

How Childbirth-Related Stress May Be Contributing to Increased Postpartum Mood Disorders in New Mothers

Could the increased stress that mothers are experiencing before, during, and after childbirth be responsible for the rising rate of postpartum mood disorders?

This is a question I've asked myself countless times over the past 17 years as a student of midwifery, a doula, childbirth educator and advocate, coach, maternal mental health researcher and, more recently, a trauma-informed counsellor for mothers.

A woman's experience of pregnancy and childbirth is ever changing. How a woman experienced childbearing a century ago is vastly different than today. Yet, one thing is certain: **Childbirth is a stressful life event. And, it's arguably more stressful now than it's ever been.**

Mothers experience many kinds of stress. The journey to motherhood is full of challenges that crop up during pregnancy, labour and birth, or the postpartum period. Childbirth is a time of great transition and change, and this change often includes arduous and challenging experiences. Yet, the mainstream mindset rarely endorses the idea that childbirth stressors are an important part of preparing for parenthood. **As a result, rather than accept challenges as part of a normal experience, many women are taught to resist the experience or approach it with fear.**

Today, mothers are exposed to an enormous amount of information related to childbirth, as well as more medical testing during and after pregnancy than ever. This is

both a blessing and a curse. An increase of access to information is assumed to result in increase safety and better birthing outcomes.

Yet, there's rising evidence that pregnancy is now a more stressful event for mothers than it's ever been (Coates, Ayers, & de Visser, 2014; Congdon, Adler, Epel, Laraia, & Bush, 2016; Dekker, 2015; Grekin & O'Hara, 2014). **Rather than feeling empowered by information, many mothers are feeling overwhelmed by the number of decisions they need to make.**

Pregnancy for the modern mother is met with a borage of testing, instructions, *dos and don'ts*, and decisions to be made about where to give birth, with whom, and how. This includes the constant hum of *what if something goes wrong?* In many cases, all of this creates new worries. In fact, many of the mothers I work with are just as worried about developing a postpartum mood disorder as they are about the birth itself. This is a notable change over the past decade.

What are the main stressors of the modern childbirth experience?

Let's pause for a moment to unpack the potential stressors experienced by mothers in today's world. Mothers are at risk of feeling stress from the moment they decide to try to conceive a baby or learn they are pregnant.

Stressors during pregnancy can include:

- Worries about miscarriage
- Worries about genetic dysfunction
- Worries about gestational diabetes
- Worries about developing pre-eclampsia
- Worries about risk associated with the Rh factor
- Worries about risks associated with Group B strep

- Concerns about nutrition including what to eat or what not to eat
- Concerns about environmental toxins
- Concerns about not receiving the caregiver you want
- Concerns about relationship challenges
- Changes in body
- Changes in role in the family
- Changes in work
- Increased financial stress and uncertainty about future funds
- Worries about the 'unknown' of parenthood
- Fear of not being able to give birth in the position they want
- Fear of not being in control during labour and birth
- Fear of childbirth pain
- Fear of interventions
- Fear of premature birth
- Fear of surgery
- Fear of having an unhealthy baby
- Fear of stillbirth
- Fear of dying during childbirth

In addition to these prenatal stressors, **mothers also face labour and delivery stressors** such as:

- Being overdue
- Waters breaking and not going into labour
- Needing an induction
- Labour being long and prolonged
- Feeling unsafe in labour
- Not knowing what is happening to the body during labour
- Feeling out of control in labour
- Feeling violated by procedures and protocols
- Not being able to make a choice in labour

- Bleeding during labour
- Not being able to tolerate the pain of contractions
- Needing an epidural in labour and not being comfortable with needles
- Not expecting what they are experiencing in labour
- Feeling observed and on display
- Not being listened to or not being able to voice needs
- Worrying about the wellbeing of baby
- Not understanding what symptoms mean such as 'a drop in fetal heart rate'
- Stalled labor
- Malposition of baby
- Lengthy pushing stage
- Being in an uncomfortable position and not being able to move
- Saying no or stop and not being listened to
- Needing an unplanned or emergency C-section
- Baby needing medical assistance during birth with either vacuum or forceps
- Losing a lot of blood after birth
- Having a difficult time delivery the placenta

And, to compound the stress of pregnancy, labour, and delivery, **mothers often experience additional stressors in the postpartum period:**

- Baby being sent to NICU immediately after birth
- Baby needing resuscitation after birth
- Being separated from baby at birth (no skin to skin)
- Being in recovery and baby with the other parent
- Having difficulty breastfeeding
- Lacking the instinct to bond with newborn
- Staying in hospital
- Being exhausted in the postpartum period
- Fighting with partner

- Feeling defeated by birth experience
- Lacking supports from friends, family, and caregivers
- Being told 'get over it'

Is it possible that these stressors are contributing to an increased risk of postpartum mood disorders for new mothers?

Is it postpartum mood disorders *themselves* that we should to be most concerned with? Or, is the bigger concern the *number of stressors* that mothers experience in a short period of time?

French Obstetrician, Dr. Michel Odent, is well known for his strong opinions about supporting mothers' instinctive physiological needs during pregnancy and birth (Buckley, 2015; Odent, 1986). His primary recommendation is **for caregivers to do everything within their power to reduce unnecessary stress for the pregnant mother**. The premise is that **stress is the main reason for the challenges and complications** that can arise throughout the childbearing continuum.

An overwhelming amount of stress can result in the activation of the autonomic nervous system. This floods the system with adrenaline, which then compromises brain functions and social bonding systems (Badenoch, 2008; Levine, 2010; D. J. Siegel, 2001). In other words, according to Porges, the vagal nerve that facilitates the bonding and connection instinct, becomes dysregulated (Porges, 1998; Williamson, Porges, Lamb, & Porges, 2015).

Additionally, we know that when someone experiences an increase of adrenaline and cortisol, they experience a decrease in the functioning of their prefrontal cortex. This issue is intensified if there is an accumulation of stress, prolonged stressors, and/or unresolved historical stress, including intergenerational stress.

The prefrontal cortex is the area of the brain related to higher function and thinking. It's also the part of the brain that supports regulation of the nervous system and promotes integration. Integration relates to how separate or differentiated parts are linked together and communicate with one another (D. Siegel, 2001). The 'parts' that require integration for optimal function and wellbeing correspond to the brain stem, body, limbic system, cortex, and social circuits of a person. According to Siegel, mental health is represented by the integration of these parts that together foster a flexible, adaptive, coherent, energized, and stable system (i.e., person).

When faced with stressors, integration is challenged or compromised, thus a person becomes dysregulated. **In simple terms, an activated nervous system due to perceived stress or threats can result in a dysregulated system in which a person becomes either hyper-aroused (anxious) or hypo-aroused (depressive).**

To counteract the symptoms of a dysregulated system, it is encouraged to engage in a process called 'down regulating' or 'interoception,' which is the capacity to calm an activated nervous system through attuned attention towards the inner experience of the self and relational others (D. J. Siegel, 2001). If an activated nervous system does not have the opportunity to return to homeostasis, it can result in a state of chronic hyper-arousal or hypo-arousal in which the system remains outside of what Dr. Dan Siegel calls the "window of tolerance". **The window of tolerance is the optimal zone of arousal in which our whole system functions optimally and remains integrated.**

When a mother is outside of the window of tolerance she can experience the following as symptoms of hyper-arousal:

- Experiences tension or shaking
- Experiences emotional reactivity
- Feels defensiveness
- Has racing thoughts

- Has intrusive imagery
- Feels emotionally overwhelmed
- Feels unsafe
- Has obsessive cognitive processing
- Experiences hypervigilance
- Experiences impulsivity
- Feels anger or rage

When a mother is *outside* of the window of tolerance, she can experience the following as symptoms of hypo-arousal:

- Feels a numbing of emotions
- Experiences no feelings
- Feels disconnected
- Feels ashamed
- Has reduced physical movement
- Is passive
- Feels shut down
- Can't say no
- Has flat affect

However, when a mother is ***within*** the normal window of tolerance, she can experience the following (adapted from (Kerr, 2015)):

- Feels and think simultaneously
- Experiences empathy
- Experiences emotions as tolerable
- Demonstrates in-the-moment awareness
- Feels open and curious, rather than judgmental and defensive
- Has an awareness of boundaries (her own & others)
- React in a manner that fits the situation

- Feels safe

When we remain within the window of tolerance, the social engagement system is activated and we can shift our attention towards others, including our newborns. When mothers are attuned and attached, mothers and newborn can relax into a state of calm, loving connection. **All of these are also important factors that reduce symptoms of postpartum mood disorders.**

Might it be wise to shift our focus towards *better reduction in childbirth-related stressors* as a possible preventative measure for developing postpartum mood disorders?

I would argue that if we (as caregiver, family members, community members, and mothers) look for ways to reduce stress throughout the childbearing continuum, we may **be able to significantly reduce the risk of mothers developing postpartum mood disorders.**

Doing so would also increase the loving, calm connection circuitry (or, social bonding in love) that is innately wired in all humans. Evidence suggests that when a newborn experiences secure attachment during his or her primary period of development (during the first year), they are more likely to grow up with a healthy system – meaning a better immune function, better mental health, better physical health, better relational health, better sense of self.

This shift could be accomplished by looking at obstetrics, midwifery, and maternity care not only from a *physical safety* standpoint (i.e., reducing risk of maternal and infant mortality), but also from a *neuro-physiological safety* perspective.

In fact, I would argue that **there needs to be a comprehensive paradigm shift in how we view birth**. Currently, the medical mainstream mindset is that birth is a dangerous event and, therefore, needs to be managed through a medical lens. **Although it may be true, generally speaking, that childbirth is a *physiological* stressful event, it does not need to be a *psychologically* stressful experience.**

The body experiences stress naturally during pregnancy, labour, and birth. Although intended to help, modern approaches to obstetrics and midwifery can place additional external stressors on an already stressed mother. Much of this stress is linked to the perception of '*what if*' something goes wrong, rather than actual life-threatening occurrences. This creates an accumulation of stress within the mother's nervous system and can trigger perceived harm or threat.

Until this shift occurs, there are some actions mothers can take to increase their window of tolerance, resulting in a greater degree of self-awareness, down regulation, and compassion.

Simple actions that can increase a mother's window of tolerance:

- Practicing mindfulness and meditation
- Receiving support from others, especially from a partner that encourages, understands, listens, and loves
- Decreasing external stressors as much as possible, such as financial, relational, and environmental
- Engaging in imagery (visualization) exercises
- Journaling regularly
- Participating in creative activities, such as dancing, singing, poetry, writing, painting, pottery, or crafts
- Practicing yoga or other mindful-based physical activities
- Engaging in somatic experiencing or body-focused psychotherapy
- Participating with EMDR therapy
- Receiving binaural sound therapy
- Participating in relational psychotherapy
- Practicing breathing activities, such as progressive relaxation

- Using contemplative practices to question stressful thoughts
- Being in nature
- Engaging in pet/equine therapy
- Talking about what she is experiencing
- Joining effective mother groups
- Developing and/or engaging in a spiritual practice

Postpartum mood disorders are complicated. They rarely appear as a stand-alone disorder. **What causes a mother to experience symptoms of postpartum mood disorders is a multifaceted conversation.** Each mother has a unique expression of past and present experiences that inform her nervous system, core beliefs, and sense of self.

Yet, when a mother experiences multiple, compounded stressful events during pregnancy, childbirth, and in the postpartum period, this stress is accumulated within her nervous system and, if left unresolved, can affect her overall mental health.

Since humans are resilient beings who innately thrive within secure and connected bonds of love, **a larger emphasis on reducing stress through mindfulness practices and fostering love** towards the self and others through compassionate inquiry, could be a powerful way to avoid the symptoms of postpartum mood disorders in new mothers.

References:

- Badenoch, B. (2008). *Being a Brain Wise Therapist: A Practical Guide To Interpersonal Neurobiology*. New York, New York: W.W. Norton & Norton.
- Buckley, S. J. (2015). *Hormonal Physiology of Childbearing: Evidence and Implications for Women, Babies, and Maternity Care*. Childbirth Connection Programs: National Partnership for Women and Families, Washington.
- Coates, R., Ayers, S., & de Visser, R. (2014). Women's experiences of postnatal distress: a qualitative study. *BMC Pregnancy and Childbirth*, *14*, 359.
<https://doi.org/10.1186/1471-2393-14-359>
- Congdon, J. L., Adler, N. E., Epel, E. S., Laraia, B. A., & Bush, N. R. (2016). A Prospective Investigation of Prenatal Mood and Childbirth Perceptions in an Ethnically Diverse, Low-Income Sample. *Birth*, *43*(2).
<https://doi.org/10.1111/birt.12221>
- Dekker, R. (2015). Induction for Going Past your Due Date: What does the Evidence Say?
- Grekin, R., & O'Hara, M. W. (2014). Prevalence and risk factors of postpartum posttraumatic stress disorder: A meta-analysis. *Clinical Psychology Review*, *34*(5).
<https://doi.org/10.1016/j.cpr.2014.05.003>
- Kerr, L. (2015). *Live Within Your Window of Tolerance*. San Fransico, CA. Retrieved from www.laurakerr.com
- Levine, P. A. (2010). *In an Unspoken Voice: How the Body Releases Trauma and Restores Goodness*. Berkeley, California: North Atlantic Books.
- Odent, M. (1986). *Primal Health*. London: Century Hutchinson.
- Porges, S. W. (1998). Love: An emergent property of the mammalian autonomic nervous system. *Psychoneuroendocrinology*, *23*(8), 837–861.
[https://doi.org/10.1016/S0306-4530\(98\)00057-2](https://doi.org/10.1016/S0306-4530(98)00057-2)
- Siegel, D. (2001). *The Mindful Brain: The Neurobiology of Wellbeing*. Sounds True.
<https://doi.org/978-1-60407-227-3>
- Siegel, D. J. (2001). Toward an interpersonal neurobiology of the developing mind:

Attachment relationships, “mindsight,” and neural integration. *Infant Mental Health Journal*, 22(1–2), 67–94. [https://doi.org/10.1002/1097-0355\(200101/04\)22:1<67::AID-IMHJ3>3.0.CO;2-G](https://doi.org/10.1002/1097-0355(200101/04)22:1<67::AID-IMHJ3>3.0.CO;2-G)

Williamson, J. B., Porges, E. C., Lamb, D. G., & Porges, S. W. (2015). Maladaptive autonomic regulation in PTSD accelerates physiological aging. *Frontiers in Psychology*, 5(January), 1–12. <https://doi.org/10.3389/fpsyg.2014.01571>