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Together for better health

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

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# 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 et 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 <sup>*)</sup>	Q <sub>1</sub> , Q <sub>3</sub> <sup>*)</sup>	Range	(%)	Md <sup>*)</sup>	Q <sub>1</sub> , Q <sub>3</sub> <sup>*)</sup>	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

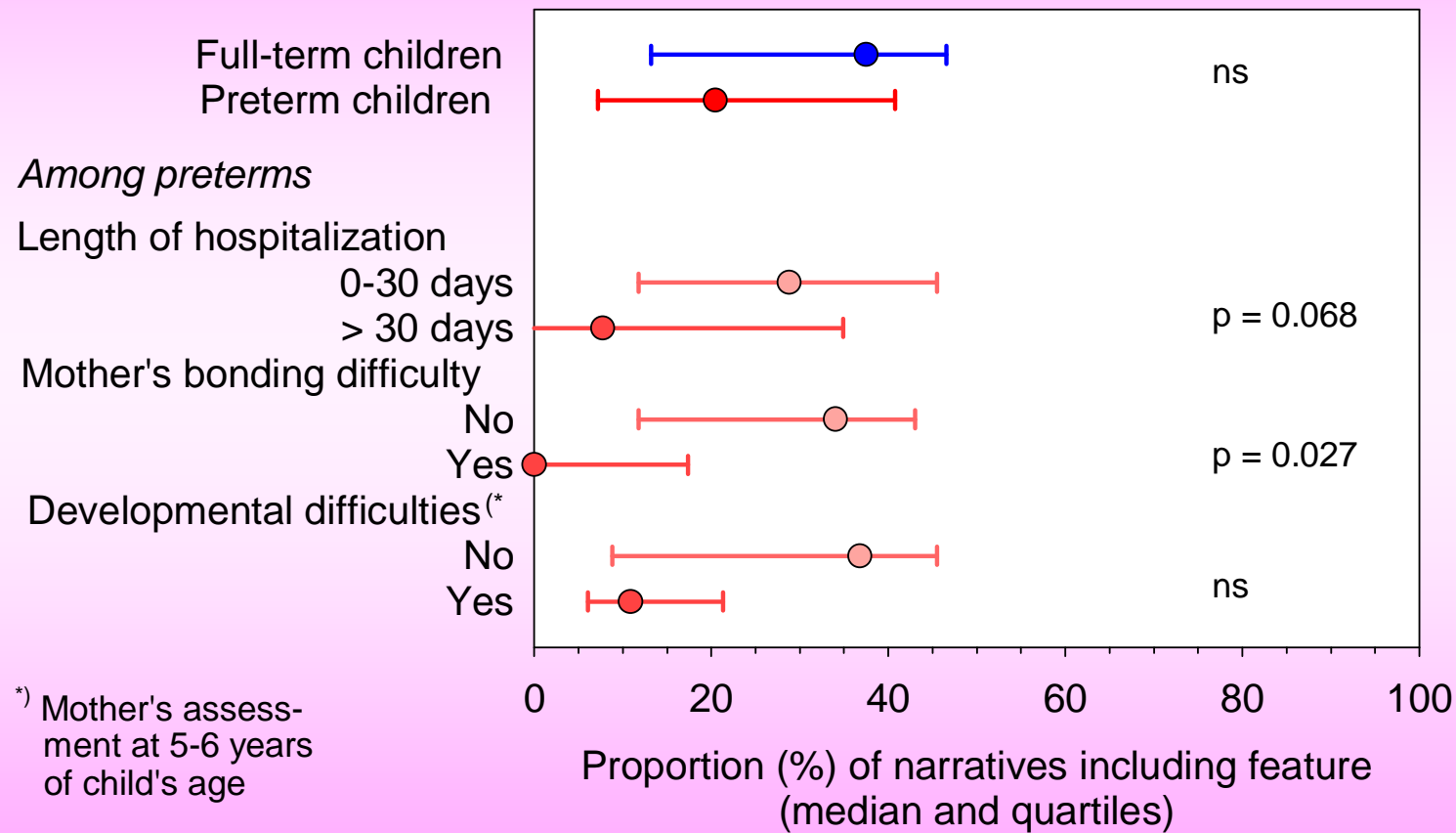


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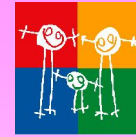
- **Caring representations** (Robinson J et al. 2004, unpublished)
  - the parent is taking care of the child
  - the parent is protecting the child from a possible or actual harm
  - the parent gives the child concrete help, or the parent acts warmly and supportively towards the child
  - child used 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



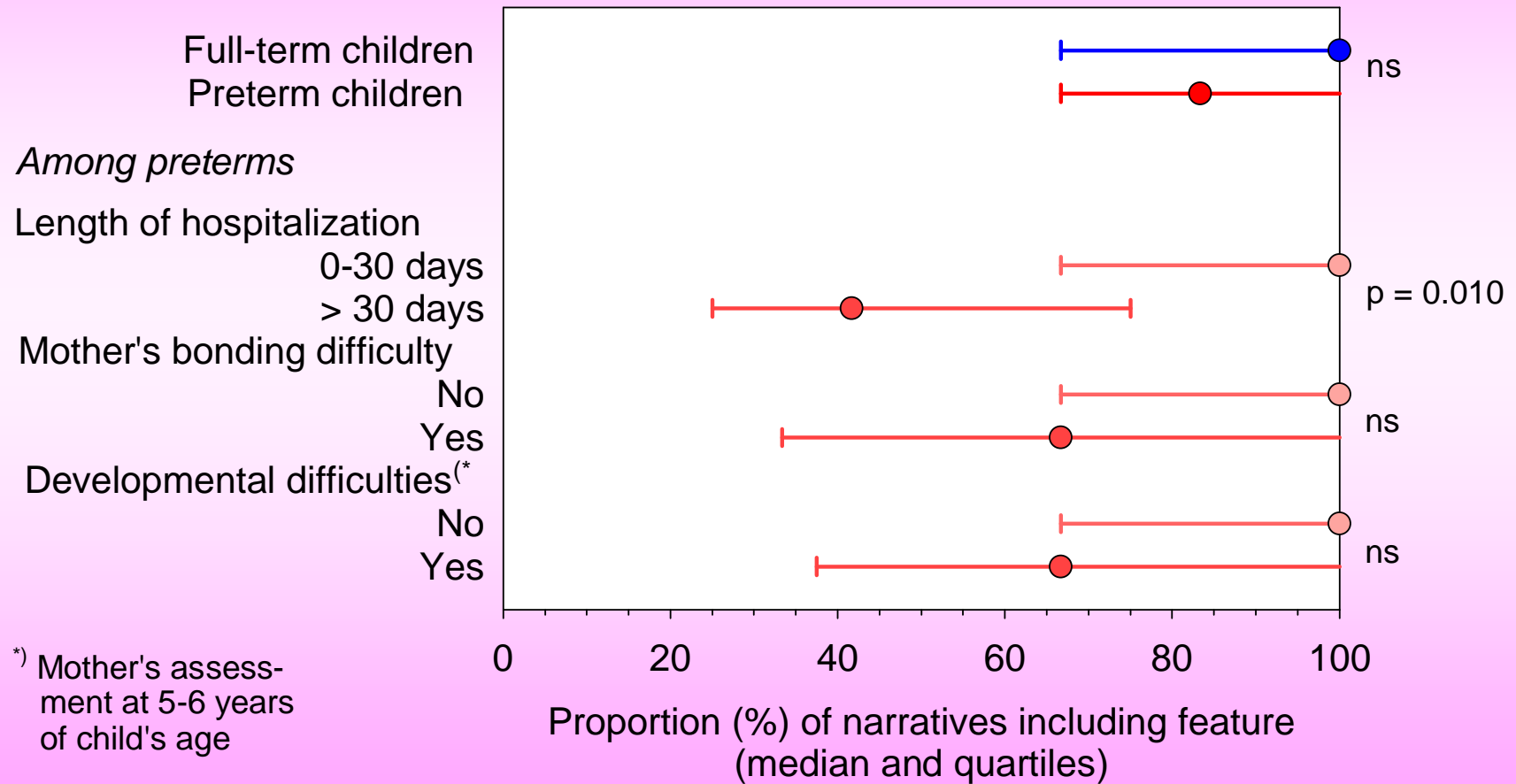
## Caring representations across all stories







## Addressing and resolving the conflict across separation stories



<sup>\*)</sup> Mother's assessment at 5-6 years of child's age

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# 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



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