

Early psychosocial circumstances and duration of breast-feeding strong markers for child neuropsychiatric disorders in adolescence

- the prospective ABIS-study

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Material and Methods

All babies in southeast Sweden (ABIS) is a population based prospective cohort study including children from the southeast of Sweden born between 1997/99 (N=21,700) in which 17,055 families (78%) initially participated.

All doctor set psychiatric diagnosis from birth to the ages 15-17 years were provided by the national patient register from The National Board of Health and Welfare.

Material and Methods

A multivariate logistic regression analysis was done based on parental questionnaires at birth and at age 1 year including: child sex, duration of breast-feeding; and four indexes;

- 1. Psychosocial vulnerability** (parental low education, parents born abroad, parents unemployed, sick leave, low income, stressful life events, low social support, single parent, mother not feeling safe, mother worried about future health of child).

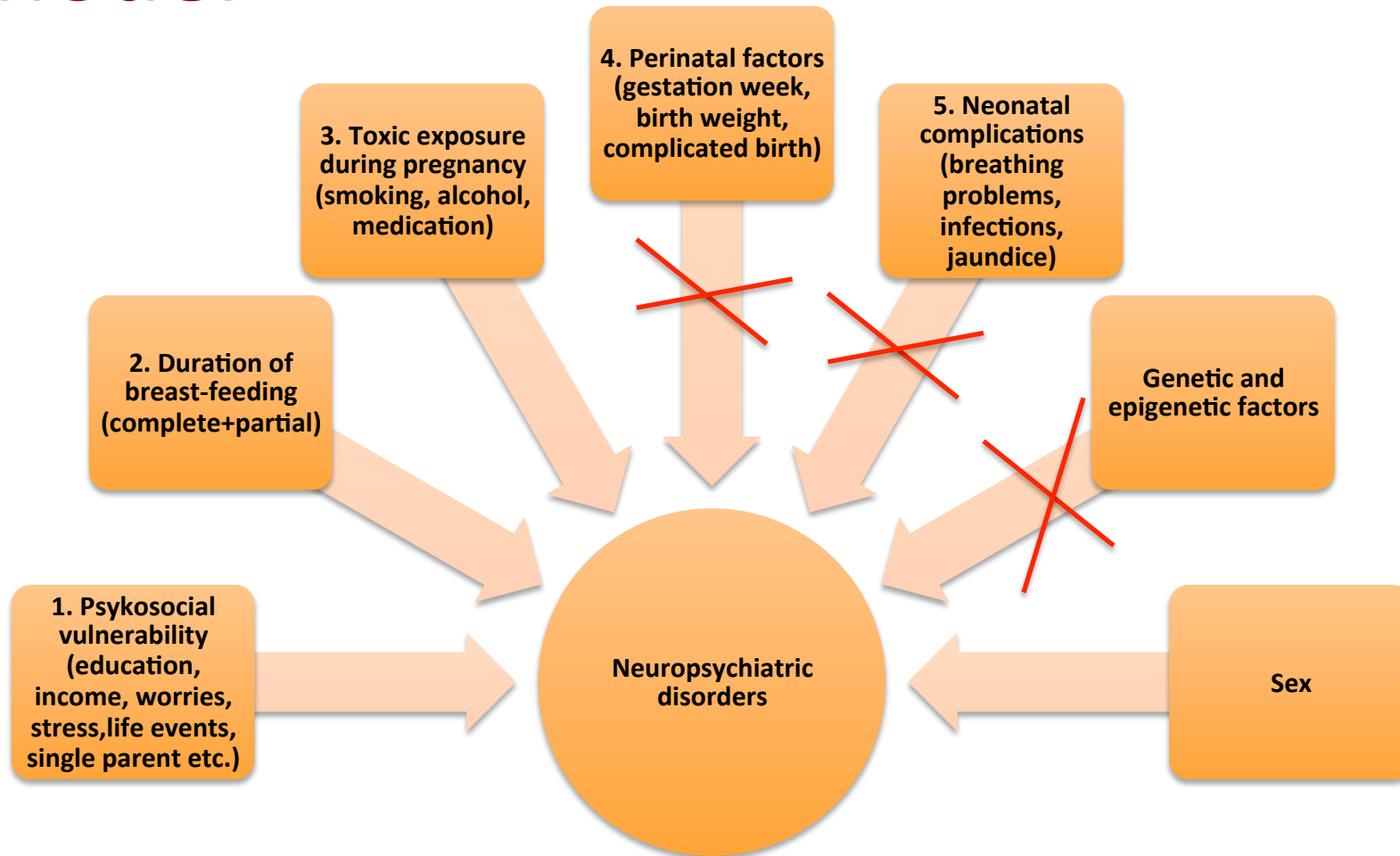
Material and Methods

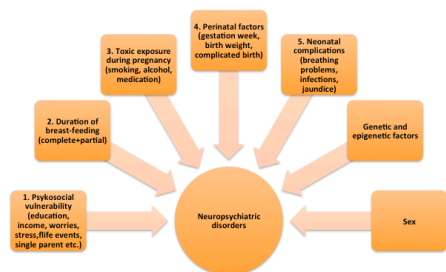
- 2. Duration of breast feeding** (both complete and partial).
- 3. Toxic exposure** (smoking, alcohol and medicine consumption during pregnancy).
- 4. Perinatal events** (gestational week, birth weight, complicated birth).
- 5. Neonatal events** (breathing problems, infections, jaundice).

Results

Diagnosis DSM-IV	Frequency	Prevalence per 1000 children
Mental retardation	134	8
Autism	184	11
Specific language disorder	155	8
ADHD	273	17
total Neuropsychiatric	746	45
Anxiety/Depression	176	11
total	922	56
No psychiatric diagnosis	15 506	

Model

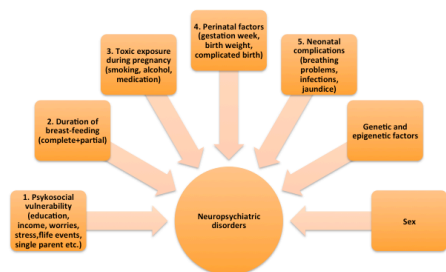




Results

Multivariate logistic regression	crude OR	adjP	adjOR	adj95% CI
<i>Neuropsychiatric disorders</i>			<i>n=273</i>	
Sex (girl vs boy)	0.39	<0.001	0.34	0.26-0.45
Psychosocial vulnerability (0)	1.0			
1	1.53	=0.037	1.35	1.02-1.78
≥ 2	2.07	<0.001	2.09	1.51-2.88
Duration of breast feeding				
<5 months	1,0			
5-8 months	0.72	=0.060	0.74	0.54-1.01
≥9 months	0.60	=0.006	0.64	0.47-0.88
Toxic exposure (≥1 vs 0)	1.38	=0.147	1.20	0.94-1.54
Perinatal factors (≥1 vs 0)	1.23	=0.617	1.09	0.78-1.43

(adjusted for the variables above + neonatal events)



Results

Multivariate logistic regression	crude OR	adjP	adjOR	adj95% CI
<i>Anxiety/Depression</i>			n=63	
Sex (girl vs boy)	1.82	=0.219	1.37	0.83-2.27
Psychosocial vulnerability (0)	1.0			
1	1.61	=0.310	1.37	0.76-2.48
≥ 2	2.67	=0.011	2.32	1.21-4.43
Duration of breast feeding				
<5 months	1.0			
5-8 months	0.75	=0.517	0.82	0.45-1.49
≥9 months	0.50	=0.020	0.46	0.24-0.88
Toxic exposure (≥1 vs 0)	1.55	=0.643	1.16	0.63-2.14
Perinatal factors (≥1 vs 0)	1.09	=0.280	0.65	0.29-1.43

(adjusted for the variables above + neonatal events)

Discussion

- Psychosocial vulnerability in early life, duration of breast feeding, exposure to toxic substances during foetal life and perinatal factors were associated with neuropsychiatric diagnosis in adolescence
- These associations were equally strong for a diagnosis of anxiety or depression
- I.e. aim for a balance between salutogenic factors and stressors
- Breast feeding = both good nutrition and secure attachment

Discussion

- Smoking, drinking and exposure to pharmacaca during foetal life should be avoided
- Sex differences between the two groups of child psychiatric diagnosis were prominent (more boys in the NP-group, more girls in Anxiety/Depression)

Conclusion

Psychosocial circumstances during early life and duration of breast-feeding seems important for psychiatric well-being

Early support for families in dire psychosocial circumstances, support for breast-feeding, and preventive efforts against smoking and drinking would be favourable!

Nurse Family Partnership (Olds) implemented in USA, UK, the Netherlands, Germany and Sweden