



PremieStart: Beautiful Beginnings

The Parent-Infant Research Institute (PIRI) is dedicated in the quest to make a difference to the lives of premature babies and their families. Over the years we have engaged in a number of projects supporting this vulnerable group.

PIRI was awarded two successive four-year research grants from the National Health and Medical Research Council (NHMRC) to fund the evaluation of the PremieStart research program.

PremieStart makes a difference!

Mothers of babies born less than 30 weeks gestational age were a part of PremieStart, PIRI's program based on the most recent research into the brain development of premature babies and developed by Dr. Carol Newnham and Dr Carmel Ferreti.

Currently, up to 50% of Victorian preterm infants suffer from one or more developmental difficulties in early childhood. The PremieStart program is designed to make a difference to this at-risk population by reducing stress in the early months after birth – a time when infants are exposed to necessary but painful hospital procedures and are often unable to experience normal levels of physical interaction with their mothers.

PremieStart focuses on improving mother-baby interactions through an intensive 8-session training program, held with the mother while the babies are still in hospital.



Improving Medical, Neurobehavioural and Brain Functioning

PIRI designed and successfully piloted the PremieStart program to help parents and their very premature babies to adjust to each other in the early weeks after birth.

What did we find?

In our study for families of preterms we compared outcomes for 2 groups involving:

- 1 Ongoing contact with a psychologist/ therapist during the time with their baby in hospital.
- 2 Developmental measures around the time the baby would have been born if he or she was born at fullterm.
- 3 Two neurobehavioural assessments (at entry into the study and also at the time ythe baby would have been born if they had been born fullterm).
- 4 One group received our Premiostart interaction and the other Copies of the magazine Premiepress which are full of helpful information.

Our study aimed to evaluate the effectiveness of a simple, inexpensive program of stress-reduction for preterm infants (n=123) on measures of cognition and behaviour. We demonstrated some early advantages of the PremieStart program in infant development at 6 months and are now comparing developmental outcomes at 4 and 6 years and 9 years in intervention and control preterm children, alongside a matched full-term cohort (funded by NHMRC).

Milgrom, J., Newnham, C., Martin, P. R., Anderson, P. J., Doyle, L. W., Hunt, R. W., Gemmill, A. W. (2013). Early communication in preterm infants following intervention in the NICU. Early Human Development, 89(9), 755-762. <https://dx.doi.org/10.1016/j.earlhumdev.2013.06.001>.

