



# **Prenatal and Perinatal Psychology; A New Paradigm for Working with Mothers and Babies**

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**Birth Outcomes Matter: Updates in Clinical and Community Care (NYSPA 2019)**



## **As We Begin, Some Questions to Consider...**

- What is prenatal and perinatal psychology and why is knowing this information so critically important?
- Who and what informs our individual and collective health-related beliefs, attitudes, behaviors, and choices?
- What kinds of choices and opportunities do nurses, midwives, doctors and other healthcare professionals have in promoting prenatal and perinatal wellness and a trauma informed perspective?
- What factor(s) impact individual and organizational resistance to change?

"It's a kaleidoscope of inputs over which we have no control. We are like 'womb sponges' that absorb all this with no ability whatsoever to counter, debate or otherwise neutralize these effects. We accept a blend of loving and hostile contributions to our 'reality' and, depending on that blend, our lives reflect this uninvited manipulation. If the blend is predominantly loving, then we are the fortunate ones who are likely to glide more easily through life. If it is primarily negative then fear, guilt and insecurities become ever-present echoes in our day-to-day existence. But none of this is our doing. It is NOT our fault. We are simply innocent bystanders who have been given these foundations without our permission."

Gary Craig  
Founder, EFT

"In order to drive meaningful change in a hospital, the conversation needs to focus on an uncompromising insistence that the patient is central to decision making, and that birth and babies belong to families. The role of the administrator is to facilitate a culture where every woman who enters the hospital encounters a team that thinks about how to facilitate the lowest intervention birth possible."

Amber Price, DNP, CNM  
Chief Operating Officer at Women's and Children's Hospital  
TriStar Centennial Medical Center, Nashville, TN

“I suspect that on some level of consciousness... practitioners realize that if they truly came to regard the unborn and newborn as being endowed with human sensitivity and sensibility, they would have to change the way they treat pregnant women and newborn babies.”

Thomas R. Verny, M.D. (2002)







## **We Can No Longer Un-See or Un-Know**

- "It is becoming clearer to all that some of the intransigent perinatal, lifespan health, developmental and social problems have intergenerational patterns that start in pregnancy...
- These problems warrant primary prevention for the infant to begin in utero...
- In order to improve perinatal outcomes and long-term health for individuals at the population level, an emphasis on psychosocial care that is informed by a knowledge about trauma is crucial...
- The goal is to get the mother-infant dyad off to the best possible start."

Seng, 2015, pg. 1



## Opportunities and ‘What if’s?’

- Seeing and knowing provides “perinatal team” professionals with opportunities to collaborate in creating new service delivery models, as well as empirical and scientific research that incorporate an understanding of prenatal and perinatal psychology and trauma informed care across the ENTIRE prenatal and perinatal period, from the period *prior* to conception through (at least) the first few years.

### **In turn I invite you to consider – “What if?”**

- What if doing this had the potential to reverse current trends in maternal and infant mortality and morbidity in the U.S.; decrease rates of child neglect and abuse and other forms of family violence; improve and strengthen intimate and family relationships; make schools and communities safer and more welcoming; as well as positively impact the short- and long-term physical, intellectual, and emotional health and well-being of mothers, babies, children, and fathers everywhere?





## Where We Come From...

- A.A.S. in Criminal Justice (Niagara County Community College)
- B.S. in Sociology (SUNY Potsdam)
  - Graduated Summa Cum Laude and Departmental Scholar
- M.A. & Ph.D. in Sociology (Binghamton University)
  - Dissertation: "Like Mother? Like Daughter?; An Exploration of Factors Influencing the Transition of Beliefs, Attitudes, and Behaviors from Mothers to Daughters About Pregnancy, Birth, and Early Mothering (2011).
  - Graduate Certificate in Feminist Theory
- 20 years teaching in Human Development, Child and Family Studies, Sociology, Criminology, and Women's Studies
- Co-Director of Education, Association for Prenatal and Perinatal Psychology and Health (APPPAH) (2017-2019)
- Childbirth Educator/Trainer (BirthWorks) Birth and Postpartum Doula/Trainer (BirthWorks)
- HealthConnect One (HCO) Birth Equity Leadership Academy (BELA) Faculty
- Community Mediator (Custody and Visitation, Restorative Justice) & Divorce Mediator, Accord; A Center for Dispute Resolution
- CEO and Director, *The Family Womb*
- Executive Director, NYSC AAUP (American Association of University Professors)
- **Current Research:** prenatal and perinatal psychology; pregnancy, birth, and early mothering/parenting; family health and health-related behaviors; medical trauma; obstetric violence; family violence; narrative medicine; mediation and conflict resolution.



## The Rest of the Story

- Mother died at 56 (from cancer) the day before Mother's Day. I was 17. Father (from sepsis) when I was 27
- I married at 19, divorced, & am now remarried to a younger man
- I was sexually assaulted and raped while serving in the U.S. Army Reserves
- I am a DV survivor (and Counselor)
- Had 3 pregnancies and 3 daughters (scheduled cesarean with epidural anesthesia for breech presentation, a hospital VBAC, and a home birth)
- Breastfed all three babies almost 3 years each
- I co-slept with my children for several years (family bed)
- I practiced complementary and alternative medicine
- I was given up at birth by a woman living in poverty who had been abused by her first husband, had 2 other older children (daughters) and gave up another baby 3 years prior to my birth (also a daughter).
- Found birth family – 6 mo. later (birth) mother was buried day before Mother's Day (father was deceased by 1 year). Found I had three sisters – 1 full and 2 half. All three have had breast cancer. Maternal grandmother died of it.
- Spent my first six months in an orphanage (1950s style) and then was adopted.

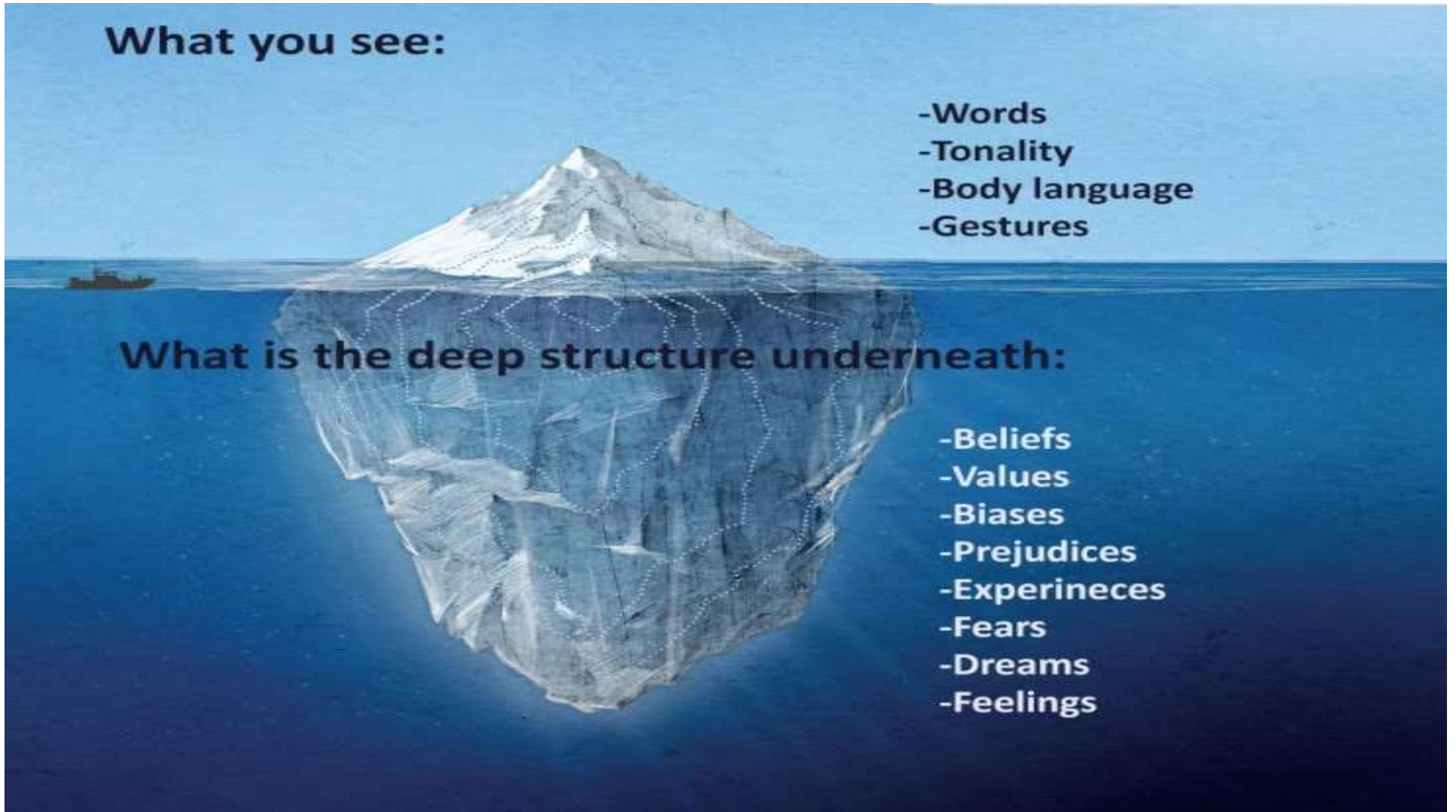
**Research clearly shows that THIS part of our history can have a profound impact on our beliefs, attitudes and behaviors – as well as our health relationships and experiences.**

**What you see:**

- Words
- Tonality
- Body language
- Gestures

**What is the deep structure underneath:**

- Beliefs
- Values
- Biases
- Prejudices
- Experiences
- Fears
- Dreams
- Feelings





## A “New” Science Emerges

- In *The Trauma of Birth* (1924), Otto Rank detailed how he thought that difficulty during birth could affect infants' psyches in such a way that it would affect them the rest of their lives.
  - “Through the combined efforts of embryologists, neuro-embryologists, physiologists, obstetricians, pediatricians, nurses, psychiatrists, psychologists and many other health professionals a new science of pre- and perinatal psychology has begun to emerge. This science explores the psychology of conception, pregnancy, labor, delivery and the postpartum period, as well as the unborn and newborn child's intellectual and emotional development” (Can Fam Physician 1984; 30:2115-2118).
- “(Yet even today), public health practice has not fully embraced the contributions that social science and behavioral research have to offer in the design of programs and policies for maternal and infant health” (Mechanic, 1995; Grason et al., 1999; Hogue, 1999).

**It is time to fully and openly acknowledge the research and use it to effect meaningful, as well as short- and long-term benefits for babies, mothers, and families!**





## **Principles of PPP**

1. Conception, pregnancy and birth are natural processes.
2. Pregnant moms and babies share experiences (physical and emotional).
3. Babies are conscious and expressive (sentient beings).
4. Babies need loving support for optimal development.
5. Baby's first relationships lay the foundation for all future relationships.
6. Experiences (what does/doesn't happen) dramatically impacts the development of babies' brains and can also impact health lifelong.
7. Imprints from early experiences can be enhanced or transformed at any time.



## What was I thinking & feeling before & during pregnancy?



# Influence of Fear, Attitudes, and Beliefs

- Haines et al. (2012) looked at the influence of a woman's fear, attitudes and beliefs of childbirth, as well as their experiences of birth, and identified three different "profiles:"
  1. **"Self-determiners"** -Clear attitudes about birth including seeing it as a natural process and with no fear.
  2. **"Take it as it comes"** – No fear of birth and low level of agreement with any of the specific attitude statements.
  3. **"Fearful"** – Afraid of birth, with concerns of the personal impact of birth including pain and control, safety concerns and low levels of agreement with attitudes relating to women's freedom of choice or birth as a natural process.



"Observations in the field of psychotherapy give us every reason to believe that experiences before and during birth remain present in our awareness of our own bodies and in our inner states of experience as a constant background of experience. During external and internal crises and conflict situations, this background experience can be activated in the form of fantasies and emotional states and can then influence images and ideas about ourselves and the world" (Janus, 1993).





## **Maternal Stress During Pregnancy**

- “Maternal feelings and moods are linked to hormones and neurotransmitters that travel through the bloodstream and across the placenta to the developing brain of the unborn child” (Verny, 2002). In turn,
  - Prolonged exposure to stress prime the growing brain to react in flight-or-fight mode - even when inappropriate – throughout his or her life.
  - Maternal emphasis on joy and love, and bathing babies brain in endorphins and neurohormones such as oxytocin, promote a lifelong sense of well-being.



## **Impact of Stress on the Baby (it's not necessarily what you may think)**

- Stress can also program a baby's nervous system so he or she is hard to settle, negatively affecting sleep, communication, eating and even motor and cognitive development.
- "The accepted neurological dictum is that memory resides in the cortical neurons of the brain. Evidence from studies on genetics, epigenetics, organ transplants, immunology, unicellular organisms, planarian flat worms, nano computers and clinical psychology is cited here in support of the hypothesis that memory can also be stored in all the cells of the body, not just nerve cells" (Verny, 2014)
- Thus stress may also be experienced as the result of a difficult implantation.
  - Laing (1976) relates how one of his patients in a therapy session said, "'I feel I am clinging to crumbling rocks liable to be swept away in the torrent. Hanging on for dear life, trying to get a foothold, never seeming as though I can get into what I'm doing.' Again, one can see how a "memory" such as this may accurately reflect on the experience of a difficult implantation"(p. 46).



## The Experience of Birth

- According to Thomas Verny, M.D. (1981), "How (the child) is born – whether it is painful or easy, smooth or violent – largely determines who he becomes and how he will view the world around him."
  - "At times the baby experiences incredible sensual pleasure. These moments, however, alternative with others of great pain and fear. Even in the best of circumstances, birth reverberates throughout the child's body like a seismic shock of earthquake proportions"
  - "Even if the baby is able to avoid things like induction, drugs, forceps, internal monitors, he will soon find himself in a cold, noisy, harshly lit room, surrounded by a group of strangers who clutch, probe and pull at him."



# The Role of Obstetric Violence

- [Organic Law on Women's Right to a Violence-free Life](#)

This law defines "obstetric violence" in Article 15(13) as: "... the appropriation of a woman's body and reproductive processes by health personnel, in the form of dehumanizing treatment, abusive medicalization and pathologization of natural processes, involving a woman's loss of autonomy and of the capacity to freely make her own decisions about her body and her sexuality, which has negative consequences for a woman's quality of life."

- Bowser and Hill identified common acts of disrespect and abuse faced by women in maternity care such as: physical abuse, verbal abuse, discrimination, lack of privacy, detention, and denial of care. The Universal Rights of Childbearing Women charter affirms that woman-centered maternity care must prioritize "women's basic rights, including respect for women's autonomy, dignity, feelings, choices, and preferences, including companionship (White Ribbon Alliance 2011)."  
<http://www.may28.org/obstetric-violence>





# **Birth “Interruptions”**

- Be aware that anything that interrupts the natural process of pregnancy, birth, and bonding impact the baby's nervous system and may negatively “imprint” on the baby, and also the mother.
- When a birth interruption is about to occur:
  - Talk to the pre-birth and newly born baby (ideally done by the mother/parents but can also be done by healthcare providers)
  - Let them know the reason for the intervention(s)
  - Understand their tremendous imperative to be born
  - Stay connected to them
  - Let them know what to expect
  - Let them know you want to help them get out
  - Identify/name any confusion they might have (e.g. the use of chemicals can ‘confuse’ the baby)
  - Understand their dissociation
  - Help them find their way back to connection
  - Seek help post-birth if it appears that baby and/or mother still need/could benefit from repair

Modified from “Birth’s Hidden Legacy Vol. 1: How Surprising Beliefs from Infancy Limit Successful Child and Adult Behavior. A Manual for Therapists, Parents, and Couples. Annie Brook, Ph.D., LPC



## Posttraumatic Stress and ASD

- Relationship found between posttraumatic stress and Autism Spectrum Disorder (ASD). In the article *Women's posttraumatic stress symptoms and autism spectrum disorder in their children*, Roberts et al. (2014) reported that "Several lines of evidence suggest PTSD in women may be associated with ASD in their children." This is because "Maternal stress affects several biological systems that in turn negatively impact the development of the fetus' brain." This includes the limbic system, prefrontal cortex, and the hypothalamic-pituitary-adrenal (HPA) axis (Talge, Neal, & Glover, 2007).
- Other agree, arguing that "Maternal exposure to psychosocial stressors may increase ASD risk through dysregulation of the mother and fetus' immune function and HPA axis, possibly leading to higher exposure to cortisol and inflammation in the child's developing brain" (Dietert & Dietert, 2008; Patterson, 2009; Talge, Neal, & Glover, 2007).



**Remember...**

**Instead of asking “what’s wrong  
with this child/person?”**

**Ask “What happened to this  
child/person?”**



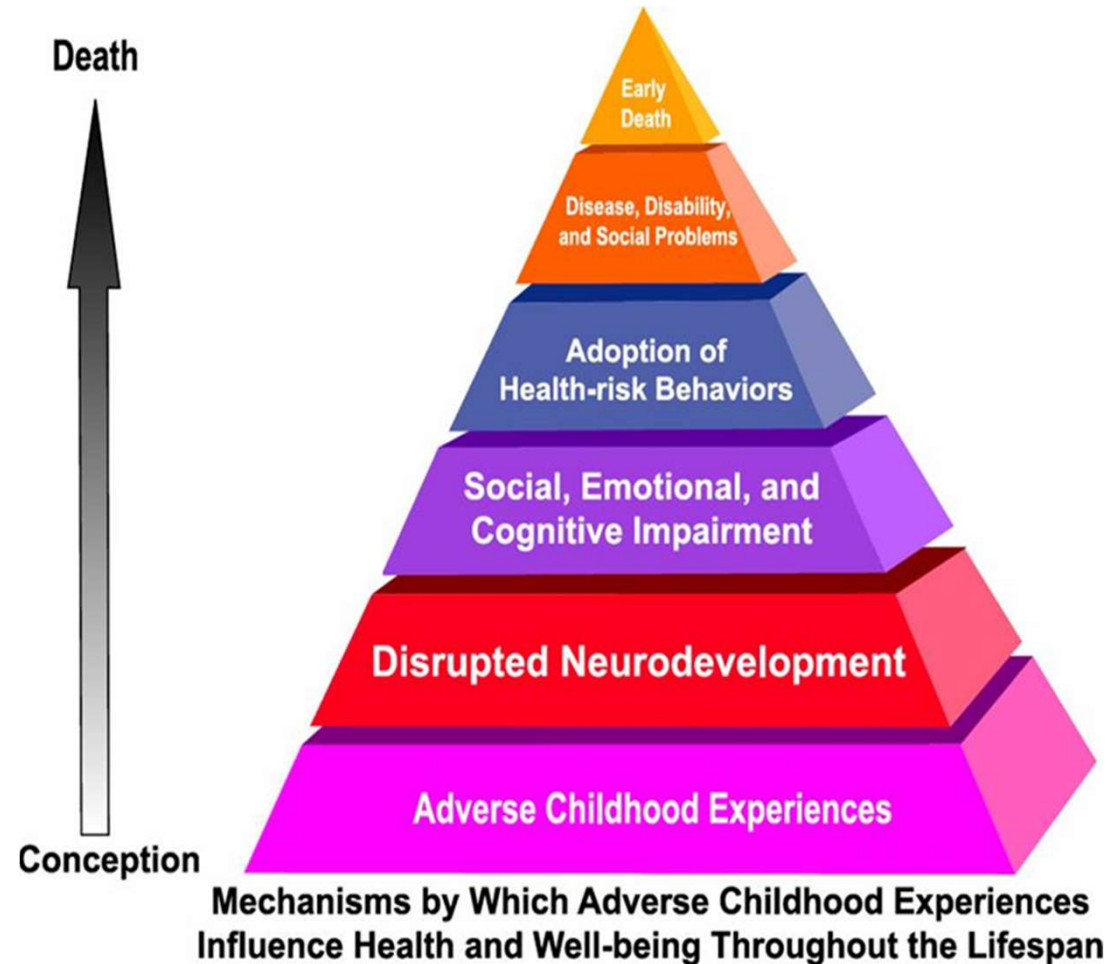
## Early Childhood Adversity and Pregnancy Outcomes

- According to Smith, Gotman, and Yonkers (2016), “The preponderance of evidence suggests that major life events and traumatic events that occur during pregnancy predict birth weight and preterm birth, with even more robust effects observed for chronic stressors.” Their research findings supported three hypotheses that have been long suspected, but not adequately tested in the literature:
  - (1) adverse childhood experiences themselves may result in adverse birth outcomes;
  - (2) the health behaviors of people who have experienced adverse childhood experiences, are implicated in poor pregnancy outcomes and/or
  - (3) adverse childhood experiences result for some in adverse birth outcomes mediated by psychiatric disorders and prenatal smoking.
- Another study by Christiaens et al. (2015) reports “A strong relationship between ACEs and preterm birth was observed. It has been shown that two or more ACEs have a notable two-fold increase in the risk of spontaneous preterm birth. These data demonstrate that stressors throughout life can have a significant effect on pregnancy outcomes such as preterm birth.”



## ACEs (Adverse Childhood Experiences)

- ACEs are adverse childhood experiences that harm children's developing brains and lead to changing how they respond to stress.
- ACEs can damage our immune systems so profoundly that the effects show up decades later.
- ACEs cause much of our burden of chronic disease, most mental illness, and are at the root of most violence.



<https://acestoohigh.com/got-your-ace-score>

# Overview of ACES

**10 year study with over 17,000 participants overall (largest study of its kind)**

**Correlated ACES score to health and behaviors occurring over participants' lifespans**

**Measured 10 types of childhood adversity and 5 types of family dysfunction**

**Each type of trauma was given an ACE score of 1 (did not count instances)**

## **Results/changes:**

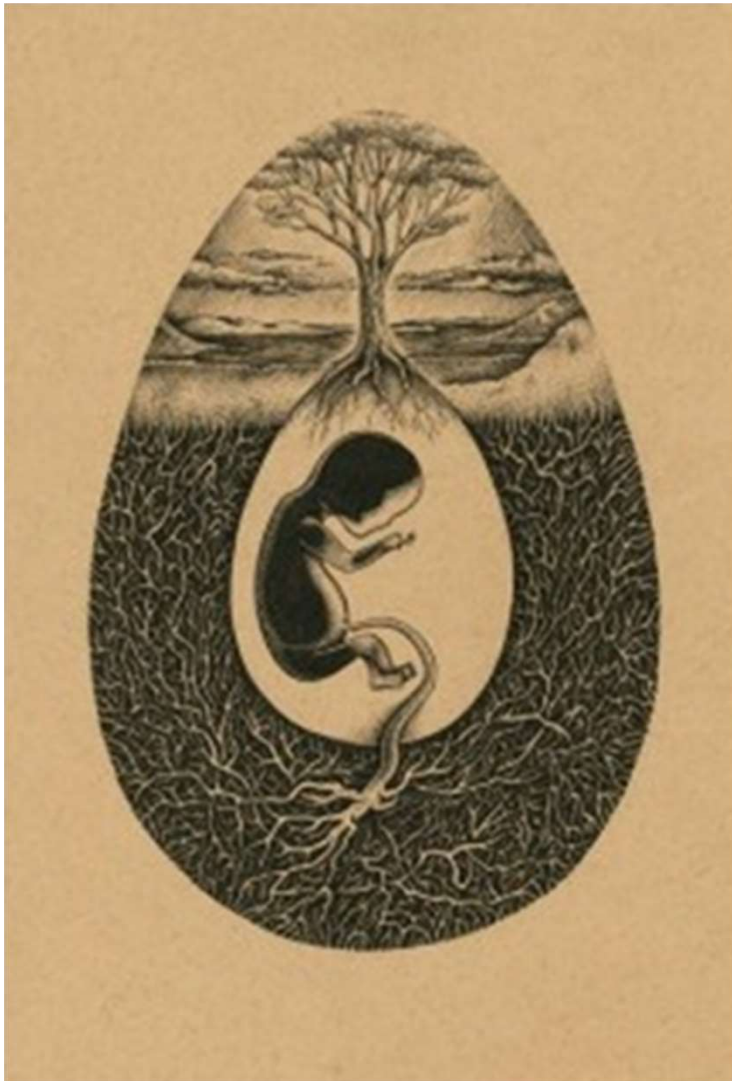
- 2/3 of the 17,000 experienced at least 1 type of trauma, most 2 or more
- A child's behavior can reveal a parents' ACE score (Willis, D. [acestoohigh.com](http://acestoohigh.com))
- 35% reduction in doctor office visits in year following assessment compared to previous year
- 11% decrease in ER visits
- 3% reduction in hospitalizations
- Note that these changes returned to baseline after two years when medical staff returned to previous medical model without asking about ACEs or including treatment for identified trauma

**ACE score runs from 0 → 5 or more**

## **The higher the score the greater the likelihood of:**

- Severe and persistent emotional problems (depression and suicide)
- Health risk behaviors (smoking, alcoholism, drug use, more sex partners & risk of STDs, broken bones, obesity, physical inactivity, poor self-rated health, etc.)
- Serious social problems (homelessness, poor job functioning, criminality, etc.)
- Adult disease and disability (cancer, heart disease, lung disease, liver disease, etc.)
- High health and mental health costs
- Poor life expectancy

**Keep in mind the  
influence of epigenetics  
("above the gene" a.k.a. environment)**



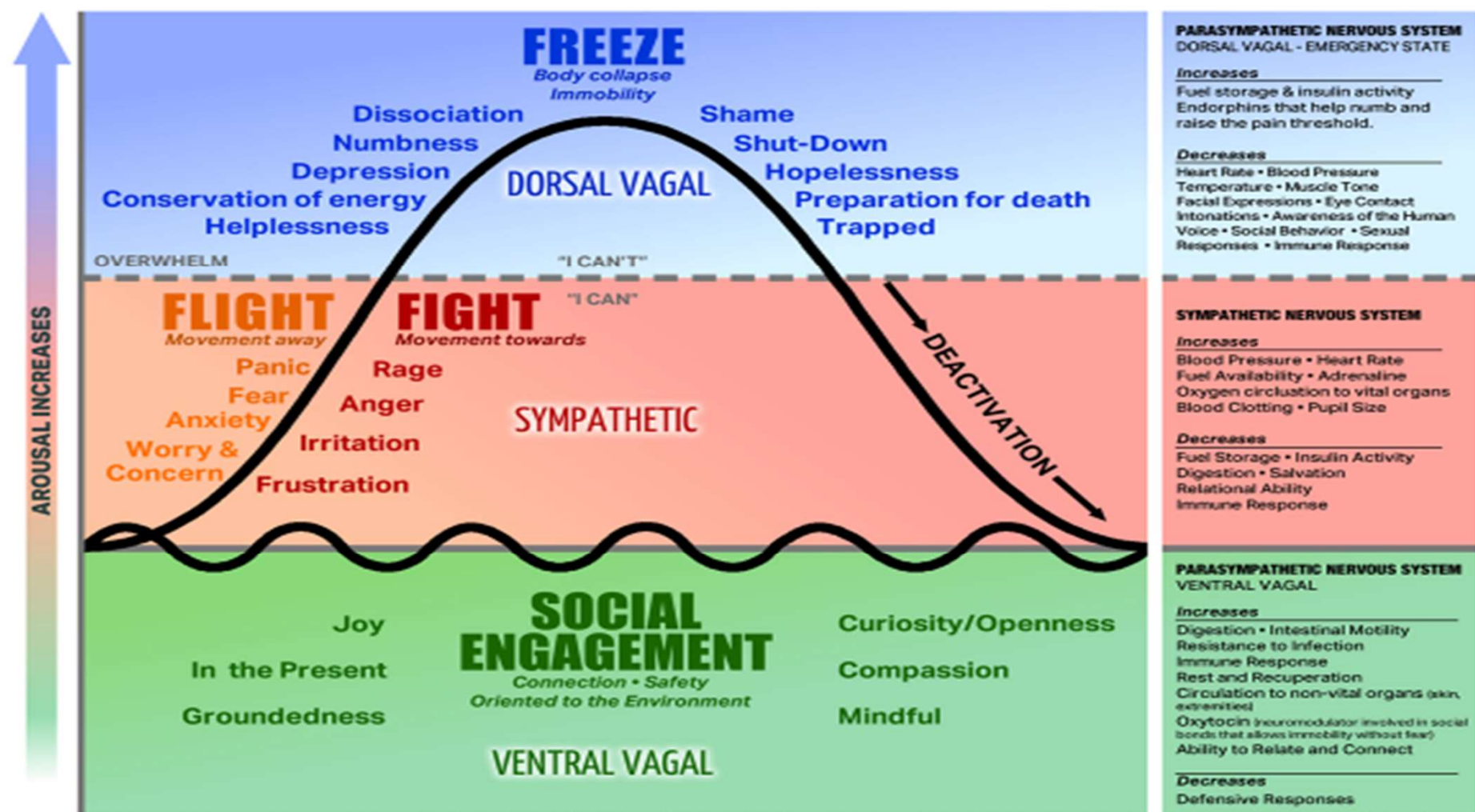
# Epigenetics

- The term “epigenetics” has been around for centuries.
- It evolved to mean any process that alters gene activity without actually changing the original DNA sequence (epi → above; genetics → the gene).
  - Gene modifications are then passed on to newly birthed “daughter cells” and can be inherited by offspring.
  - Research has shown that these genetic changes can be transmitted throughout multiple generations.
    - Dutch Hunger Study:  
<http://www.pnas.org/content/107/39/16757>
- This study, and others that followed showed that trauma can be inherited through epigenetic changes and a multitude of illnesses, behaviors, and health issues have been linked to epigenetic mechanisms. Related conditions include many cancers, autoimmune diseases, neurodegenerative and psychological disorders, addictions, and respiratory, cardiovascular, reproductive, and neurobehavioral illnesses.



# Polyvagal Theory

- Polyvagal Theory is considered to be the neurophysiological foundation of emotions, attachment, communication, and self-regulation (Porges, 2011).
- Evolved from 4 decades of research on the neural regulation of the autonomic nervous system (ANS).
- Original research on the ANS was organized between the sympathetic and parasympathetic nervous systems.
- Polyvagal theory expanded on the model with an emphasis on the social, myelinated vagus as the “fine-tuning regulatory system that opens up a role of the environment to foster or ameliorate stress-related physiological states” (van der Kolk, in Porges, 2011, pg. xi).
- Most important, polyvagal theory gave us a powerful means of understanding how both bodily states and mental constructs dynamically interact with environmental triggers to precipitate maladaptive behaviors” (van der Kolk, in Porges, 2011, pg. xvi).



Adapted by Ruby Jo Walker from: Cheryl Sanders, Steve Hoskinson, Steven Porges and Peter Levine

[rubyjowalker.com](http://rubyjowalker.com)





"In the Western world, the beginnings of parenthood have been obscured by the pervasive materialism of medicine and psychology which doubts the cognitive status of neonates and denies the human aspects of fetal behavior. This has led to confusion about the nature of parenthood and when it begins. What is currently referred to as "early" parenting begins after birth and is at least nine months late. If discoveries in prenatal psychology are to be taken seriously, early parenting begins after conception and very early parenting begins before conception" (Chamberlain, 1997).



## Care of Babies During the Perinatal Period

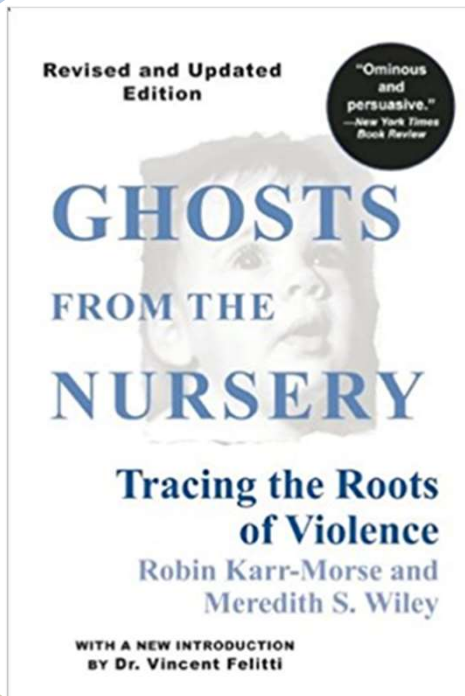
- How are babies typically received into the world and how are they treated once they are here?
  - Research has clearly shown that the vast majority of medical interventions interfere with labor, birth and bonding.
- When and how does the mother receive her child? How long are they able to spend together? What about the father?
  - Is the baby breastfed or bottle-fed?
- What kinds of support will the mother, baby, and the family receive, including once they return home?
- What are the beliefs, attitudes, and behaviors of the baby's parents and various care and health care provider(s) re: infant/child care, feeding, health care (including vaccinations), sleeping, discipline vs. loving guidance, schooling, etc.?
- To what extent are babies and children truly accepted and physically and emotionally "seen"?



## **The Impact of Rejection and Separation**

- Loneliness and physical pain are processed in the same region of your brain, the anterior cingulate cortex.
  - So just as you have a powerful drive to avoid causing physical pain to your body, you have a similarly powerful drive to connect with others and seek companionship in order to avoid painful feelings of loneliness.
- Separation can be an especially physically and emotionally destructive experience, beginning immediately after birth and continuing throughout the first few years.
- Babies instinctually know when they are not wanted. Some argue this awareness occurs as early as preconception.
- These babies are at greater risk of having social and psychiatric problems, and are more often delinquent in their later years (childhood *and* adulthood).
  - In fact, family histories of psychopathic killers show they lacked affectionate, supportive relationships early in life.

# Ghosts From the Nursery



- Crimes committed by children and young adults are committed at alarming rates.
- Robin Karr-Morse and Meredith S. Wiley, authors of *Ghosts from the Nursery: Tracing the Roots of Violence* (2014) believe that a predisposition to violent behavior can be learned before birth.
- Their research argues that a "chemical wash" of toxins such as drugs and alcohol, combined with a mother's stress hormones generated from rage or fear can directly effect the babies brain development.
- This rage and fear can result from environmental and social factors, such as the way women are treated by their partners and the medical community, as well as fearful perceptions of and beliefs about pregnancy and birth.

# Anatomy of Violence



- According to Adrian Raine, author of *The Anatomy of Violence: The Biological Roots of Crime*, studying the biological roots of criminal behavior – or “neurocriminology” – promises to yield insights into human nature, as well as incite effective and humane methods for reducing crime.

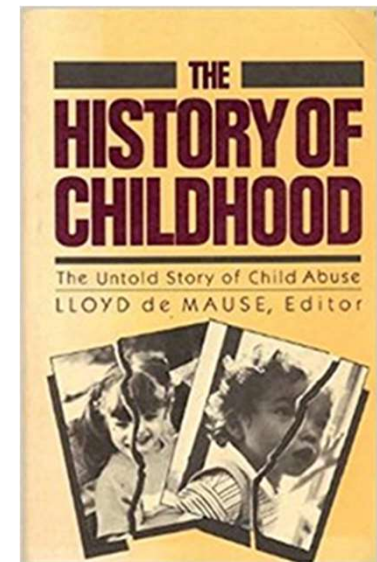
In turn he recommends a  
“public health approach to violence.”

- Raine bases his argument on the idea that certain genetic, neurological and physiological factors predict violent behavior.
- Among other claims, Raine argues that “Certain insults to the developing brain...have pernicious effects on behavior.”



# The Untold Story

- Lloyd de Mause was a psychohistorian who examined the political sig-significance of the traumatic experiences of birth and early childhood.
- He wrote about how human societies restage this early trauma later in life in wars and social violence.
- De Mause suggested that we recreate in the outer world the unconscious images we carry deep within our brains, the repressed memories of the conflicts and losses we have experienced before during or after our births.





## **Changing the Paradigm**

- Changing/expanding the way we view pregnancy and birth.
- Changing/expanding the way we view the yet-to-be-born child.
- Changing/expanding the way we view the mother-infant dyad during labor and immediately after birth.
- Changing the way we treat newborns during labor and immediately after birth.
- Expanding the way we view parenting (pre-conception and beyond), and the way we parent, to include the perspective and needs of the developing infant/child and the recognition they are sentient beings.
- Acknowledging that trauma (rupture) can occur prenatally and postnatally, and that this trauma can have short- and long-term negative effects/affects.
- Being aware that help (repair) can be found and is often very effective.

**“I see you!”**



## **Resilience and Repair**

- Parents, mothers in particular, can look at their own history and determine how they were parented. Remember, it is not only what happened to us as babies and children that matters, but if/how we have come to terms with it.
- Potential parents can examine how attuned they are to their own emotions and how comfortable they are expressing these emotions with the people they love and trust.
- Healthcare providers can also examine how attuned they are to THEIR own emotions and how comfortable THEY are expressing these emotions with the parents and babies/children they work with.
- If there has been a difficult birth or separation between mom and baby, then parents can use skin-to-skin practices and other therapies to help repair and support bonding.
- Since a connected, attuned experience is vital for all aspects of a baby's development, parents and caregivers can slow down and provide appropriate enriching experiences through touch, music, rhythm and communication.



# The Future of Prenatal and Perinatal Science

- The pre- and perinatal paradigm for health and healing has immense importance to human development.
  - New research supporting the vital importance of this period is being published on a regular and on-going basis and individual and collective awareness is expanding.
  - Holistic healing trends influenced by advances in prenatal and perinatal psychology therapies include mother- and baby-friendly initiatives, increases in breastfeeding initiation rates, increases in natural and home birth, increased awareness and adoption of skin-to-skin practices and policies, and the integration of therapies led by advances in neuroscience, as well as the importance of healthy, balanced relationships in early life – a field known as “interpersonal neurobiology.”
  - Others contend that an emphasis on prenatal and perinatal psychology can help eliminate emotional and physical health issues, relationship issues, and decrease violence (interpersonal and community).

**What IS clear is that the future is ripe and ready for this “newfound” awareness and the deliberate and conscious integration of practices which fully support healthy prenatal and perinatal psychology and human and social development.**




"If we hope to create a non-violent world where respect and kindness replace fear and hatred, we must begin with how we treat each other at the beginning of life.

For that is where our deepest patterns are set.  
From these roots grow fear and alienation  
~ or love and trust."

Suzanne Arms (2002)



A photograph of four children jumping in a grassy forest to catch a ball. The children are wearing blue, green, and red shirts. The background is a dense forest with many trees.

**Together we can find ways to promote  
and protect the  
physical, emotional,  
and spiritual health of  
unborn babies and children.**

**~ Thomas VERNY (1995)**



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