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Oral Presentation

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Parental adaptation to having a child with spina bifida: a developmental perspective

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Background

Parents' adjustment to having a child with spina bifida (SB) varies greatly (Wallander et al., 1989, Singh, 2003). A recent meta-analysis of 18 studies (Vermaes, Janssens, & Gerris, submitted) confirmed that although parents of children with SB experience more psychological symptoms than parents of able-bodied children (average effect size Hedges $d+$ = 0.73; CI 95% = 0.38–0.97) there is within-group heterogeneity ($Q = 66.21, P < 0.001$). Three hypotheses were postulated: Parents' psychological adjustment varies as a function of (1) adjustment processes over time; (2) severity of SB: type, lesion level, hydrocephalus, ambulation status, number of shunt revisions, IQ, and school type; and (3) demographic characteristics: child age, child gender, maternal age, paternal age, family ethnicity (Dutch vs. non-Western), SES, marital status, number of children, and the child's birth order.

Method

Retrospective interviews were conducted with parents ($n = 46$ mothers; $n = 37$ fathers) of 58 children with SB (age $M = 10.36, SD = 2.38$; 34 girls). Parents were asked to describe their experiences of the periods: (T1) pregnancy and birth; (T2) baby-toddler period (0–2 years); (T3) pre-school period (3–4 years); (T4) middle childhood (5–11 years). After each period they filled out a 13 item questionnaire (4-point Likert scale) of DSM-IV symptoms representing two factors: (1) Internalization-depression and (2) Externalization-irritability. GLM analyses with repeated measures were applied to detect time trends and interaction effects with SB characteristics and demographics.

Table 1: Trends in Parents' Psychological Symptoms across the Child's Life Span

	Group means (SDs)				Time effects(linear)		Time effects (quadratic)	
	Time 1 pregnancy-birth	Time 2 baby-toddler	Time 3 preschool	Time 4 middle childhood	F	p	F	p
<i>Mothers</i>	$n = 55$	$n = 55$	$n = 55$	$n = 55$				
Int-depression	2.18 (0.70)	1.83 (0.68)	1.59 (0.64)	1.55 (0.52)	58.103***	0.000	1.266**	0.003
Ext-irritability	1.85 (0.85)	1.68 (0.69)	1.64 (0.82)	1.70 (0.73)	1.095	0.300	2.427	0.125
<i>Fathers</i>	$n = 33$	$n = 33$	$n = 33$	$n = 33$				
Int-depression	2.10 (0.58)	1.78 (0.50)	1.44 (0.48)	1.48 (0.58)	48.099***	0.000	9.787**	0.004
Ext-irritability	1.59 (0.80)	1.61 (0.77)	1.50 (0.79)	1.52 (0.69)	0.500	0.485	0.003	0.447

** $P < .01$, *** $P < .001$ (two-tailed).

Results and Discussion

As can be seen in Table 1, internalization-depression symptoms decreased steeply after the first years of the child's life and gradually continued to decline into middle childhood. Externalization-irritability symptoms however remained stable over time. The question is whether counseling interventions have interfered with these trends.

Physical parameters of SB did not explain within-group variability of parents' psychological symptoms, but mental parameters (low IQ, attending special education) or threats to the child's mental functioning (shunt revisions) did, especially during the child's preschool and middle childhood years. During the child's middle childhood older parents had higher levels of psychological symptoms than younger parents. Possibly worries about the child's future care and personal midlife concerns play a part. Although the sub-samples were rather small, non-Western parents and parents who had divorced reported significantly more psychological symptoms than other parents in the child's middle childhood years. Stresses around immigration and divorce may provoke increased psychological symptoms in addition to or in interaction with the child's condition.

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