

CHILDREN BORN LATE PRETERM: SCHOOL ATTAINMENT AT 7 AND 18 YEARS - A LONGITUDINAL STUDY

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Background and aim: Late preterm neonates represent the largest and most rapidly growing preterm population. The aim of our study is to address emerging fears regarding unfavorable neurodevelopmental outcome in this group.

Methods: As part of a nationwide, cross-sectional survey 11,048 consecutive births in 1983 (8% of annual deliveries) were recorded. Of these, 6,441 children were traced at age 7 in schools and studied by questionnaires. A sample representative of the original, it included 94.6% full term (FT), 4% late preterm (LP) and 1.4% preterm babies less than 34 weeks of gestation (PT). At 18 years of age 3,464 adolescents were further traced, sample again representative, and answered questionnaires regarding their life. School performance was used in both studies as marker of neurodevelopment. FT, LP and PTs were compared for poor performance. Logistic regression analysis was run to control for antenatal, perinatal, postnatal and lifestyle factors affecting school achievement.

Results: LPs had no statistical significant differences from FT babies for poor performance at age 7. PT infants had worse performance especially in mathematics (OR 4,431). At age 18, the effect of gestational age was attenuated, for both overall school performance and specific competences, when possible confounders e.g. socioeconomic status, school attendance and parental involvement were controlled for.

Conclusion: While at age 7 PTs bear the burden of disability, across the school years LP's performance appears similar to that of FT babies. Although subtle neurologic deficits cannot be excluded, it is reassuring that these infants were able to develop their potential.