversity on health overall. The lifetime prevalence of PTSD in women is near 12%.³⁷ The rate of PTSD during pregnancy is high, near 8%,^{38,39} but with rates that range from near 3% in high-resource settings, to near 14% in low-resource settings.³⁹ Childhood maltreatment trauma is the biggest risk factor for having PTSD in pregnancy, conveying 12-fold risk.⁴⁰ Some populations, including women who are homeless or incarcerated, substance users, refugees, and members of cultures with historical trauma, including African-Americans^{27,40} and Native Americans,²⁶ are more likely to have very high levels of cumulative lifetime trauma exposures and therefore higher risk for PTSD.^{26,27,40}

Studies of pregnant women that have examined maltreatment history or PTSD find that psychosocial risk factors for adverse perinatal outcomes—intimate partner violence, smoking, and substance use—are concentrated in this population,^{12,40,41} as is the case in nonpregnant populations. Such factors are also independently associated with adversity and add to the complexity of the situation. Maltreatment and adversity are also a risk for adult revictimization.⁴² Substance use and smoking is broadly understood to be self-medicating behavior that is an effort to treat symptoms of noxious traumatic stress.⁴³ The impact of PTSD on adverse perinatal outcomes is not entirely explained by these risk exposures, however.

PTSD is associated with adverse pregnancy outcomes, conveying increased odds of prematurity and low birth weight, especially when occurring in association with a history of childhood maltreatment or military sexual trauma, or when comorbid with depression.^{13–15} In the 2 studies where both trauma exposure (child abuse, military sexual trauma) and PTSD were used as predictors, PTSD was more predictive of adverse outcomes than the trauma exposure itself.^{13,15}

Having PTSD in pregnancy (ie, preexisting PTSD) is a risk factor for experiencing birth as traumatic and for having PTSD in the postpartum period.^{15,44} Preexisting PTSD also is strongly predictive of postpartum depression and is associated with delayed or impaired bonding with the infant and with less breastfeeding despite intention to breastfeed.^{15,45}

There are intergenerational patterns of maltreatment and of mental health disorders.⁴⁶ Women with high levels of maltreatment and adversity may lack good models for maternal role development with regard to sensitive, reflective, and protective mothering. The field of infant mental health uses the terms ghosts in the nursery⁴⁷ and unresolved maternal trauma and is showing that affected women have infants who are more likely to experience dysregulation in their physiologic and behavioral stress responses and insecure or disorganized attachment.⁴⁸ Children of women who have experienced maltreatment are at higher risk for being maltreated and for other types of trauma exposures than are children of women who did not experience maltreatment,49 and those whose mothers have PTSD and depression sequelae are more at risk for bonding impairments.⁵⁰ Children of individuals with PTSD can develop PTSD symptoms even when they have not been exposed to trauma, with both parenting behavior and epigenetic processes probably playing a role in intergenerational transmission.51

Effects of Traumatic Stress on the Midwifery Care Relationship

Maltreatment and ACEs have at their base harm that occurred within a caregiving relationship. This form of betrayal in childhood disrupts numerous developmental processes, including those that should lead to an individual's ability to regulate emotion, attend to bodily cues, and navigate trusting relationships.¹⁹ Those who have a hard time navigating relationships might present to care as "difficult" clients; seeing trauma history and sequelae as antecedents to relationship behavior might increase understanding in clinical situations.

The growing literature on birth as a traumagenic experience has strong consensus that birth-related PTSD is often related to perceived or actual interpersonal behavior of clinicians and that these interactions are "hot spots" for later intrusive reexperiencing symptoms.⁴⁴ This suggests that the usual approach to the interpersonal therapeutics associated with midwifery practice may not always be adequate for

trauma survivors, especially those with active PTSD. It may be helpful to borrow approaches from professions focused on working with individuals who have experienced trauma and tailor those approaches to midwifery and maternity care.

A FRAMEWORK FOR TRAUMA-INFORMED CARE

Case reports and qualitative literature have laid the groundwork for providing trauma-informed care in midwifery.^{27,28,32,44,52,53} Information is also available on good practices for avoiding triggering survivors in predictable situations such as during vaginal examinations.^{52,53} Midwives and other perinatal care providers are becoming fluent at integrating recommended screening for intimate partner violence and depression, and developing referral resources for women so affected, so some of the basic capacities to address trauma survivors' needs are in place. The next step is to move to providing therapeutic care within the maternity care relationship. However, the full benefit of integrating care for trauma-related needs into maternity care will not occur without systematic implementation of the trauma-informed perspective.

National Center for Trauma-Informed Care Leadership and Paradigm Change

A predominant framework to support a systematic approach to implementing trauma-informed care has emerged during the past decade via the US Substance Abuse and Mental Health Services Administration's funding of the National Center for Trauma-Informed Care (NCTIC).¹⁰ The NCTIC provides a mandate and technical assistance to a wide range of service delivery organizations. This mandate came from growing awareness in the mental health and addiction fields that many chronic conditions individuals seeking health services struggle with have roots in sexual abuse and other traumas.

According to the NCTIC, trauma-informed care takes place when "... services are based on an understanding of the vulnerabilities or triggers of trauma survivors so as to be more supportive and avoid re-traumatization."¹⁰ The NCTIC seeks to change the paradigm from one that asks "What's wrong with you?" to one that asks "What has happened to you?"

Key Concepts of Trauma-Informed Care

The NCTIC has helped to standardize a definition of traumainformed care. Their technical assistance has distilled a few key concepts that underpin trauma-informed care (Table 2), which include the 3 Es of conceptualizing trauma, the 4 Rs for interacting and responding, and 6 principles that underscore care. The 3 Es conceptualization of trauma connects the event(s), the person's experience of the events, and the effects of the events. It is important to know that clinicians do not always learn about the event or experience of it via disclosure; sometimes the effects are noticed first. Table 3 provides case examples.

The 4 Rs are the essential practices for responding that make care trauma-informed: realizing the impact of trauma, recognizing its signs and symptoms, responding by

Table 2. Main Elements of National Center for Trauma-Informed Care Technical Assistance

Overarching mandate for a trauma-informed approach:

It is critical to promote the linkage to recovery and resilience for those individuals and families impacted by trauma. Services and supports that are trauma-informed build on the best evidence available and foster engagement, empowerment, and collaboration.

Conceptualization of trauma: 3 Es:	Essential practices: 4 Rs	6 key principles:
"Individual trauma results from an	A program, organization, or system that is	A trauma-informed approach reflects
event, series of events, or set of	trauma informed:	adherence to 6 key principles rather than a
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. ²¹⁰	 Realizes the widespread impact of trauma and understands potential paths for recovery; Recognizes the signs and symptoms of trauma in clients, families, staff, and others; Responds by fully integrating knowledge about trauma into policies, procedures, and practices; and Seeks to actively resist retraumatization. A trauma-informed approach can be implemented in any type of service setting or organization and is distinct from trauma-specific interventions or treatments that are designed specifically to address the consequences of trauma and to facilitate healing. 	 prescribed set of practices or procedures. These principles may be generalizable across multiple types of care settings, although terminology and application may be setting or sector specific: 1. Safety 2. Trustworthiness and transparency 3. Peer support 4. Collaboration and mutuality 5. Empowerment, voice, and choice 6. Cultural, historical, and gender issues

integrating knowledge into practice (and policies and procedures), and resisting retraumatization. In maternity care, intrusive physical contact and vulnerability and dependence on a caregiver in labor are instances where risk for retraumatizing are high, but triggers can be very individual,²⁸ so learning as much as one can about a client's 3 Es matters.

The 6 principles are broad and likely underpin good care that is patient centered or relationship based. Their use in trauma-informed care is particularly focused on not reenacting relationship dynamics that are triggers or retraumatizing. The 6 principles can be applied across a variety of care settings.

A Stepped Approach

Trauma-informed care uses a stepped (or tiered) approach that encompasses universal, targeted, and specialty levels (Table 4). At the service delivery level, trauma-informed care is universal; it considers that one out of 5 clients has a childhood maltreatment trauma history, and all staff are prepared to respond to client behaviors, interactions, and needs using a trauma-informed approach.

Trauma-specific (targeted) interventions are made available based on history (ie, self-identifying as a survivor); these can be frontline offerings such as tailored labor planning. For some clients, targeted interventions will not meet their needs, and they should be referred to trauma-specific specialist treatment, which is mental health care provided based on diagnosis.

Organizational Change

Another feature of trauma-informed care is that it turns a trauma-informed lens on the organization itself and calls for transformation of the work culture. Assessment and potential modification of the agency's organization, culture, and service delivery may be needed to include the basic understanding of trauma's effect on the lives of individuals seeking help. Trauma-informed care recognizes that anyone can be a trauma survivor. All staff, from the front desk to providers, are impelled to understand the 3 Es, 4 Rs, and 6 key principles. The goal is to decrease toxic and traumagenic interactions and circumstances so that both staff and clients experience the health care context as a safe, supportive environment.

CONCEPTUALIZING TRAUMA-INFORMED CARE FOR MIDWIFERY PRACTICE

The NCTIC framework is basic and generic. Tailoring and elaborating the model to apply to maternity care is needed. We present here 2 examples of tailoring trauma-informed care identified in the perinatal literature.

A Conceptual Framing That Attends to the Midwife-Client Relationship

An interdisciplinary team of US midwifery, Australian parenting, and UK abuse-prevention researchers has suggested that trauma-informed care applied to maternity care could have several relationship-based themes.⁵⁴ These themes are

Table 3. Case Illustrations of the 3 Es	Case Illustrations of the 3 Es Concentualization of Trauma and Ho	How It Can Affect Maternity Care		
				Realizing the Impact of Trauma and
				Potential for Recovery, and Recognizing
Event(s)	Experience of the Events	Effects	Effects Specific to Childbearing	the Signs, Symptoms
Lily is a refugee from the Congo who She told no one, not even her	She told no one, not even her	Lily experiences the nightmares,	Lily does not have PTSD anymore, but	The midwife responds by normalizing
was physically and sexually	husband, even though she had	hypervigilance, self-blame, and	she dreads being separated from her	this need to have her husband with her,
assaulted while her husband was	severe nightmares and tried	avoidance of PTSD, but usually only	husband in the maternity care	reassuring that he can attend all visits,
away in combat.	never to be alone.	near the anniversary.	setting.	planning with couple for him to be
				present in labor, and enrolling them in
				childbirth education.
				She resists retraumatizing by honoring
				the commitment to keep the couple
				together at all times.
Marianne was sexually abused by her She told herself that she would	She told herself that she would	In a loving relationship now, Marianne	In a loving relationship now, Marianne Marianne is terrified of being examined The midwife responds by assessing if the	The midwife responds by assessing if the
uncle as a young girl, and as a	remain single and avoid sexual	still finds intimate contact hard and	vaginally during pregnancy or when	fear is of vaginal examination, of
teenager she experienced date	activity so she would not have to	dissociates during intercourse.	she is in labor.	having flashbacks, or both. She
rape.	remember.			collaborates to plan accordingly. She
				also offers referral for trauma-specific
				therapy so Marianne can address
				remaining effects.
				She resists retraumatizing using
				strategies to minimize vaginal
				and the second s
				examininations to merp marianine teet safe
				and connected.
Josie's mother had a string of violent Josie felt abandoned and believed	Josie felt abandoned and believed	She has spent the last 3 years in a	Josie is worried that she will not feel	The midwife responds by acknowledging
relationships, drank heavily, and	she was alone in the world,	violent partner relationship.	love for her baby and has a feeling of	cycles of abuse, holding out hope Josie
failed to protect her daughter	unworthy of love, and she was		panic that she will not be able to keep	will bond well and choose safety. She
from beatings.	often depressed.		the baby safe.	connects Josie to intimate partner
				violence services with parenting
				support.
				She resists retraumatizing by anticipating
				Josie's need not to feel abandoned. She
				arranges a doula so Josie will have
				continuous support in labor and the
				subsequent days.

Table 4. A Trauma-Informed System of Maternity Care Parallels the Familiar Stepped (or Tiered) Model of Care			
Usual Care	Usual Care	Trauma-Informed Care	Examples
Universal—based on awareness	Medical, surgical, obstetric, and	Adds trauma history and	Uses adverse childhood
of a problem in the	social history, which now	screening for trauma-related	experiences or other trauma
population	likely includes depression	disorders (at least PTSD), plus	history questionnaire and a
	screening	assessment of social support	PTSD screening tool for
		that does not assume partner	primary care (eg, PC-PTSD)
		and family are safe and helpful	
Targeted intervention—based	Enrollment in social work or	Adds trauma-specific	Offers psychoeducation, group
on history or contextual	home visiting if vulnerable	interventions for survivors (ie,	prenatal care for survivors,
factors	due to poverty or young age	based on history)	trauma-trained doula for
			labor, later parenting support
			group for survivor moms
			and dads.
Specialist treatment—based on	Referral to interpersonal	Adds ability to refer to therapists	Provides treatment engagement
diagnosis	therapy plus SSRIs or other	who use evidence-based PTSD	support so the woman can
	evidence-based depression	treatments (eg, EMDR) and can	choose among PTSD-specific
	treatment as indicated	tailor to address perinatal	treatment options, including
		triggers	medications

Abbreviations: EMDR, Eye Movement Desensitization and Reprocessing; PC-PTSD, primary care posttraumatic stress disorder screen; PTSD, posttraumatic stress disorder; SSRIs, selective serotonin reuptake inhibitors.

familiar to perinatal care professionals because they apply to maternal and child development more broadly: attachment, dyadic regulation, and a holding environment.

Attachment refers to the degree to which an infant or child feels security within their relationship with their primary caregiver.⁵⁵ Dyadic regulation refers to the ways in which an infant or child relies on their caregiver for regulating their emotions.⁵⁶ The holding environment refers to the supportive space a caregiver provides in order for a child to feel safe and secure in developing and exploring their emotions.⁵⁷ For survivors in the context of midwifery care, this holding environment can also be thought of as an environment in which a sense of psychologic and physical safety can be established,⁵⁴ which has been referred to in the trauma literature as sanctuary.⁵⁸

Women with childhood maltreatment trauma history (with or without posttraumatic stress) may have experienced insecure or disorganized attachment with their own primary caregiver.⁵⁹ Their caregivers may have been emotionally dysregulated (ie, shut down, irritable, or fearful) and unable to provide the dyadic regulation needed for them to learn to modulate their own emotions. They may not have experienced relationships that serve as a *holding environment* or *sanctuary* space and provide consistent protection, encouragement, and support.

"Being with women" is an inherent component of midwifery practice. But for a client who is a survivor of traumatic stress, the midwife-client relationship and the midwife's role modeling may be providing an essential and perhaps otherwise missing template for mothering. Midwives can suggest to members of the maternity care team to name relational issues such as the *holding environment* or *sanctuary space*, focus on them, and explicitly foster these capacities in the mother-to-be.⁶⁰

Attention to Common Concerns

Montgomery⁵² conducted a meta-synthesis of qualitative studies of the labor experiences of childhood maltreatment trauma (sexual abuse) survivors and distilled themes that point to areas of special concern for these clients. The 6 common concerns found in this study are: need for control, difficulties with disclosure, struggling with dissociation, hoping for healing, coping if remembering [about abuse] happens during pregnancy, and the extreme discomfort that comes with vulnerability. This finite list could inform a routine set of issues to explore when working with a trauma survivor to plan her care.

Qualitative studies have consistently referred to practices to use that avoid triggering survivors. These practices address the remembering and vulnerability themes. Some best practices such as asking permission to conduct a vaginal examination in labor or having the woman insert the speculum herself have emerged. But, as Montgomery points out,⁵² internal examinations and vaginal pain in labor are not the only events that can trigger a childhood maltreatment survivor. Many triggers are idiosyncratic. Others are more subtle, often related to relationship dynamics.²⁸ So using a set of themes or other routine process to be systematic in assessing and planning is likely to be most useful.

Developing Trauma-Specific Perinatal Interventions

The NCTIC technical assistance in the form of the 3 Es of conceptualizing trauma, the 4 Rs for interacting/responding, and the 6 key principles are essential practices for a generic framework. But as identifying affected women becomes-routine and destigmatized, the volume of clients wanting trauma-specific interventions may increase substantially.

Approaches that leverage the whole maternity care team and peer support would be ideal.

Interprofessional approaches are being advocated for perinatal care settings so that trauma-informed care can span the continuum from preconception to antepartum, intrapartum, postpartum, and pediatric care settings.60 As of this writing, trauma-informed universal perinatal programs (eg, Minding the Baby,⁶¹ Compassionate Minds⁶²) and trauma-specific interventions that articulate with routine prenatal care and home visiting programs and address pregnancy and parenting issues (eg, the Survivor Moms' Companion,⁶³ Seeking Safety⁶⁴) are being developed and tested. Some treatments that are trauma informed are also being applied with childbearing women (eg, Eye Movement Desensitization Reprocessing,65 Infant Psychotherapy,⁶⁶ Parents under Pressure⁶⁷). See Table 5 for more information about these interprofessional approaches. Evidence-based treatments for PTSD exist but have not vet been tailored to take into account the triggers of pregnancy and early parenting or tested for safety and efficacy in pregnancy.68

Trauma-specific interventions for intrapartum care settings and to address the breastfeeding needs of survivors have not yet appeared. Fathers and partners who have childhood maltreatment trauma histories may also have unaddressed needs. Pre- and post licensure education for providers about trauma-informed care is needed as well. Intervention development, evaluation and outcomes research, and implementation studies are strongly needed.

MIDWIFERY AND TRAUMA-INFORMED CARE: PUTTING IT INTO PRACTICE

Midwifery literature has included attention to maltreatment, especially childhood sexual abuse, and posttraumatic stress since 1992,68 so individual midwives act on this knowledge base. The time is ripe to translate trauma-informed care recommendations into midwifery practice on a larger scale and to create trauma-specific interventions for pregnant and postpartum women. Large-scale change in the standard of care takes time to accomplish. But it is not necessary to wait. In the absence of high-level evidence, clinicians can look to established routines such as the process of mutual collaboration in care planning and informed consent,⁶⁹ an approach completely consistent with the NCTIC 6 key principles, and seek to discover ways to take steps to move things forward. These steps will likely include clinician training, enhancing screening and referral routines, establishing connections to trauma-specific interventions, bringing attention to traumarelated practitioner needs, and developing processes for evaluating the provision of trauma-informed care.

Training and Preparation

The NCTIC technical assistance materials and trainers are available. Journal clubs, case conferences, and in-service programs are ways to introduce the concepts and lay the groundwork for changing services. The process of choosing some published interventions and gathering referral resources can help prepare the team to work together.

Screening

An early step to launching trauma-informed care, traumaspecific interventions, and trauma-specific referrals is knowing what the extent of the need is within a practice setting. Maltreatment occurs across social contexts, but disadvantaged women will have had fewer opportunities to recover and more ongoing trauma exposures, so clinics in low-resource settings can expect higher rates of maltreatment, adversity, and PTSD. All health care settings will benefit from starting out by learning the extent of survivorship within the practice setting.

Screening for ACEs, other trauma history, and PTSD will show just how big or small a proportion of trauma survivors are in the caseload, what types of trauma they have, and what their priority needs are. Disclosures are not necessary for adoption of trauma-informed principles and the general approach, but they are needed in order to offer intervention. There can be a chicken and egg problem at the beginning, though. Providers don't want to offer intervention unless they know there's a need. But women won't disclose in clinical settings unless they know that providers are competent to hear disclosures and that some form of help is available.⁴⁰ Thus, screening and starting to offer trauma-informed care and trauma-specific interventions go hand in hand.

If the practice already screens for intimate partner violence and perinatal depression, it may be straightforward to add trauma history and PTSD screening to that routine. Several measures are available for use in screening, including the up-to-date ACE study questionnaire, which is available from the CDC in English and Spanish and used nationally for the Behavioral Risk Factor Surveillance System.⁷⁰ The 5-item Primary Care PTSD screening tool (PC-PTSD-5)⁷¹ can be followed with the PTSD Checklist-5 for those who screen positive.⁷² Both measures are available from the National Center for PTSD.

If the maternity care practice is still in the process of training and preparing to adapt care, then a more exploratory process may be useful. A quality improvement project to try out history and screening questions and ask respondents about trauma-related needs could be a place to start. For example, an anonymous survey process could be used (ie, a pile of screening forms and a locked box to deposit forms in the waiting room). Once the practice group or clinic staff know the types of trauma (or ACE scores) and rates of screening positive for PTSD, they can begin developing the trauma-specific intervention offerings and cultivating the referral relationships they need in order to provide the universal, targeted, and treatment responses appropriate to their setting. Making these offerings plain in practice welcome documents, posters, brochures, and in clinical conversations will then become the signs of competence and help that women need to disclose on record rather than only anonymously.

Offering Interventions and Referrals

The stepped approach to trauma-informed care has the important implication that several strategies may need to be developed simultaneously or in rapid succession. The biggest

Interventions in the Perinatal Period	Description
Minding the Baby (Sadler, Slade, Close, et al, 2013)	Combines nurse home visiting with components of parent-infant psychotherapy
	for vulnerable mothers and their infants from pregnancy until the child reaches
	2 years of age. Aimed at mother-infant relationship disruptions stemming from
	mothers' difficult attachment histories and early trauma.
Compassionate Minds (Renshaw & Wrigley, 2015)	Augmentation module suited for nurse home visiting programs. Intended to
	inform parents about compassion and the importance of self-compassion, and
	teach them skills for emotional dysregulation and distress.
Survivor Moms' Companion (Seng, Sperlich, Rowe,	Self-study psychoeducation program intended to address specific needs of
Cameron, Harris, & Bell, 2011)	pregnant abuse survivors impacted by traumatic stress. Aimed at decreasing
	interpersonal reactivity, improving affect regulation, and supporting PTSD
	symptom management despite presence of triggers.
Seeking Safety (Upshur, Wenz-Gross, Weinreb, &	Present-focused, manualized psychoeducation intervention intended to improve
Moffitt, 2016).	coping skills for those with comorbid substance use and PTSD.
Eye Movement Desensitization and Reprocessing	Trauma-specific therapy modality that facilitates the processing of traumatic
(Baas, Stramrood, Dijksman, de Jongh, & van	memories and negative self-directed beliefs through bilateral eye movements
Pampus, 2017)	or other bilateral stimulation.
Infant Psychotherapy (Barlow, Bennett, Midgley,	Dyadic intervention involving parent and infant working together to improve
Larkin, & Wei, 2015)	parent-infant attachment and promote optimal infant development by
	targeting mother's view of her infant.
Parents under Pressure (Barlow, Sembi, Gardner,	Intensive home visiting program that combines mindfulness, attachment theory,
et al., 2013).	and attention to self-regulation. Often geared toward mothers with current or
	historic substance abuse issues with attention to histories of abuse and trauma.

focus when implementing trauma-informed care is on addressing frontline trauma-related maternity needs that arise in the context of usual clinic and home visiting care. Women who screen positive for intimate partner violence (IPV) may need safety planning as a first priority, but they also will benefit from care within a trauma-informed care context. Women who have PTSD from a previous traumatic birth or other types of trauma exposures also will appreciate trauma-informed care, even though their background may not include childhood maltreatment trauma.⁴⁴

Looking for trauma-specific interventions that have been developed or adapted for perinatal populations and that have a beginning or solid evidence base is the next step. As noted previously, these are emerging (see Table 5). Some are available now, and others are likely to become easily accessed in the near future.

Being able to refer women to specialty services is also a near-term need. In many settings, perinatal mental health care services are available, but these colleagues may not be experienced with treating PTSD. Trauma-focused psychotherapy practices may be available, but they may not be expert on tailoring to the needs of pregnant women, so some professional networking may be necessary to put excellent referrals into place.

Referral alone is not adequate for a woman with active PTSD. First, routine aspects of prenatal or gynecologic care can be intrusive, painful, and triggering, so care providers need to be ready to alter routines and be competent to respond therapeutically to PTSD and dissociative reactions in the moment, at the bedside. Second, the hallmark PTSD symptom of avoidance of reminders of the trauma leads women to avoid mental health treatments, many of which require focusing on the trauma or using medication such as selective serotonin reuptake inhibitors (SSRIs).36 Many women may prefer to focus on avoiding triggers during pregnancy and birth, deferring trauma-focused treatment to the postpartum period. Third, although many survivors do well during their pregnancies and early postpartum period, others are very adversely affected and are at high risk for harming themselves or their infant. It may take a team to meet the needs of acutely affected women. The best referrals midwives can facilitate may be to infant mental health services that are dyadic and attachment focused, to parenting education and support, or to child protection services when the midwife has reason for concern for the child's welfare.

Attending to Trauma-Related Practitioner Needs

Deepening knowledge of trauma-related sequelae and working openly to support clients can lead to both professional growth and compassion fatigue. Midwives themselves may have sequelae from childhood maltreatment or from workrelated trauma exposures.⁷³ Applying a trauma-informed approach requires staff to support each other when there are challenging clients or adverse outcomes. Midwives may want to borrow some norms from the psychotherapy professions where it is usual for providers to use case conferences or consult regularly with a senior colleague for supervision. Self-care is also given high importance to prevent vicarious trauma.⁷³ Clinicians who have a trauma history or PTSD themselves consider it valuable to do psychotherapy to improve their capacity to work with traumatized clients without being triggered or reactive.

Trauma-informed care requires that all staff use the 4 Rs and 6 principles. However, it is probably not necessary that all providers become expert at clinical care of trauma survivors. There are models of organizations where one clinician in the group chooses to lead care of trauma survivors.⁷⁴ Secondary practices, where a midwife or doula specializes in trauma-informed care, is a model that has been presented in the midwifery literature.⁷⁵ These models may be a feasible starting point or even a long-term structure.

Evaluating Care and Building the Evidence Base

Finally, practices need to consider how to evaluate traumainformed care, trauma-specific interventions, and the results of referrals. Evaluation results will help refine the services offered so they best fit the needs of the women receiving care. Evaluations of specific interventions can also help make the case that these interventions are of value and warrant resources such as reimbursement. The simplest measure could be repeated use of a standardized PTSD symptom checklist that was used for initial assessment.72 Midwives can ask those who used trauma-specific interventions and referrals a few standard evaluation questions such as, "If you had it to do over again (ie, use this program, see that therapist), would you?" Or "If you had a friend who needed it, would you recommend it to her? Why or why not?" Or simply, "How useful was it to you?" or "How satisfied were you with your experience?" As traumaspecific interventions are developed for perinatal populations, participating in quality improvement, evidence-based practice implementation projects, and outcomes research will be another way to move the field forward by helping to create the evidence base.

Midwives should also notice and measure positive outcomes such as posttraumatic growth or the mother's selfefficacy to keep her child safe from abuse. Such outcomes seem feasible if giving birth and becoming a mother takes place in a context that recognizes that the midwifery-client relationship can provide the therapeutic holding environment that childhood maltreatment trauma survivors need.

CONCLUSION

Providing trauma-informed care as part of midwifery practice has the potential to prevent adverse outcomes, help break intergenerational cycles of maltreatment and mental health disorders, and change the mother's and child's life-span trajectories into a positive direction.^{46,60} The problems stemming from childhood maltreatment and adversity are universal. The global community of midwives are ideally positioned to support each other in creating ways to mitigate them with the women in our care.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to disclose.

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