

# Dr Kim Alyousefi – van Dijk

## VIPP-PRE: Video-Feedback Therapy for Expectant Fathers Using Live Ultrasound Images

### Abstract

Despite evidence from scientific literature claiming that fathers are important for child development from the earliest stages of parenthood onward, (clinical) family services, as well as parenting research, still predominantly focus on mothers. Importantly, both mothers and fathers often experience the transition into parenthood as stressful whereas fathers specifically have little access to support within perinatal healthcare or parenting resources. A difficult transition into parenthood can affect fathers' mental health and ability to parent at a time when the infant needs physical and emotional support from its caregivers. Additionally, prenatal precursors of paternal behaviour have been documented, but the underlying mechanisms and developmental trajectories of perinatal paternal care are still poorly understood. In a series of randomized controlled trials (i.e., the *Father Trials* project, designed by prof. Bakermans-Kranenburg and prof. van IJzendoorn) we investigated the neurobiology, attitudes and behaviour of men's transition into parenthood.

As part of the project, we developed and tested the Prenatal Video-feedback Intervention to promote Positive Parenting (VIPPP-PRE), aimed at improving postnatal parenting sensitivity (i.e., quality) and involvement (i.e., quantity) in first-time fathers (preregistered here: <https://osf.io/4nyrx/>). With the use of ultrasound images, expectant fathers interacted with their unborn children and were given feedback aimed at improving their ability to detect and understand their child's behavioural signals as well as reinforcing fathers' timely sensitive responses to those signals. We found that the intervention is feasible and that fathers who received VIPPP-PRE as compared to fathers in the control condition reported to have gained more insight into their relationship with their child, a better understanding of their child and its feelings, and more insight into their communication with their child. Additionally, our studies indicate that after the birth of fathers' first child several neurobiological processes 'come online' and orchestrate the necessary changes for facilitating the transition into parenthood. However, we also found that fathers' parenting behaviours are associated with their own childhood experiences, specifically in those fathers with a particular neurobiological make-up (i.e., low structural connectivity in pathways associated with inhibitory control and emotional regulation).

With the development of an evidence-based short, prenatal, and interaction-focused parenting intervention for fathers, we hope to contribute to giving fathers the parenting resources families deserve.