Effect of prematurity, early separation and mother's bonding difficulty on children's play narratives

Reija Latva, MD
Tampere University Hospital, Finland
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reija.latva@pshp.fi

Introduction

- Maternal attachment is a central factor affecting the development of the mother-child relationship.
- A delay in maternal attachment
  - among all mothers, 8.5 – 15% (Edelborg et al. 2005, Brockington etl al. 2004).
  - mothers of preterm infants are especially vulnerable to the delay in maternal attachment (Feldman et al. 1999).
- Early separation of the infant
- Alteration of the parental role

à psychological distress to the mothers of preterm infants

à mother's attachment to infant

  à the quality on mother-infant interactions and long-term effects on parenting

  à the emotional and cognitive development of the child

Introduction

- A young child creates the mental representations of his/her parents from repeated interaction patterns with his/her parents (Bretherton et. al. 1999, Stern 1998)
- Play narrative methods assess children's mental representations of their experiences and relationships
  - secure attachment – positive parental representations and a good ability to address the story conflict (Bertherton et al. 1990, Cassidy 1988, Solomon et. al. 1995).
  - insecure attachment – difficulties to address story conflicts, incoherent stories, and anger between the child and caregiver doll (Bertherton et al. 1990, Goldwyn et al. 2000).
- Preterm birth, medical condition of the infant and early separation may increase the risk for insecure attachment pattern (Sajaniemi et al. 2001)

Objectives

- To explore whether prematurity, early separation and mother's bonding difficulty are related to children's narrative representations of the parents

- To find out whether early separation is related to child's ability to address the separation story conflicts

The characteristics of the children

	Preterm group (n = 28)				Control group (n = 40)			
	(%)	Md*)	Q_1, Q_3*)	Range	(%)	Md*)	Q_1, Q_3*)	Range
Gender, boy	50				41			
First-born child	50				51			
Birth weight (g)		2055	1659, 2308	900-2470		3630	3270, 3830	2680-4590
Gestational age (weeks)		33	32, 34	26-36		40	39,41	37-42
Length of hospital stay (days)		23	18, 28	6-109		-	-	-
Duration of ventilation treatment (days, n = 6)		2	1, 20	1-41		-	-	-
Duration of supplementary oxygen (days, n = 21)		2	1, 5	1-103		-	-	-
Duration of parenteral nutrition (days, n = 15)		4	3, 21	2-61		-	-	-

*) Md = median, Q1 = lower quartile, Q3 = upper quartile. There were no congenital anomalies in either of the groups.

- The mean age of the children were at the time of the study 6.2 years (SD 0.4, range 5.3-6.8)
- A total of 6/28 (21%) of preterm children had developmental difficulties at 5-6 years of age

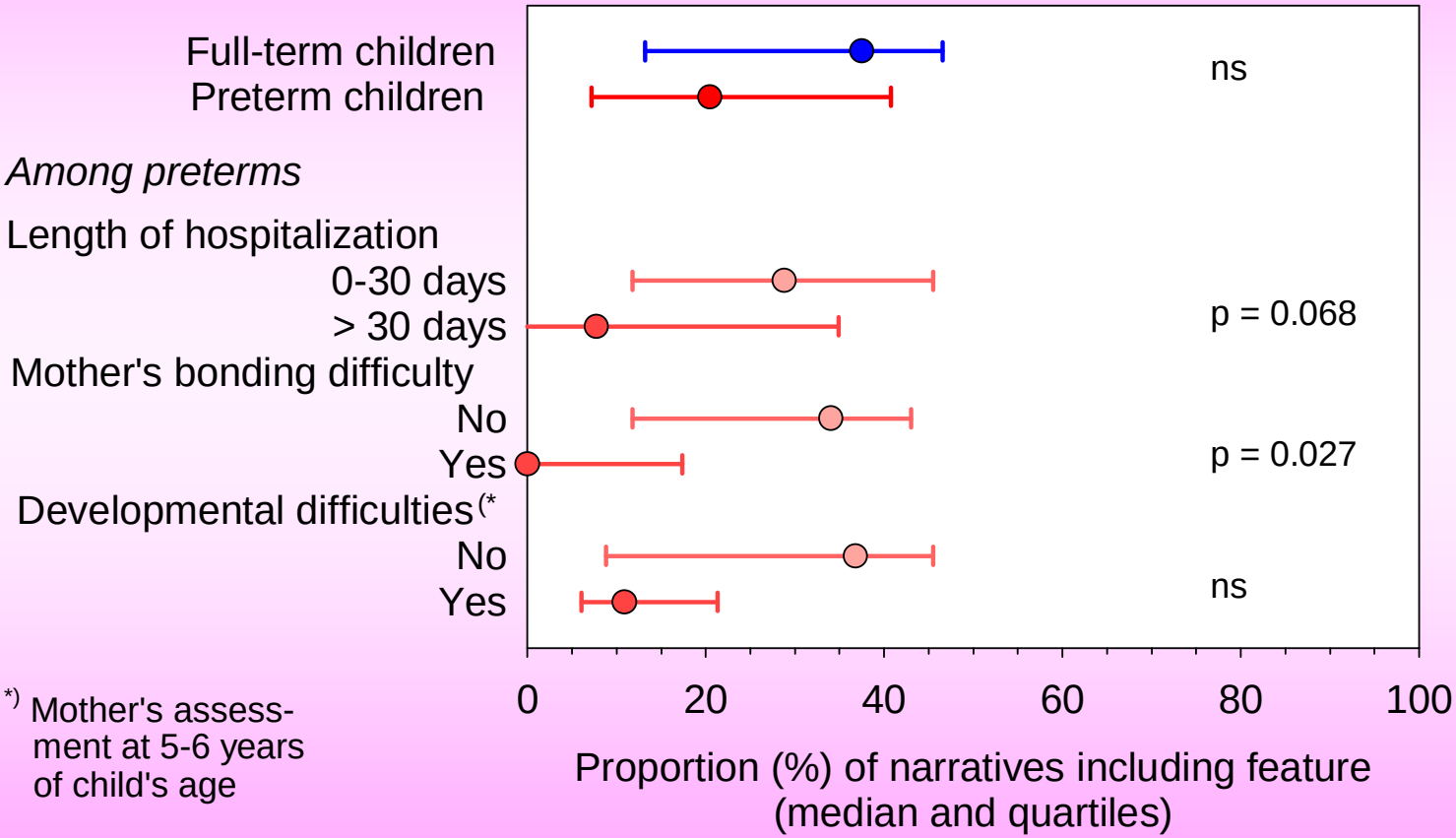
Methods

- MacArthur Story Stem Battery (MSSB, Bretherton et al. 1990)
  - a structured play method consisting of dramatic story beginnings to be completed by the child through narrative play
  - each child was administered nine MSSB story stems
    - Spilled juice, Monster, Hot Gravy, Lost keys, Departure, Reunion, Scary dog Hospital and Looking for the Barney.
- Clinical Interview for Parents of High-risk Infants (CLIP, Mayer et al. 1993)
  - a semi-structured interview developed to assess mother's experiences of the pregnancy, the delivery, the newborn, and her thoughts and feelings about the child

MSSB themes and dimensions

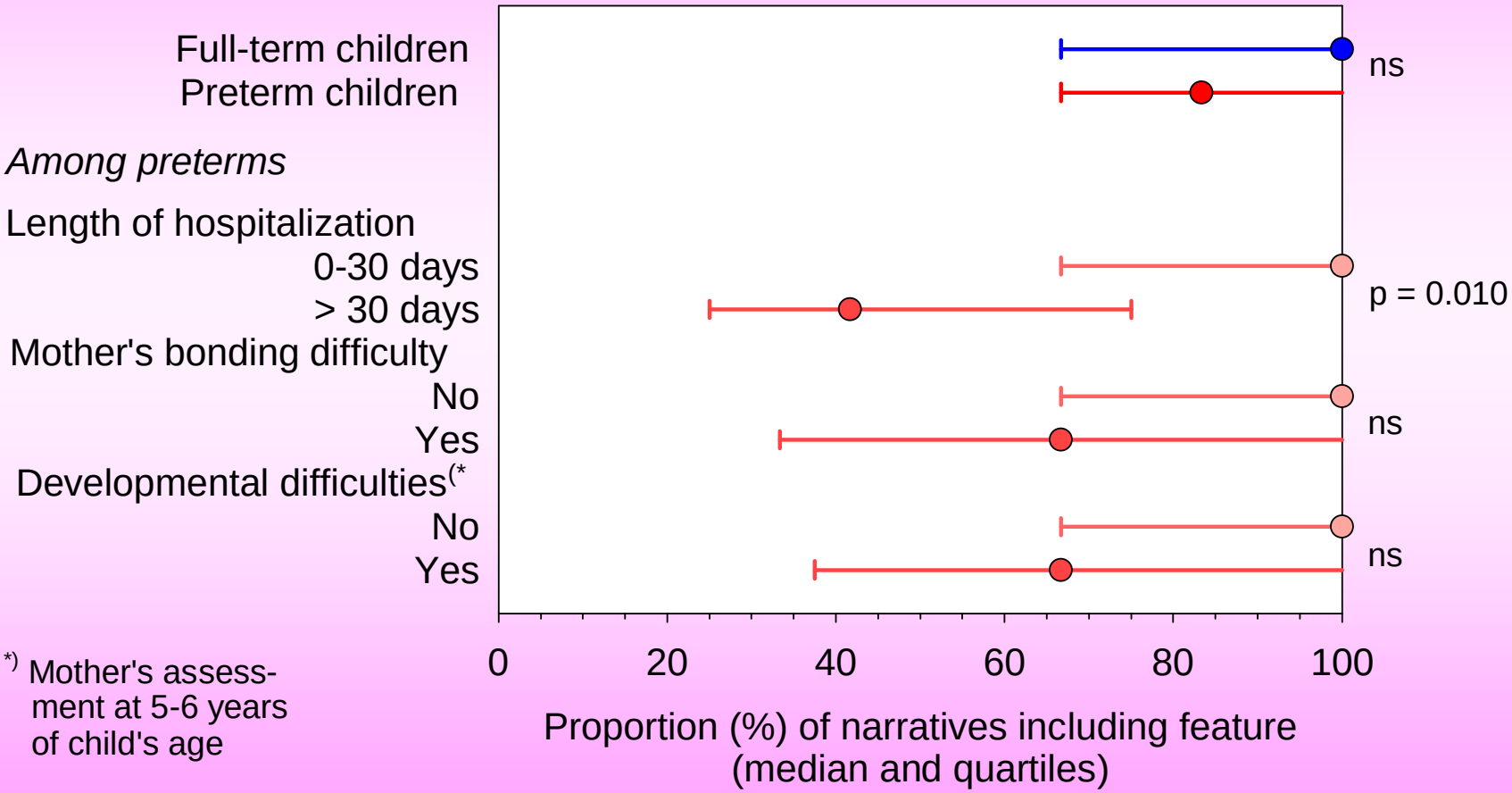
- Caring representations (Robinson J et al. 2004, unpublished)
  - the parent is taking care of the child
  - the parent is protecting the child from a possible or actual harm
  - the parent gives the child concrete help, or the parent acts warmly and supportively towards the child
  - child used a gentle, soothing tone of voice imitating parental ‘talk’
- Addressing the conflict of the story (Latva et al. 2008, unpublished)
  - no response / does not address / addresses but does not resolve / addresses and resolves
- Narrative coherence (Latva et al. 2008, unpublished)
  - no response / incoherent / partly incoherent / coherent

Caring representations across all stories



*) Mother's assessment at 5-6 years of child's age

Addressing and resolving the conflict across separation stories



*) Mother's assessment at 5-6 years of child's age

Conclusion

- Mothers' bonding difficulty was associated with lower proportion of caring representations in preterm children
  - lower proportion of caring representations may reflect the child's insecure attachment
- The length of early separation was associated with the preterm child's ability to address the conflicts of the separation stories
  - may reflect the child's insecure attachment
- Our findings emphasize the importance of supporting the mothers of preterm infants, especially in context of bonding difficulties and prolonged hospitalisation

Research Group

Tuula Tamminen, professor
Liisa Lehtonen, MD, PhD
Raili K. Salmelin, MSc, PhD
Pälvi Kaukonen, MD
Tarja Sorvali, MD
Suvi Pirkkalainen, medical student
Mika Martikainen, technical assistant
Juhani Halme, technical assistant

Correspondence: reija.latva@pshp.fi