

# Preterm birth and perinatal parental mental health

Prof Antje Horsch

Institute of Higher Education and Research in  
Healthcare, University of Lausanne, Switzerland  
Neonatology Service, Department Woman-Mother-  
Child, Lausanne University Hospital, Switzerland

[Antje.Horsch@chuv.ch](mailto:Antje.Horsch@chuv.ch)



*What I found pretty hard was when I gave birth, when [baby] was born, I was not actually able to see him till I could stand up and I really had to push myself to get up so I can go see my son. That was pretty traumatic* (Fowler et al., 2019)

*I have anxiety and stress. I know that other babies, like mine, who were prematurely born and had immature lungs, faced many problems later in their life* (Garel et al., 2007)

***I feel like I failed as a human being able to keep this baby inside me. I had one job and I failed at that...*** (Fowler et al., 2019)

*When you have a premature child, you don't take the development for granted like you do with term-born children* (Kynø et al., 2013)

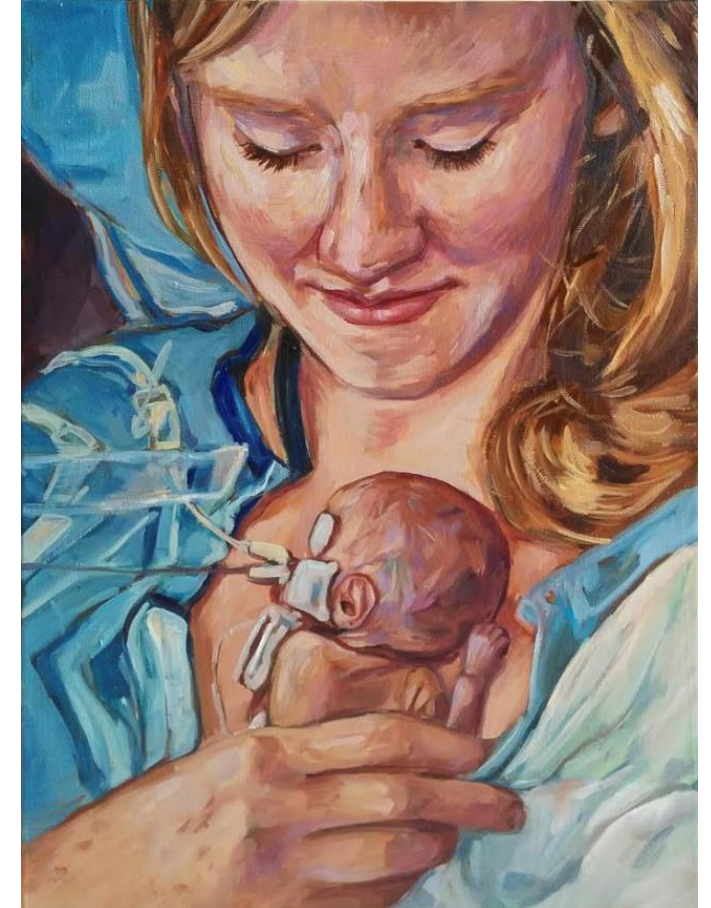


*It's really stressful because all you want is for your child to be okay. You're not going to know that and no one is going to give you the answers for that* (Fowler et al., 2019)

# Parental experience of preterm birth

Preterm birth is **stressful** for the parents

- Hospitalization in the **NICU** :
  - Traumatic and stressful
  - Unfamiliar, high-tech environment
  - Limited (or no) contact with the baby soon after birth
- Shock of **giving birth earlier** than expected and alterations of **parental role expectations**
- **Uncertainty** regarding the child's prognosis
- **Lower perceived parental self-efficacy**



# Parental experience of preterm birth

- **Returning home** after hospital discharge:
  - Feeling of **isolation**
  - Difficulties in **parental role** development
  - Difficulties in the development of **parent-infant relationships**
  - Risk and fear of **re-hospitalization**
- In the long term, raising a child who may have **poor health and additional needs**

Early parental stress has an impact on **parental mental health**





# Maternal mental health

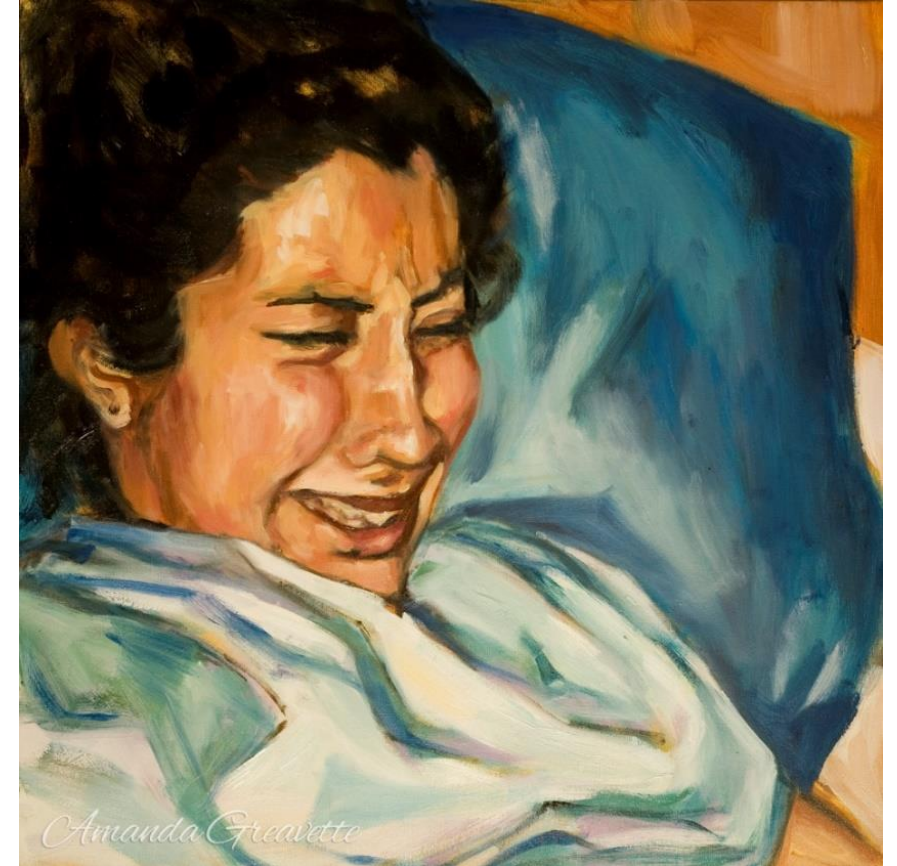
## Meta-analyses:

- 1 m after baby's admission to NICU: 42% anxiety and 40% PTSD symptoms
- From 1 m to 1 y after birth: 26 % anxiety and 25% PTSD symptoms (PTSD remains at 27% more than 1y pp)
- Increased risk of PPD: 40% up to 24 w pp



# Impact on mothers

- Symptoms tend to persist over the long term
- Mothers of premature babies are more likely to have health problems and use fewer postnatal services and support than other mothers
- Lack of social support and socio-economic background influence symptoms



Horsch, Tolsa, Gilbert, Du Chêne, Müller-Nix & Bickle Graz (2016). *Child Psychiatry & Human Development*.

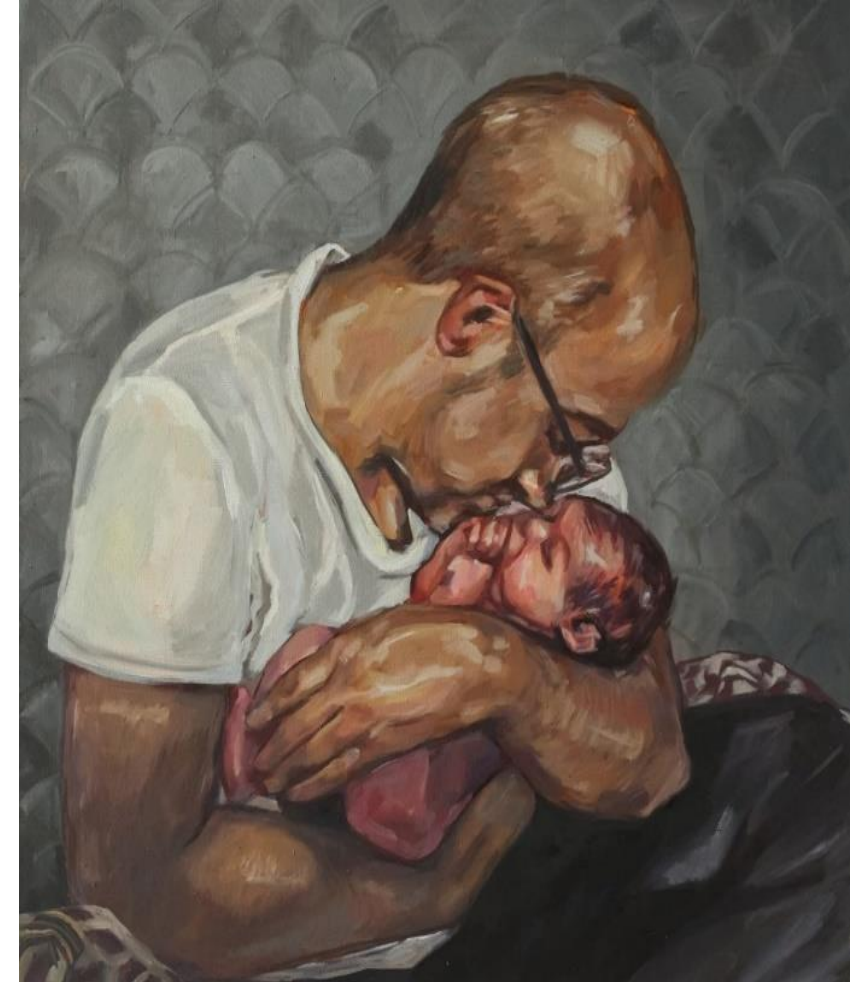
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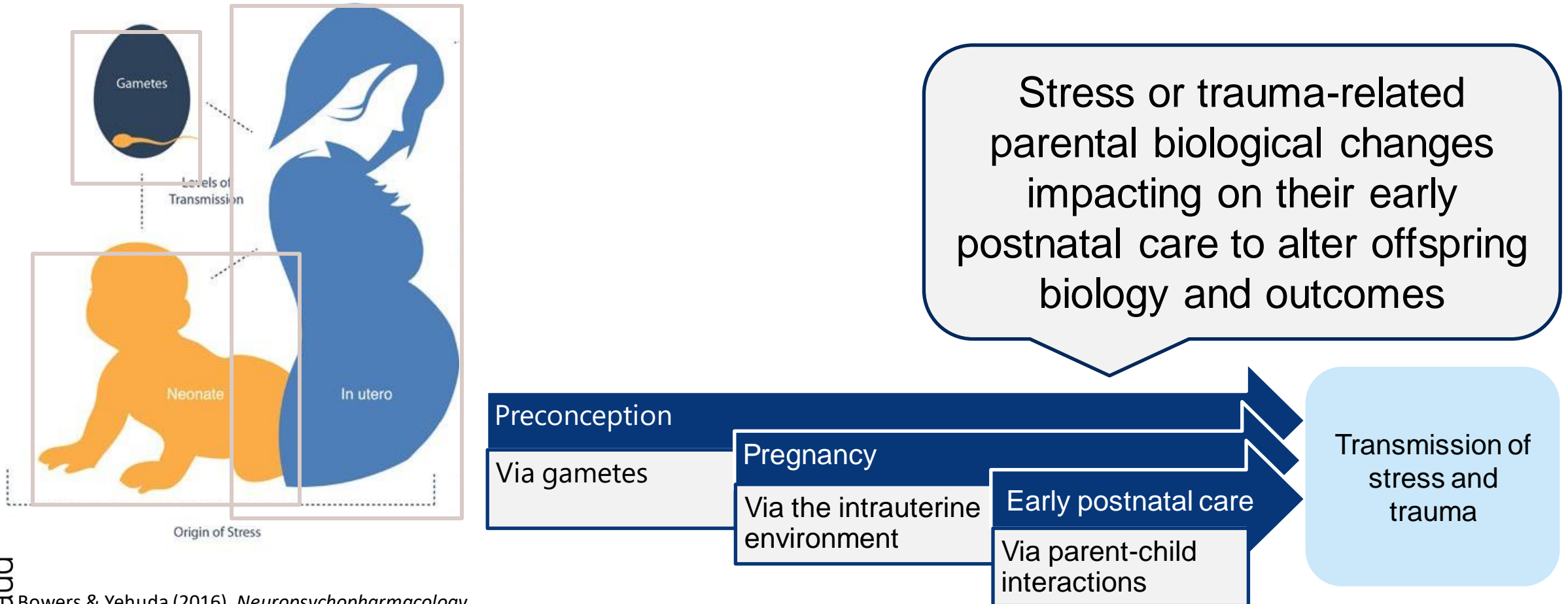
# Paternal mental health

- Higher levels of depression
- More anxiety
- Higher risk of PTSD: At term, 12 and 24 months, 35%, 25%, and 19%.
- Similar to what has been observed in mothers
- Lack of research





# Intergenerational transmission





# Impact on the mother-infant relationship

## Inconsistent results

- More controlling and less sensitive
- Over-protective
- Less available to regulate their child's emotions
- Negative impact on the emotional bond
- **Meta-analysis:** mothers of premature babies are no less sensitive or receptive to their children than mothers of full-term babies.
- Self-reported vs. observed data



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

Horsch, Jacobs, Gilbert, Favrod, Schneider, Morisod Harari, & Bickle Graz (2017). *BMJ Paediatrics Open*.

Bilgin & Wolke (2015). *Pediatrics*.

# Impact on child development

- Children aged 2 y born very preterm of parents with clinically significant mental health problems 2 ½ times more likely to have **socio-emotional** problems
- Maternal PPD prospectively associated with **emotion regulation** problems in preschool children
- 40% of infants aged 1 y of mothers with PPD had delayed **motor** development
- Poorer **cognitive and learning** outcomes in infants aged 16 m of mothers with PPD
- Parenting behaviours impact on early **neurobehavioural** development





# Screening for CB-PTSD



***" Did you think your life was in danger?"***  
***" Did you think your baby's life was in danger? "***  
Likert scale: 1 = "Not at all" to 7 = "Extremely"

- Mothers are much more likely to feel that their baby's life is at risk than their own
- The 2 types of perceived threat...
  - were significantly higher in the high-risk sample than in the community sample
  - **identified mothers at risk of developing CB-PTSD up to 6 months postpartum**

**First step in the development of a brief screening tool  
for CB-PTSD**

- From 1 m pp: City Birth Trauma Scale (Ayers et al., 2018)

# Screening for depression: Whooley questions

- Questions for **depression identification** :
  - *During the past days/weeks/months, have you often been bothered by feeling down, depressed or hopeless?*
  - *During the past days/weeks/months, have you often been bothered by having little interest or pleasure in doing things?*
- If a parent responds positively to the depression identification questions, or **is at risk of developing a mental health problem**, or there is a clinical concern:
- Edinburgh Postnatal Depression Scale (EPDS; Cox et al., 1987)



# Screening for anxiety

- Questions for anxiety disorder identification, **2-item Generalized Anxiety Disorder scale** (GAD-2; Kroenke et al., 2007) :
  - *Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious or on edge?*
  - *Over the last 2 weeks, how often have you been bothered by not being able to stop worrying?*
- An answer of «not at all» scores 0, «several days» scores 1, «more than half the days» scores 2, «nearly every day» scores 3
- **If a parent scores 3 or more on the GAD-2 scale :**
  - 7-item General Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006)
  - Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983)

# Need for (early) interventions

That are :

- Easily accessible
- Easily integrated into routine care
- Cost-effective
- Overcome language barriers



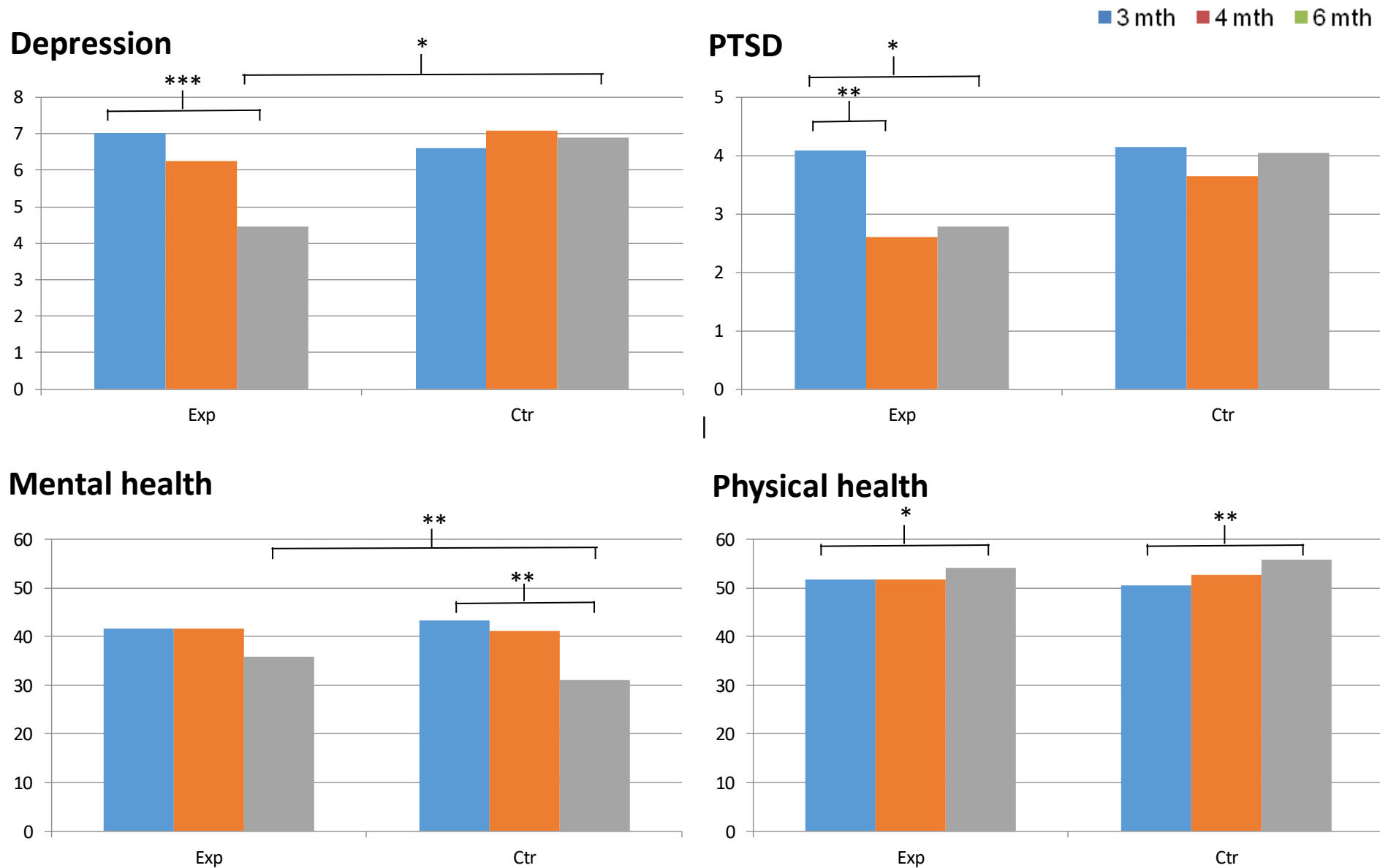
# Expressive writing



Photo: Courtesy of Neonatology Service, CHUV

- Write about the deepest thoughts and feelings related to the most traumatic aspects of your own experience.
- Write for 15 minutes for 3 days in a row.
- Once you've started writing, don't stop until 15 minutes have passed.
- Your text will then be destroyed.

# Expressive writing



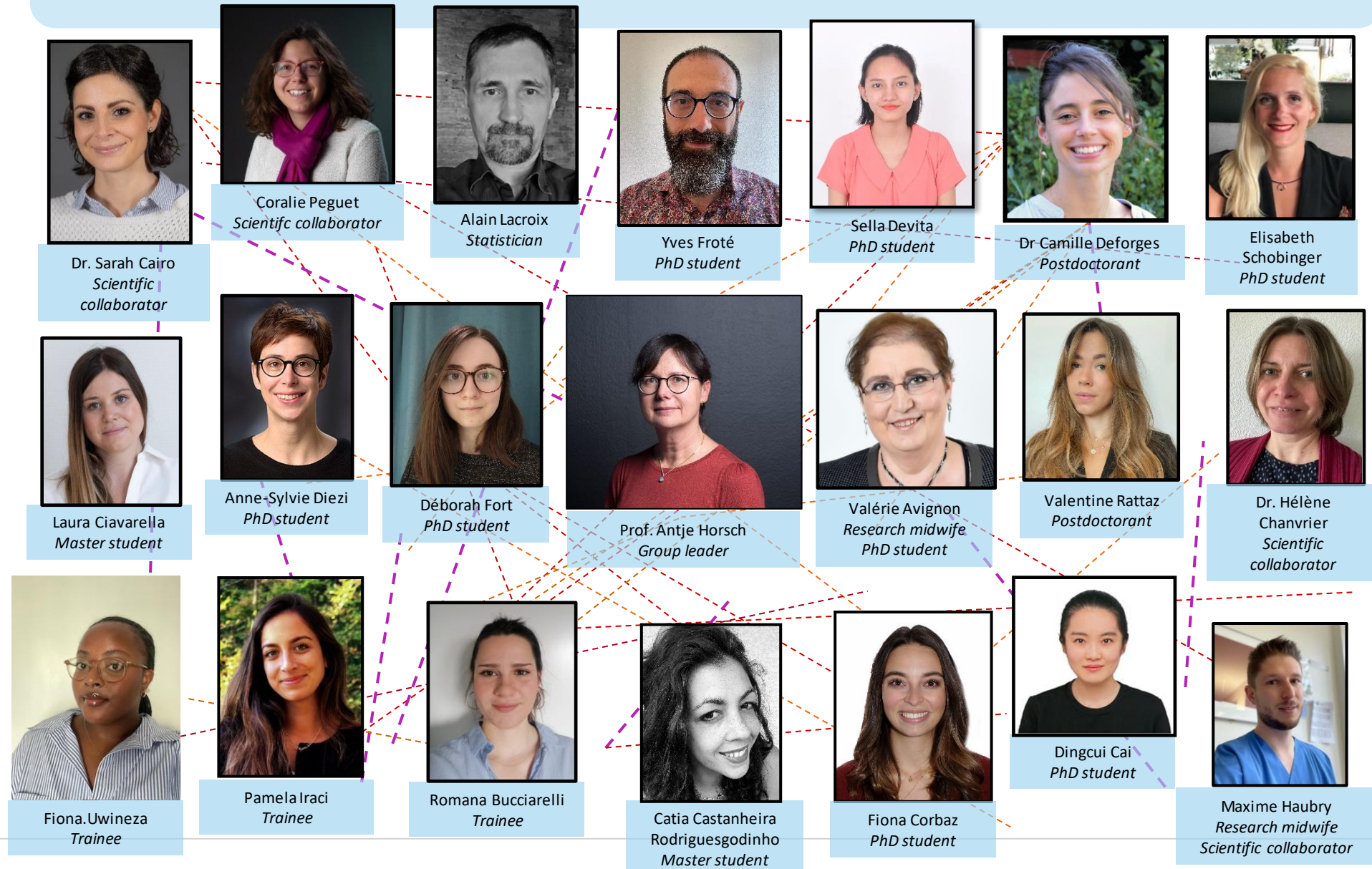


# Conclusions

- Parents of preterm infants are **at risk of mental health problems.**
- Parental mental health is an **important factor** affecting the parent-infant relationships and the child's development.
- It is crucial to **systematically screen** for depression, anxiety and PTSD during the early postpartum period for these parents.
- **Early interventions** are needed to mitigate these effects.



# LAUSANNE PERINATAL RESEARCH GROUP





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# Many thanks for your attention !



[antje.horsch@chuv.ch](mailto:antje.horsch@chuv.ch)



@DrAntjeHorsch  
@LPResGroup



Antje Horsch

