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## S12. Long-term impact of perinatal stress

*Chairmen:* H van Engeland, A Stewart

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### NEONATAL NEUROLOGICAL DEVIANCY: NEUROLOGICAL AND BEHAVIOURAL SEQUELAE DURING SCHOOL-AGE AND ADOLESCENCE

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The Groningen Perinatal Project (GPP) is a long-term follow-up study on the consequences of neonatal brain dysfunction for later development. All infants born in the Groningen University Hospital in 1975–1978 ( $n = 3162$ ) were assessed neurologically during the first week of life. Follow-up assessments of various subpopulations were carried out at 1½, 4, 6, 9, 12 and 14 years of age. The follow-up focused on the outcome of the children who had been neurologically abnormal at birth ( $n = 160$ ). They were studied with control groups of children who had shown no or only mild neurological abnormalities at birth ( $n = 2 \times 300$ ). The follow-up assessment consisted of a neurological examination paying special attention to presence of minor neurological dysfunction (MND), and a documentation of learning- and behavioural problems.

The prevalence of MND increased till the age of 12 years. With the onset of puberty, the prevalence decreased considerably. At any age, the presence of MND was clearly related to neonatal neurological deviancy. The presence of MND, in turn, was significantly related to learning problems and behavioural difficulties.

The onset of puberty was not only followed by a reduction of the frequency of MND, but is also induced a change in perinatal-neurological-behavioural relationships. Before the onset of puberty the number of signs of MND played a predominant role, while after puberty's onset the type of dysfunction was critical. Especially fine manipulative disability and dysco-ordination were related to neonatal brain dysfunction. Adolescents with these types of dysfunction showed significantly more often cognitive and attention problems. Moreover, they often reported themselves as socially inadequate.

### INTERACTION BETWEEN BIOLOGICAL AND PSYCHOSOCIAL RISKS IN EARLY DEVELOPMENT

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In 360 children the predictive value of defined biological and psychosocial risks during childhood has been examined within a bifactorial design. Children were assessed at 3 months, 2 years, 4½ years and 8 years for motor, cognitive and socio-emotional development. Educational behaviour and mother-child interaction were included in the analysis. Regression analysis showed decreasing effects of severe biological risks on motor development and of severe biological and psychosocial risks on cognitive development. Socio-emotional development seemed mainly influenced by psychosocial risks. Remarkable were partly late diagnoses of cognitive impairment. Mother-child interaction made essential contribution to explained variance of cognition and behavior. Hardly no protective mechanisms could be detected. Almost all effects demonstrated were additional effects, nearly no interactions could be seen. Transaction mechanisms from children's behavior on parenting style and from there back to children's later behavior have been demonstrated.

Excluding severe impairments persisting behavior starts only at the age of 2.

### LONG-TERM BEHAVIOURAL, COGNITIVE AND NEUROLOGICAL SEQUELAE OF PREMATUREITY

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*Objective:* Follow-up of premature children with severe peri- and neonatal complications who did not develop serious physical and/or mental handicaps. The aim of the study was to evaluate the prevalence, change and persistence of behaviour problems, cognitive disabilities and minor neurological dysfunction.

*Method:* Longitudinal follow-up of a cohort of premature children ( $N = 178$ ) hospitalized in a Neonatal Intensive Care Unit. The follow-up extend from early school-age up to adolescence and was conducted with the help of a the Child Behaviour Check List (CBCL) and b. clinical examinations in a sample randomly selected from the original study sample ( $N = 66$ ). Children were assessed four times (early school age, school age, pre-adolescence and adolescence) with the CBCL. Clinical assessments were conducted twice (school age and adolescence) and comprised psychiatric, neurological and neuro-psychological examinations.

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## S13. Art ventures in mental health

*Chairmen:* M Mitchell, R Downie

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### GOFAL CELF — ARTS CARE

Hugh Bevan Jones. *Derwen NHS Trust West Wales*

There has been a significant shift in the way in which the arts are treated within the Health Care context. ARTS CARE represents a clear and conscious artistic and cultural strategy directly addressing the challenge of re-engaging the arts with a broader cross section of the community. Adventurous and committed arts practitioners, enlightened art funders, administrators and policy makers have established a new relationship between arts and community. One area is that of creative work by and for people with special needs and a variety of projects have been initiated within the West Wales region over a number of years. This pilot project has been designed to provide a planned programme of artistic activity for mentally ill people in day care and hospital settings. It provides visual arts and crafts, dance, drama, creative writing and story telling, music and photography, drawing on the expertise of professional artists from the community. This movement has witnessed considerable growth in awareness and activity over the past five years and ways in which support and financial advice have been obtained will be discussed.

### PROSPECTIVE OF MENTAL ILLNESS — AN ART EXHIBITION IN THE GORBALS

Denise Coia. *Florence Street Day Hospital, Glasgow*

Our main aim was 'informal education' and 'demystification' of mental illness. By organising an art exhibition we hoped we would bring people into our day hospital and show them some aspects of