

23/06 - "Massagem ao Bebê Prematuro em Cuidados Intensivos Neonatais: Efeito no Funcionamento Psicofisiológico dos Bebés e Pais" - "Premature Infant Massage in Neonatal Intensive Care: Effect upon the Baby and Parents' Psychophysiological Performance"

Instituição/*Institution*: Cipsi, Universidade do Minho, Braga - Portugal

Duração prevista/*Estimated duration*: 2007/07 - 2010/04

Investigadores/*Researchers*: Prof. Doutora Bárbara Fernandes de Carvalho Figueiredo, Dra. Clara Sofia Domingues Paz Dias, Dra. Maria Alice Peixoto Freitas, Dra. Maria Agostinha Costa Andrade, Dra. Maria José Faria Novais Rebelo, Dra. Susana Nunes da Silva, Dra. Maria de Lurdes Alves Senra, Dra. Maria José Carvalho Ferreira, Dr. César Bessa Pinheiro Teixeira, Dra. Mariana Pinto Basto Teixeira, D. Diana Patrícia Pires Pinto, Dra. Mariana Bianchi de Aguiar, Dra. Ana Guedes, Dr. Pombeiro

Objectives: To study the impact of premature infant massage on the mother and father's anxiety and depression symptoms and marital relationship, as well as in their emotional involvement with the infant.

Participants: 30 mothers and 30 fathers that had a preterm baby with less than 34 weeks and/or 1500g admitted to a Neonatal Intensive Care Unit (NICU) (Oporto Hospital Centre, Portugal) between July 2007 and December 2008 were enrolled on an infant massage protocol.

Instruments: Self-measure questionnaires were used to assess mother and father depression (EPDS, Edinburgh Postnatal Depression Scale), anxiety (STAI, State Trait Anxiety Inventory), couple relationship (RQ, Relationship Questionnaire), and emotional involvement (BS, Bonding Scale) with the infant.

Procedures: Mother and fathers were assessed in two stages: in the NICU they were asked for informed consent and self-measure questionnaires (pre-test), 1 month later (post-test) they were assessed using the same instruments from stage one. In between the mother and father were taught how to massage, and provide massage to their infant once a day in the NICU and later at home.

Results: No significant differences were found between measuring time points [$F(3,9)=1,65;p=0,23$]. No significant differences were found between pre and post-test measurement of mother/father's anxiety [$F(1)=1,17;p=0,30$], depression [$F(1)=3,14;p=0,10$], couple relationship [$F(1)=3,24;p=0,09$], and emotional involvement with the infant [$F(1)=2,27;p=0,15$]. No significant differences were found between gender [$F(3,9)=1,34;p=0,31$]. This also applies to gender differences in anxiety [$F(1)=1,68;p=0,22$], depression [$F(1)=2,62;p=0,13$], couple relationship [$F(1)=1,92;p=0,19$], and emotional involvement with the infant [$F(1)=3,10;p=0,10$]. The interaction between measuring time points and gender was also not significant [$F(3,9)=1,56;p=0,25$].

Conclusion: Although not significantly at this stage, results regarding mothers' anxiety and depression (but not results regarding mothers' couple relationship and involvement with the infant) and results regarding fathers' emotional involvement with the infant (but not results regarding fathers' anxiety, depression and couple relationship) pointing to our general hypothesis – over time the depressive and anxious symptoms decrease in mothers and the emotional involvement with the infant increase in fathers who provide massage to their premature infant. Generally men and women behave similarly, but while mother emotional involvement with the infant decrease over time, in the father it increases.

Publications:

Bianchi Aguiar, M. & Figueiredo, B. (2009). Prematuridade e baixo peso à nascença. *Nursing, in press.*

Figueiredo, B., & Aires Pereira, M. (2010). Anxiety, depression and marital relationship in preterm and term mothers and fathers. *Journal of Developmental & Behavioral Pediatrics, submitted.*

Figueiredo, B., & Aires Pereira, M. (2010). Premature infant massage improves mother and father's well-being.

Keywords: infant massage, preterm infants, preterm mothers and fathers, Neonatal Intensive Care Unit.