The Premiestart Intervention Study: Helping parents help their preterm infants

The Premiestart intervention comprises 10 x 1-hour intervention sessions for parents of still-hospitalized preterm infants. It was modelled on the 1980s Mother-Infant Transaction Study, where an early parent-sensitivity/infant stress-reduction intervention resulted in cognitive advantages to the infants of intervention mothers, starting at 2 years of age, and increasing to 9 years of age.

We changed some of the intervention content based on recent research, the timing of the delivery and the population of preterm infants (our sample comprised infants born at less than 30 weeks of gestation).

One of the outcomes from our intervention was improved white matter (connective tissue) in the brains of babies of intervention mothers at 40 weeks of gestation (full-term equivalent).

Neuroplasticity is at its height at this very young age and it is possible that infant stress-reduction, as a result of parental sensitivity, has life-long positive effects on a child’s development. This ultra-early intervention, that has both short and long-term effects, is possibly due to changes in neural architecture of the infant as well as psychological processes in the dyad. This is especially important for preterm children who are at increased risk of developmental difficulties.

In this workshop participants will learn about:

- The effects of prematurity on child development, including cognitive and emotional outcomes
- The effects of prematurity on parental mental health and parenting practices
- The theory underpinning this type of intervention
- Long-term outcomes (for infants and mothers) from the Premiestart intervention
- Premiestart session-by-session content – participants will be supplied with the implementation manual

A practical component of the workshop will be to teach participants the observation skills taught to mothers, to increase their sensitivity to preterm infant cues.

References:


Biography
Dr Carol Newnham’s research focus has been on ultra-early interventions with preterm infants. She has planned and implemented programs for the mothers of preterm infants who were still in the Neonatal Intensive Care Unit. She also writes the magazine Premmipress and was the expert consultant for the Raising Premmies section of the Raising Children Network webpage. Dr Newnham has presented in many local, national and international forums. The overall aim of her work is to improve outcomes for children born prematurely.


Presenters’ Details

1. Dr Carol Newnham
   Senior Research Fellow
   Parent-Infant Research Institute
   Austin Health
   Melbourne

2. Carmel Ferretti
   Senior Research Fellow
   Parent-Infant Research Institute
   Austin Health
   Melbourne