

Development of behavioral and emotional problems: Do twins born after IVF differ from other twins?



A study from the Netherlands Twin Register (NTR)

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background & aim

In the past years the number of twins in the NTR who were born after IVF shows a large increase: 6% in 1990 and 20% in 2001. The aim of the present study is to compare the development of IVF twins to matched control twins.

methods

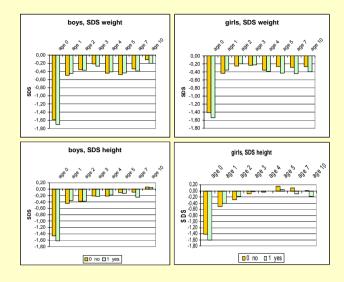
• The study includes 1400 IVF twin pairs and 2000 matched non-IVF pairs, who were recruited shortly after birth. The development of the twins was followed in longitudinal survey studies.

• Measures on growth and behavior were obtained by mailed questionnaires completed by parents every 2 years. From age 7 years onwards, surveys were also sent to teachers.

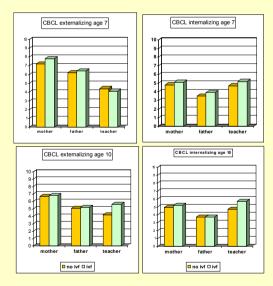
results				
		IVF	N0-IVF	N0-IVF match
		(n=1423)	(n=8777)	(n=2087)
Age mother (sd)		33.4 (3.44)	30.9 (3.79)	33.1 (3.35)
Educational level Mother	Low	36.3%	35.5%	34.8%
	Mid	41.7%	43.4%	42.2%
	High	22.0%	21.1%%	23%
Premature (>=32 and < 37 wks)		36.1%	31.7%	35.6%
Smoke during pregnancy		81.8%	78.7%	81.4%
Zygosity (% DZ)		94.8%	63.1%	95.1%

• Age mother, smoking during pregnancy and duration of pregnancy (% premature) were different between IVF and non-IVF mothers.

• Matching was done on these variables, as well as on zygosity of the twins and on educational level of mother. Standard deviation score (SDS) for height and weight (based on 1997 Dutch reference data)



Probleem behavior for IVF and matched non-IVF group



conclusion

- Growth: no / few differences between IVF and non-IVF twins
- Behavioral problems: No differences between IVF and non-IVF twins