



DEVOTION

COST ACTION CA18211

Perinatal Mental Health & Birth Related Trauma:
Maximising Best Practice & Optimal Outcomes

Impact of postpartum PTSD on the whole family

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Impact on the woman



<https://www.newscientist.com/article/mg23130813-000-uk>

- high levels of distress; feelings of guilt, panic, anxiety, grief, anger, and tearfulness
- some women report having suicidal thoughts and ideations following traumatic childbirth
- women describe being haunted by traumatic memories for many years
- loss of identity and self-esteem, particularly with regards to their competencies as a mother

'I am still left with flashbacks and horrible nightmares. I lay awake for hours at night despite sleeping tablets, and wake up in the night soaked in sweat. Everything that happened goes over and over in my head. And I sometimes think about taking an overdose just so that I can get some help, but I don't want to die, I want to get better.'

(Louise, BTA, 2005)



© talk to the press
<http://www.dailymail.co.uk/femail/article-3771107/Woman-left-PTSD-giving-birth.html>

Impact on family planning

- women may decide not to have further children
- traumatized women who do embark on a new pregnancy are more likely to have a negative experience of subsequent pregnancies



“I took the test and crumpled over the edge of our bed, sobbing and retching hysterically for hours.”
(Beck & Watson, 2010, p.245)



<https://www.imperial.ac.uk/news/175666/miscarriage-ectopic-pregnancy-trigger-post-traumatic-stress/>

Risks for subsequent pregnancy



<https://www.bbc.com/future/article/20190424-the-hidden-trauma-of-childbirth>

- increased risk of maternal stress and its associated risks of negative pregnancy outcomes, such as intrauterine growth retardation, low birth weight, and premature birth
- extreme fear of subsequent pregnancy and childbirth (tokophobia), sexual problems, and avoidance of medical care

Impact on fathers

- 60% of fathers found attending the childbirth distressing
- Paternal postpartum PTSD incidence is between 0-5% in low risk populations and 8-66% in high risk populations (premature birth and NICU)
- More research on postpartum PTSD of fathers and partners is needed



Photo: S. Ravenscroft

Johnson (2002); Lindberg & Engström (2013); Ayers et al. (2007); Bradley et al. (2008); Helle et al. (2018); Aftyka et al. (2017); Koliouli et al. (2016); Yaman & Altay (2015)

Impact on fathers

ASD at one week

| | All birth | Vaginal birth | Operative birth |
|---------|--------------------|--------------------|--------------------|
| Mothers | 63.9% ^a | 57.5% ^b | 73.3% ^b |
| Fathers | 51.7% ^a | 50% | 50% |

PTSD at one month

| | All birth | Vaginal birth | Operative birth |
|---------|--------------------|---------------|-----------------|
| Mothers | 20.7% ^c | 18.8% | 25.2% |
| Fathers | 7.2% ^c | 6.6% | 9.8% |

a,b,c $P < 0.005$

- ASD = predictor of PTSD after childbirth
- When having ASD, the risk of developing PTSD was 8.1 times higher

n = 647 (419 women and 228 men)

Impact on the couple relationship

- PTSD undermines positive relationship processes and/or exacerbates negative relationship processes between partners -> lowers perception of couple relationship quality
- Meta-synthesis: childbirth-related PTSD can have a perceived negative impact on the couple relationship
- Metha-synthesis:
“shattered relationships”
as a central theme



Impact on the couple relationship

- women may blame their partners for the events that took place
- 64 couples completed questionnaires 9 weeks pp: no cross-sectional association between PTSD symptoms and couple relationship satisfaction
- Prospective population-based study: maternal PTSD symptoms following childbirth were prospectively related to low couple relationship satisfaction at two years postpartum, mediated by postpartum depression symptoms

Impact on the couple relationship

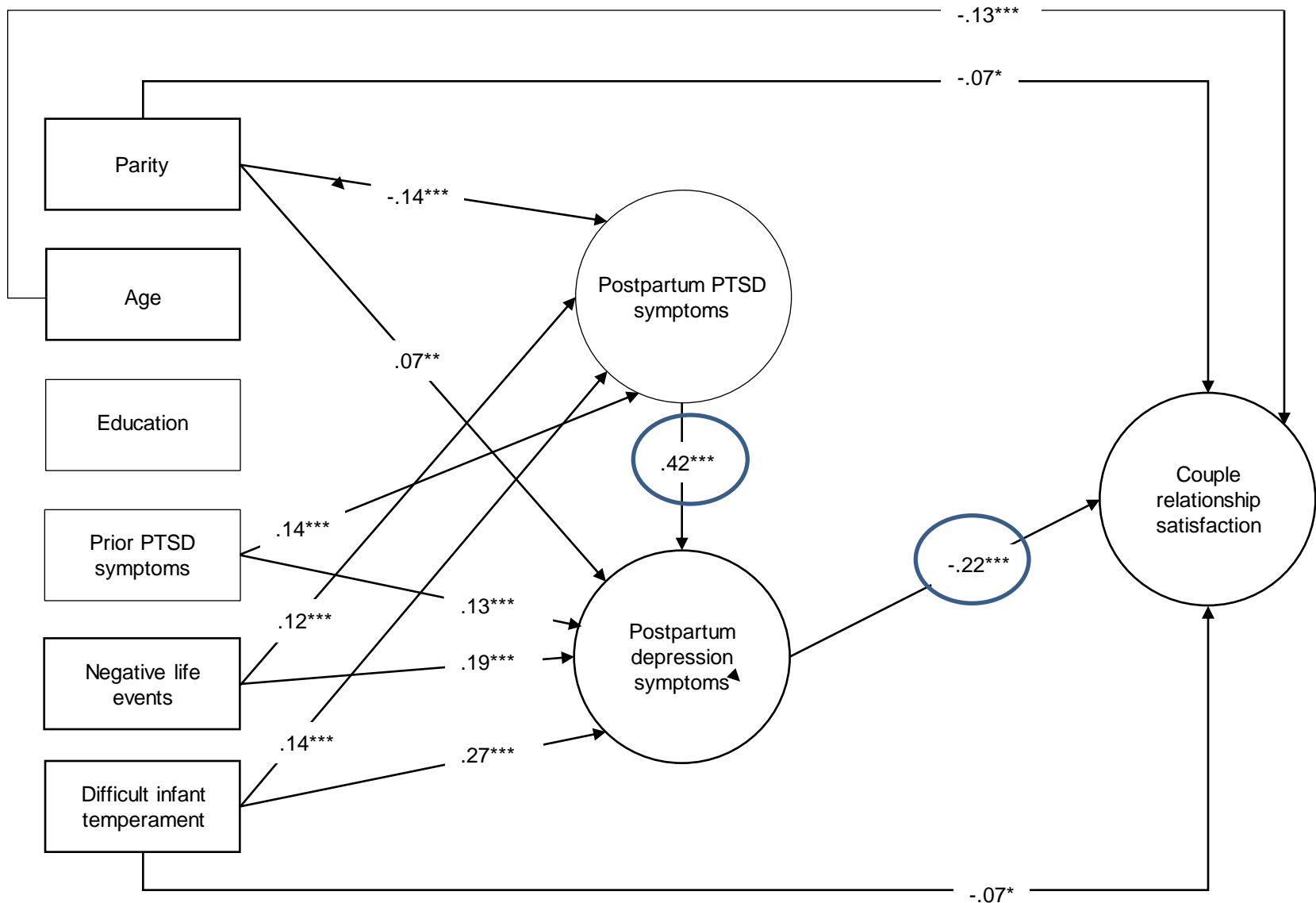
- Pp PTSD symptoms prospectively related to low couple relationship satisfaction at 2 years pp, even when controlling for background factors
- When including pp depression symptoms as predictor in the analyses, the effect of postpartum PTSD is no longer significant
- Pp depression symptoms act as a significant mediator, fully explaining the association of pp PTSD with couple relationship satisfaction



<https://maternitycare.es/postparto/cuidados-postparto/>

ABC study: prospective
cohort study
N = 2106
Self-report questionnaires and
hospital medical records

Full mediation model predicting couple relationship satisfaction



RMSEA = .03, CFI = .96, TLI = .95

*** $p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$ (non-significant pathways are not shown)

Impact on mother-infant relationship

- One of the symptoms of PTSD is emotional detachment, and mothers may therefore be less able to feel and show affection towards their baby.

Caring for their baby continues to be a reminder of traumatic experiences, which may in turn make it harder for them to develop strong bonds and secure attachments with their baby.



'It all felt surreal though. I felt as if she was not my baby and, because I connected her with the traumatic experience I had had, it took a while for us to bond.' (Jane, BTA, 2005)

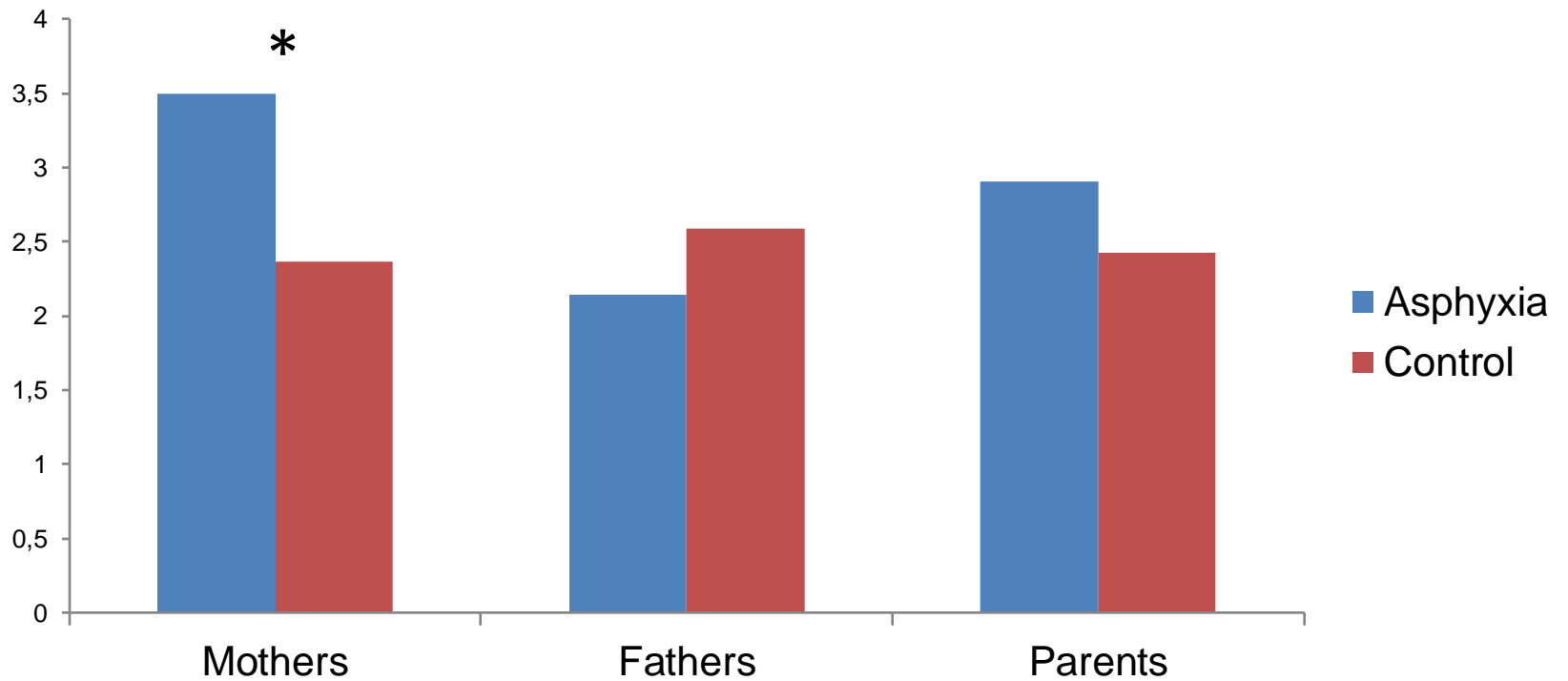
'Mechanically I'd go through the motions of being a good mother. Inside I felt nothing.'
(Ayers et al., 2007, p.220)



Impact on mother-infant relationship

- Traumatized mothers have been shown to be more controlling and less sensitive towards their child.
- They also report being overprotective towards their children. This may be a consequence of hypervigilance, one of the symptoms of PTSD.
- Traumatized mothers struggle to be available for the regulation of their infants' emotions, arousal, and aggression during and immediately following a stressful interaction.
- Negative impact on bonding

Parent-Infant Bonding



Impact on prenatal attachment

PTSD symptoms following childbirth prospectively predicted **higher levels of prenatal attachment** in the subsequent pregnancy

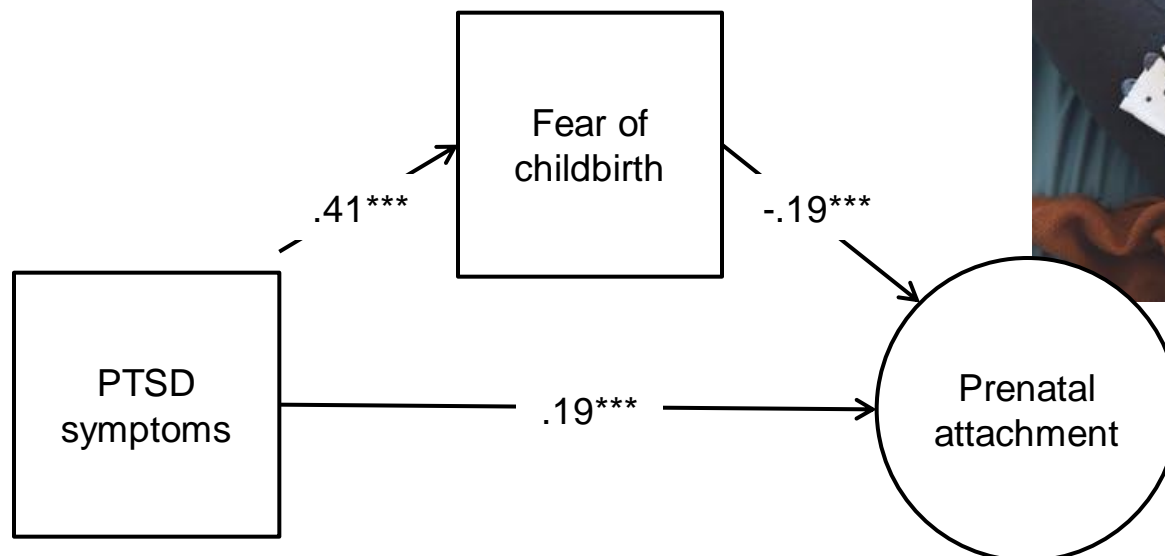
- Whilst controlling for important confounding factors

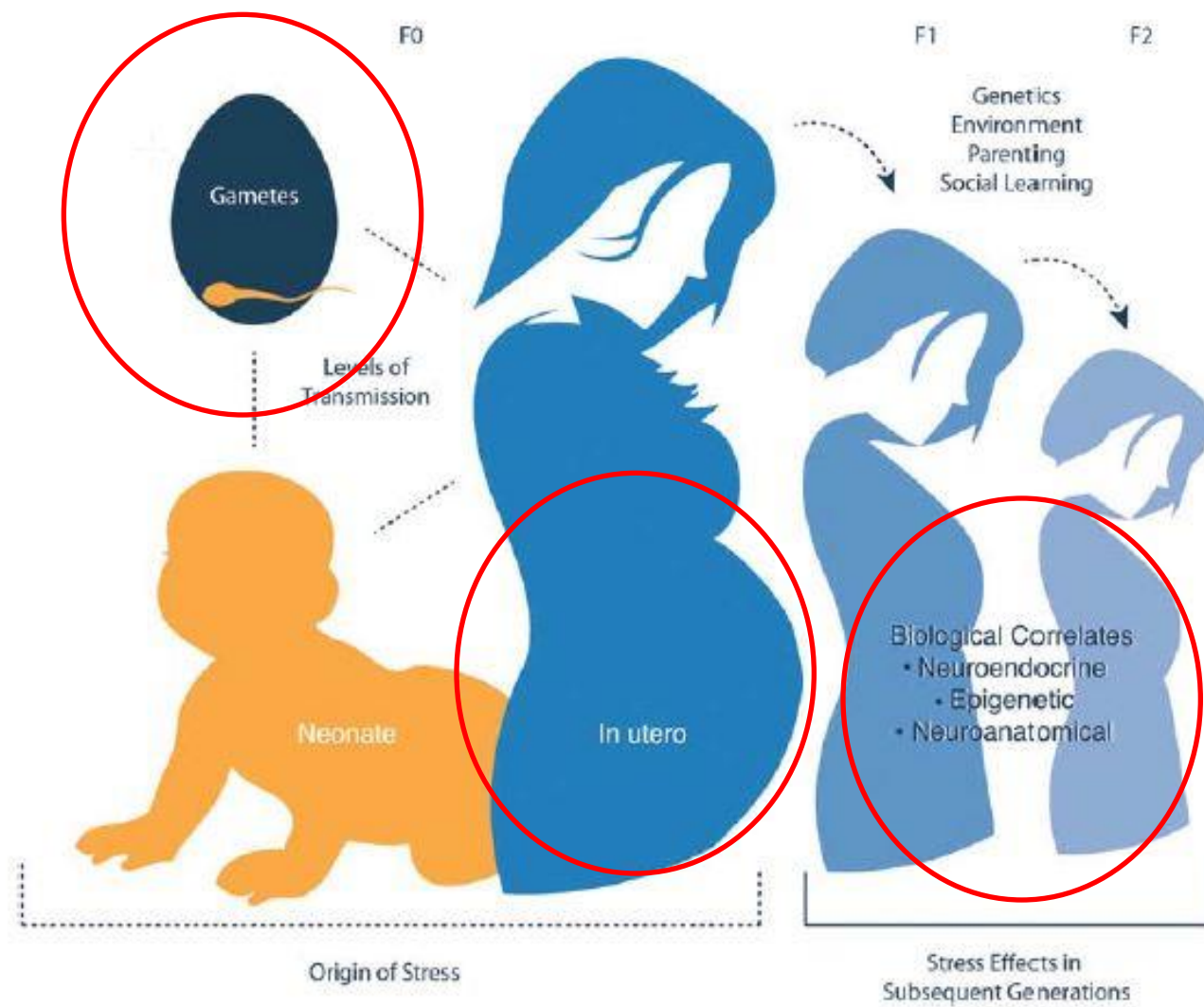
Fear of childbirth as suppressor

- Increasing the positive prospective relationship

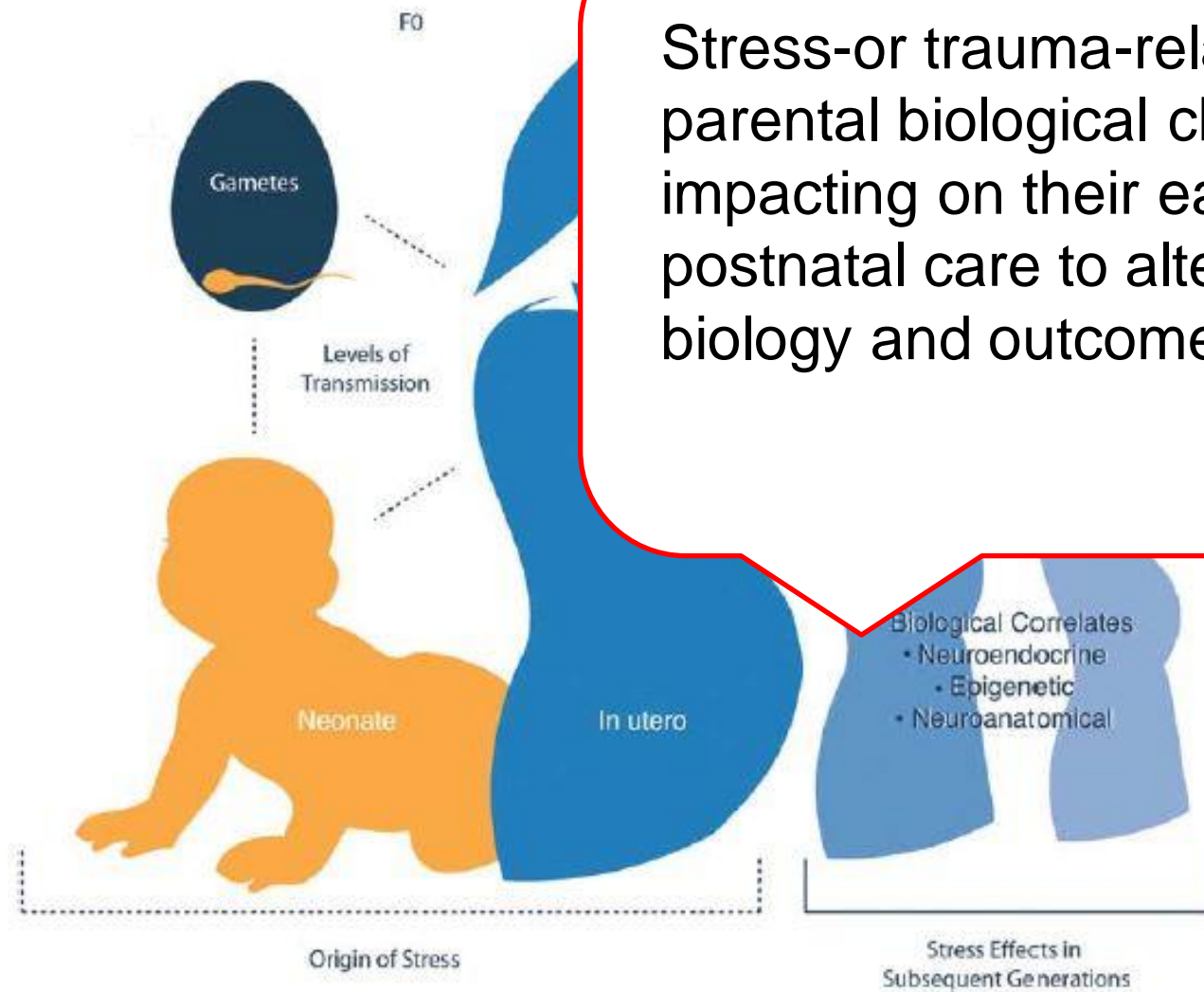


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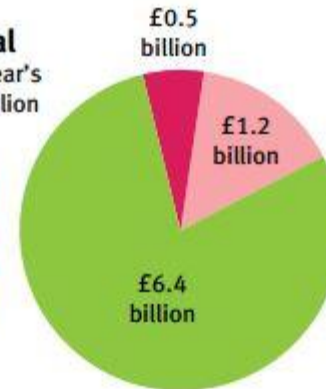
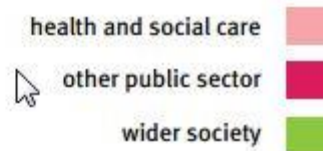


Bowers & Yehuda (2016); Monk et al. (2019); Horsch & Stuijfsand (2019)



Key points from the report

Known costs of perinatal mental health problems per year's births in the UK, total: £8.1 billion

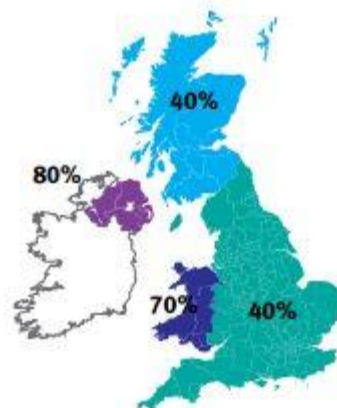


Of these costs
28%
relate to the mother
72%
relate to the child



Up to 20%
of women develop a mental health problem during pregnancy or within a year of giving birth

Women in around half the UK
have **NO** access to specialist perinatal mental health services



Suicide
is a leading cause of death for women during pregnancy and in the year after giving birth



Costs v improvement
The cost to the public sector of perinatal mental health problems is **5 times** the cost of improving services.

Bauer et al. (2014)

Impact on child outcomes

- Breastfeeding
- Child sleep
- Child emotion regulation
- Child development



http://jennifermasonphotography.com/pp_gallery/birth-gallery/

Garthus-Niegel, Ayers, von Soest, Eberhard-Gran (2017). *Psychological Medicine*.

Garthus-Niegel*, Horsch*, Ayers, Junge-Hoffmeister, Weidner, Eberhard-Gran (2018). *Birth*.

Cook, Ayers, & Horsch (2018). *Journal of Affective Disorders*

Garthus-Niegel*, Horsch*, Bickle Graz, Martini, von Soest, Weidner, Eberhard-Gran (2018). *Journal of Affective Disorders*.

Sandoz, Bickle-Graz, Camos, Horsch (2019). *Acta Paediatrica*

I Impact on breastfeeding

- Akershus Birth Cohort (ABC) study: prospective cohort study
- N = 1,480
- Self-report questionnaires and hospital medical records



http://www.huffingtonpost.com/diana-west/smart-bedsharing-gives-br_b_5662733.html

I Impact on breastfeeding



| | Non-initiation of breastfeeding |
|-------------------------|---------------------------------|
| pp PTSD | 0.15*** |
| Avoidance symptoms | 0.12*** |
| Intrusion symptoms | 0.06* |
| Maternal factors | |
| Age (years) | 0.03 |
| Educational level | -0.09*** |
| BMI | 0.12*** |
| Emergency CS | 0.10*** |
| Paid employment | -0.02 |
| Depression | 0.06* |
| Anxiety | 0.01 |
| Child factors | |
| Sex | 0.02 |
| Apgar score 1 min | 0.01 |
| Apgar score 5 mins | -0.00 |
| Apgar score 10 mins | 0.01 |
| Prematurity | 0.04 |
| Difficult temperament | 0.01 |

6-fold increased risk to not breastfeed

Results of stepwise logistic regression analyses with variables predicting non-initiation of breastfeeding

| Risk factors | aOR | 95%-KI | p-value |
|----------------|------|------------|---------|
| <i>Model 1</i> | | | |
| pp PTSD | 8.43 | 2.67-26.62 | 0.000 |
| <i>Model 2</i> | | | |
| pp PTSD | 6.51 | 2.00-21.18 | 0.002 |
| BMI | 1.10 | 1.04-1.18 | 0.003 |
| <i>Model 3</i> | | | |
| pp PTSD | 5.98 | 1.79-19.97 | 0.004 |
| BMI | 1.09 | 1.02-1.17 | 0.008 |
| Emergency CS | 2.48 | 1.05-5.85 | 0.038 |

Garthus-Niegel*, Horsch*, et al. (2018)

II Impact on child sleep

- Akershus Birth Cohort (ABC) study: prospective cohort study
- $N = 1,480$
- Questionnaires at 8 weeks and 2 years postpartum
- Hospital medical records



Garthus-Niegel*, Horsch*, et al. (2018)

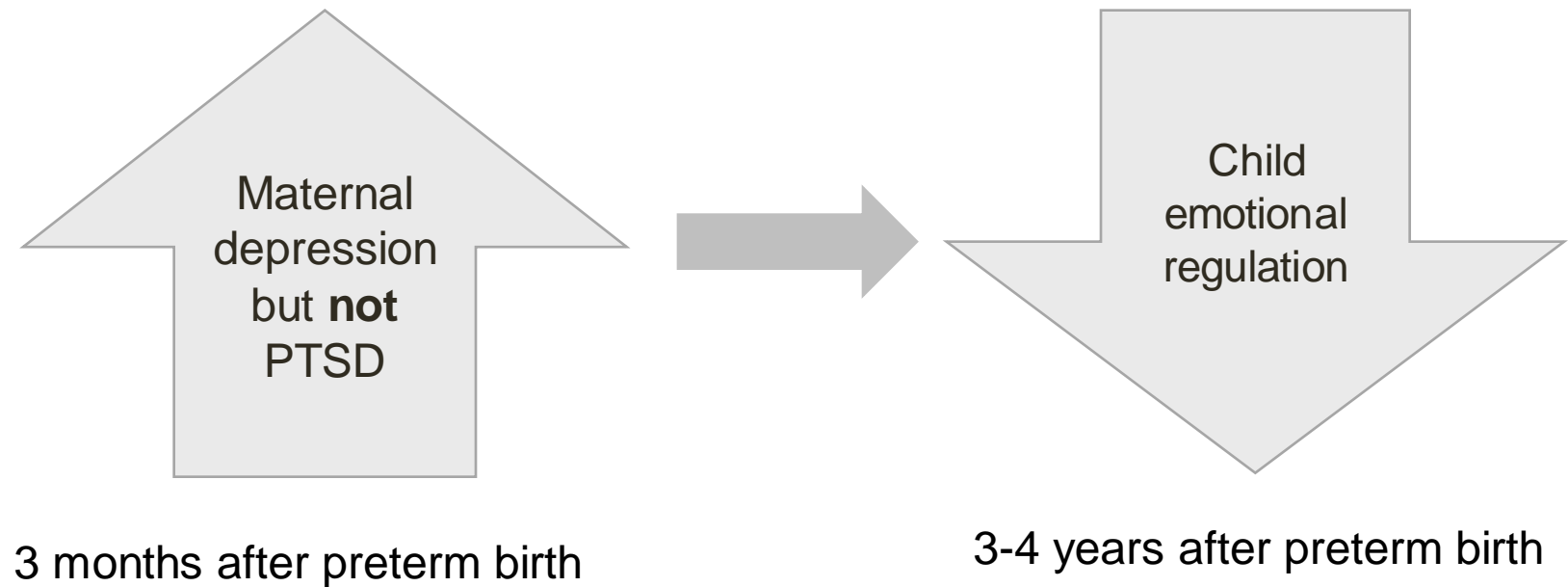
II **Children sleep worse** Impact on child sleep

Results of multiple linear regression analyses with variables predicting child sleep (2yrs pp)

| | Nocturnal sleep duration | Total sleep duration | Number night wakings | Duration wakefulness | Settling time | Perceived child sleep problems |
|-------------------------------------|--------------------------|----------------------|----------------------|----------------------|---------------|--------------------------------|
| PTSD ¹ symptoms | -0.03 | -0.04 | 0.11 | 0.09 | 0.09 | 0.12 |
| <i>Maternal factors²</i> | | | | | | |
| Depression symptoms | -0.02 | 0.01 | -0.01 | -0.07 | -0.02 | 0.00 |
| Anxiety symptoms | -0.09 | -0.08 | 0.00 | 0.11 | 0.08 | 0.03 |
| Prior PTSD symptoms | | | | 0.04 | | |
| Insomnia symptoms | | | 0.08 | 0.02 | 0.00 | 0.02 |
| Age (years) | | | 0.10 | 0.12 | 0.08 | 0.11 |
| Breastfeeding | | | 0.07 | 0.06 | | 0.09 |
| <i>Child factors²</i> | | | | | | |
| Birth weight | | | -0.06 | | | |
| Difficult infant temperament | -0.06 | -0.05 | -0.01 | 0.05 | 0.08 | 0.12 |
| Health problems | | | 0.04 | | 0.04 | 0.09 |
| <i>Child sleep³</i> | | | | | | |
| Number night wakings | | | 0.13 | 0.11 | | 0.10 |
| Settling time | | | 0.07 | 0.03 | 0.03 | 0.03 |

Garthus-Niegel*, Horsch*, et al. (2018)

III Impact on child emotional regulation



IV Impact on child development



IV Impact on child development

- Akershus Birth Cohort study
- N = 1472
- 4 areas of child development 2yrs postpartum
 - Gross motor development
 - Fine motor development
 - Communication development
 - Social-emotional development



Garthus-Niegel et al. 2017

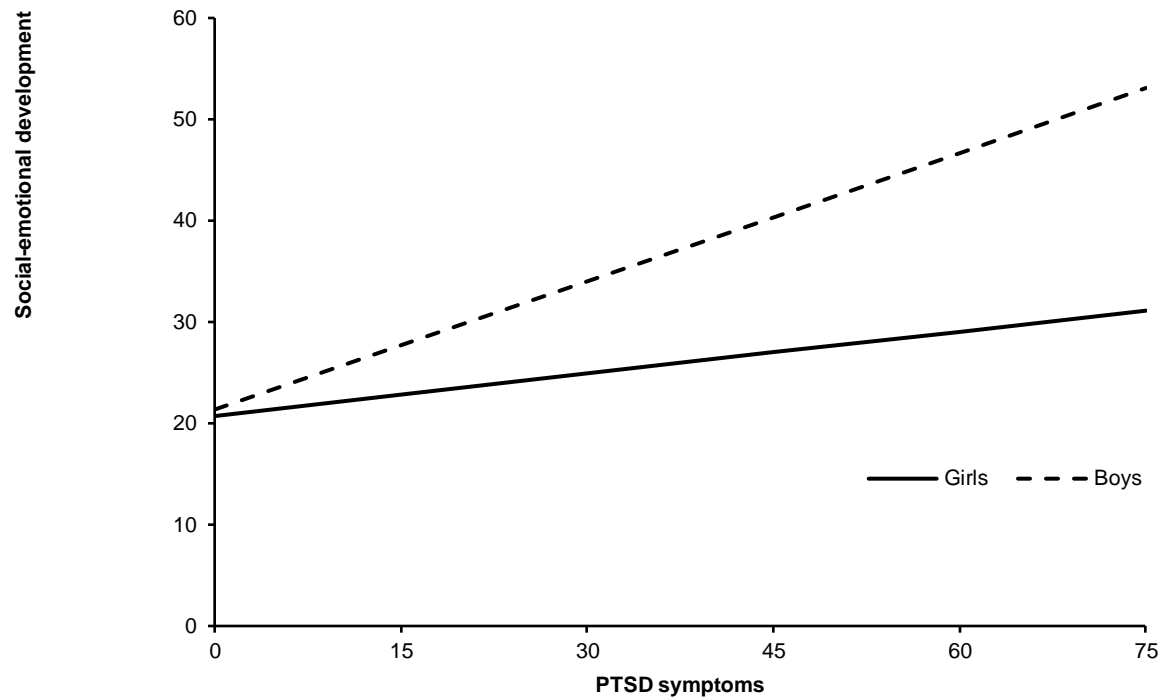
IV Impact on social-emotional development

Results of multiple regression analyses

| Variable (<i>time point measured</i>) | Social-emotional development 2 years postpartum |
|--|--|
| | β |
| PTSD symptoms (8 weeks postpartum) | .08** |
| <i>Maternal factors</i> | |
| Depression symptoms (8 weeks postpartum) | .12** |
| Anxiety symptoms (8 weeks postpartum) | .03 |
| Age (at birth) | -0.01 |
| Education (at birth) | -.10*** |
| <i>Child factors</i> | |
| Child sex (at birth) | .05 |
| Prematurity (at birth) | .07** |
| Difficult temperament (8 weeks postpartum) | .17*** |
| Current health problems (2 years postpartum) | .04 |
| R ² | .12 |
| F | 19.51 |

IV Impact on child development

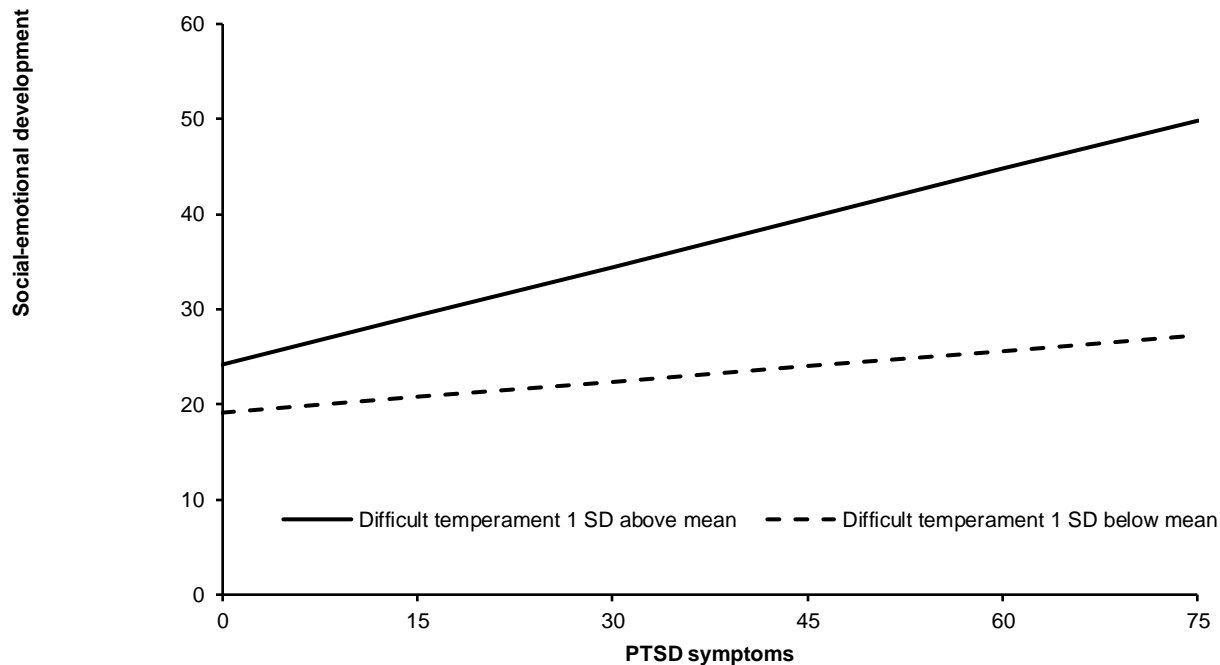
Especially boys are affected...



Interaction between child sex and maternal PTSD symptoms 8 weeks postpartum on problems in social-emotional development at two years of age

IV Impact on child development

...and children with a difficult temperament



Interaction between children's difficult temperament and maternal PTSD symptoms 8 weeks postpartum on problems in social-emotional development at two years of age

Summary

- Postpartum PTSD affects not only the mother but entire family
- Short- and longterm consequences
- Enormous costs



Thank you!





Research Topic

Perinatal Mental Health: Expanding the Focus to the Family Context

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About this Research Topic

In the past decades, there has been increasing focus not only on obstetric and neonatal factors related to pregnancy and childbirth, but also on psychosocial ones, such as perinatal mental health (i.e. mental health during pregnancy and within the first year postpartum). This was, for example, seen in the first decade of research on perinatal loss and on postnatal depression. More recently, research on psychological reactions to pregnancy and childbirth has also focused on fear of childbirth, anxiety and posttraumatic stress symptoms following childbirth. Though it seems obvious that the literature should involve the majority of research on perinatal mental health has focused only on (expectant) mothers. We aim to expand the focus by adding the perspective of fathers/partners, as well as the wider family. We would like to encourage research including the psychosocial impact of pregnancy and childbirth on both parents' and family mental health, as well as the impact of their mental health on other relevant outcomes, such as family relationships and different aspects of child development.

Our aim with this Research Topic is to form a collection of articles, which together will help researchers and clinicians, on the one hand, to learn how the family context affects parental mental health issues and, on the other hand, how pregnancy and childbirth related mental health issues may affect not only the couple but also the wider family. This may help to better understand the lived experience of (future) parents and other family members during the perinatal period, and important mental health issues that may arise. In addition, it may help to identify risk and protective factors for perinatal mental health problems. In turn, this knowledge may facilitate the development of ways of supporting women and families from pregnancy to postpartum, including evidence-based interventions aimed at prevention and/or treatment.

Topic Editors



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Following



Following

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