

# RECONSTRUCTION OF THE HEALTH STATUS AT FIVE, NINE AND TEN YEARS OF AGE IN CHILDREN BORN PREMATURELY.

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**Aim:** (1) To reconstruct the Health Status (HS) of a Dutch cohort of children born prematurely. (2) To compare their HS with the HS of a Dutch norm population at 5, 9 and 10 years of age. (3) To study HS development within the sample.

**Sample:** 875 preterm birth survivors, born in 1983 and enrolled in the follow-up programme "Project On Preterm and Small for gestational age infants (POPS)".

**Design:** A variety of clinical and psychological information about the children, formerly obtained from the parents, was retrospectively organised around six HS domains: physical complaints, motor functioning, autonomy, cognitive functioning, social functioning, and emotional functioning. Items were selected if they applied to the six HS domains according to rating by experts (three paediatricians and three psychologists). The selected items were recoded into TACQOL-item formulation (TNO-AZL children's Quality of Life questionnaire), with help of computer algorithms. Both original and recoded items were analysed.

**Results:** (1) The selected items were combined into scales covering the intended domains. The content of the scales varied among the three points of measurement. Cronbach's alpha of internal consistency ranged from 0.17 to 0.84. The cognitive functioning scale was reliable at all three ages ( $\alpha > .65$ ). Factor analysis did not confirm the intended domains completely. Problems in HS of premature children appeared to cluster around depression, social-emotional functioning, cognitive functioning, perceptual functioning, and motor functioning.

(2) MANOVA and ANOVA analysis suggested that premature children had lower HS than the normal population had on 45% of the items ( $p < 0.01$ ), especially on those concerning autonomy, motor functioning, concentration, and social functioning. Premature children seemed to have higher HS than children in the normal population did on 34% of the items, especially on those concerning physical complaints, school functioning and negative emotions. Both groups were alike on 21 % of the items, especially on those concerning aggression and communication. This applied to all three ages of measurement.

(3) OVERALS analysis with the original items revealed that children with motor and cognitive problems at age 5 still had these problems at age 9 and 10. Children with cognitive and concentration problems, but without motor problems at age 5 had cognitive problems at age 9 and were still without motor problems at age 10.  
**Conclusion:** Reconstruction of HS appeared to be possible. In future, prospective research may be needed to judge the validity of the findings in this study.