

Hormonal Physiology of Childbearing: Evidence and Implications for Women, Babies, and Maternity Care

Abstract & Topline Recommendations

Abstract

This report synthesizes evidence about innate hormonally-mediated physiologic processes in women and fetuses/newborns during childbearing, and possible impacts of common maternity care practices and interventions on these processes, focusing on four hormone systems that are consequential for childbearing. Core hormonal physiology principles reveal profound interconnections between mothers and babies, among hormone systems, and from pregnancy through to the postpartum and newborn periods. Overall, consistent and coherent evidence from physiologic understandings and human and animal studies finds that the innate hormonal physiology of childbearing has significant benefits for mothers and babies. Such hormonally-mediated benefits may extend into the future through optimization of breastfeeding and maternal-infant attachment. A growing body of research finds that common maternity care interventions may disturb hormonal processes, reduce their benefits, and create new challenges. Developmental and epigenetic effects are biologically plausible but poorly studied. The perspective of hormonal physiology adds new considerations for benefit-harm assessments in maternity care, and suggests new research priorities, including consistently measuring crucial hormonally-mediated outcomes that are frequently overlooked. Current understanding suggests that safely avoiding unneeded maternity care interventions would be wise, as supported by the Precautionary Principle. Promoting, supporting, and protecting physiologic childbearing, as far as safely possible in each situation, is a low-technology health and wellness approach to the care of childbearing women and their fetuses/newborns that is applicable in almost all maternity care settings.

Access Hormonal Physiology of Childbearing: Evidence and Implications for Women, Babies, and Maternity Care (2015) by Dr. Sarah J. Buckley and related material, including full recommendations, at ChildbirthConnection.org/HormonalPhysiology.

Recommendations to Promote, Support, and Protect Physiologic Childbearing

The following recommendations for education, policy, practice, and research arise from the synthesis presented in *Hormonal Physiology of Childbearing: Evidence and Implications for Women, Babies, and Maternity Care*. Care practice recommendations below are intended to apply whenever safely possible.

To optimize hormonal physiology in childbearing:

Education, Policy, and Consumer Engagement

- ▶ Educate all maternity care providers in the hormonal physiology of childbearing.
- ▶ Use effective policies and quality improvement strategies to foster consistent access to physiologic childbearing.
- ▶ Strengthen and increase access to care models that foster physiologic childbearing and safely limit use of maternity care interventions.
- ▶ Use effective consumer engagement strategies to inform women about physiologic childbearing and involve them in related aspects of their care.

Care Practices

- ▶ Provide prenatal care that reduces stress and anxiety in pregnant women.
- ▶ Foster the physiologic onset of labor at term.
- ▶ With hospital birth, encourage admission in active labor.
- ▶ Foster privacy and reduce anxiety and stress in labor.
- ▶ Make nonpharmacologic comfort measures for pain relief routinely available, and use analgesic medications sparingly.
- ▶ Make nonpharmacologic methods of fostering labor progress routinely available, and use pharmacologic methods sparingly.
- ▶ Promote continuous support during labor.
- ▶ Foster spontaneous vaginal birth and avoid unneeded cesareans.
- ▶ Support early and unrestricted skin-to-skin contact after birth between mother and newborn.
- ▶ Support early, frequent, and ongoing breastfeeding after birth.

Research

- ▶ Identify and carry out priority research into hormonal physiology of childbearing, and routinely incorporate this perspective in maternity care research.

