

## Book Review

***Prenatal Development and Parents' Lived Experiences: How early events shape our psychophysiology and relationships.*** Ann Diamond Weinstein, 2016. New York, NY: W. W. Norton & Company, Inc. ISBN: 978-0-393-71106-6

In *Prenatal Development and Parents' Lived Experiences: How Early Events Shape Our Psychophysiology and Relationships*, Ann Weinstein takes the reader through a beautifully-detailed journey linking current research from diverse disciplines with the experiences of mother and baby from pre-conception through the postpartum period. The author states that her "intention in writing this book is to provide practitioners and individuals with a deep understanding of the importance of the earliest period of human development: from conception through the early postnatal period," (p. 1), and this she does in spades.

The author invites the reader to *experience* her writing, as well as any perinatal memories that may arise for the reader on a somatic level while digesting the book, through a continuation of morphogenesis, an arm of human embryology hypothesizing that form develops from movement. Weinstein states:

I encourage you to pause frequently, breathe, notice your state, and use whatever skills, practices, and self-care resources are most helpful to you. As Shea notes (personal communication, October 4, 2014), "This way, you may begin to experience morphology, which is still present in your biology" (p. 11).

Weinstein begins with an overview of research supporting perinatal psychology. Throughout this overview and the rest of the book, she highlights the importance of working with all women and girls prior to conception, not only those populations that have previously received the most funding; Weinstein reports that research in perinatal psychology has been incomplete, with its heavy emphasis on vulnerable populations of pregnant women.

The author then moves into an examination of the ways in which one's cells might remember, and be affected by, the experiences of the perinatal time. In this way, she provides a link for the reader to begin to process and deeply understand the writing in her book, not only cerebrally, but also somatically. One of many examples Weinstein uses is the memory of the cells within the immune system, which once exposed to infection, are primed to recognize and attack similar future invaders (p. 42). She quotes Very and Weintraub (2002):

We do not need fully developed central nervous systems or brains to receive, store, and process information. Information substances from the mother, be they stress-related cortisol or feel-good endorphins, enter the baby's blood system affecting receptors at every stage of development, no matter how early in life. ... Our earliest memories are not conscious, nor even unconscious in the standard sense... [W]e record experience and history of our lives in our cells (pp. 159-160).

Weinstein goes into great detail in presenting multiple sources of evidence showing how both the mother and the fetus respond to stress, and how the fetus' development adapts in order to prepare for the environment it expects to live in outside of the womb. She adds research suggesting that this may occur even if excessive maternal stress occurs in the six months prior to conception (Khashan et al., 2009).

Additionally, the author presents Sandman and Davis' (2012, p. 13) research that, "When the predictive adaptive response occurs during prenatal development but does not match the postnatal environment, disease states may occur over the course of the life of the offspring." The author continues to describe other challenges by explaining how both the mother's psychological and physical states can affect her bond with her developing baby, as well as her baby's developing attachment to the mother (pp. 53-54).

The author painstakingly dissects the complexities of human hormones and physiological systems, and both their healthy and disrupted roles (due to various types of stress) in the lives of mothers and babies. She then discusses the development of the prenaté's sensory systems and autonomic nervous system, and how the baby's gene expression may be altered by the preconception and perinatal environment. Weinstein delves into the challenges that traumatic stress and unresolved grief may present for the mother, before moving into both the known and unknown territory of assisted reproductive technologies.

In these ways, Weinstein gives credence to the theory that the mother-baby relationship is fully intertwined along a continuum that begins before conception, and that examining any part of the relationship

exclusively misses the entirety of the more complex unit. She states, “Our exploration of the earliest period of human development... must be held within the awareness that the two human organisms – mother and developing embryo/fetus-placenta exist in life as a whole” (p. 56).

The connections Weinstein makes have far-reaching implications for nothing less than a systemic paradigm shift in the way our society navigates and finances all parts of this crucial period of time, she reports. Weinstein states, “investment in the preconception, prenatal, and perinatal periods is the most cost-effective approach to optimizing the health and development of children and adults” (p. 2).

Weinstein argues for *compassionate care* for mothers and babies during the perinatal period that is also trauma-informed. She states, “The practitioner’s capacity to cultivate compassion for him/herself and, in turn, their capacity to cultivate and communicate compassion for their patients/clients are essential components in practitioner-patient/client interactions” (p. 271). Weinstein suggests that tapping therapies, such as EMDR and the Emotional Freedom Technique (EFT) could be helpful in working with many of the presenting issues resulting from the above challenges encountered in pregnant females. Weinstein reports that EFT has shown great promise (McCarty, 2013), and having used Attachment-Focused EMDR (a protocol adaptation to EMDR, by Laurel Parnell, 2013) with many expectant and new parents, I can report that I have found this body-centered approach to be very helpful also.

The book ends with a Compassion-Based Model of Pregnancy, written by Michael J. Shea, PhD, followed by exquisite reprinted drawings of embryonic development (Gasser, 1975). *Prenatal Development and Parents’ Lived Experiences: How Early Events Shape Our Psychophysiology and Relationships* is a book to be read and re-read, digested slowly and deliberately, and kept on every practitioner’s shelf for ongoing referral.

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Note: Details on references noted can be found in the reviewed text.