

Presentation title:

Adverse perinatal events and offspring criminal convictions

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Background: We examined associations of adverse perinatal events with offspring violent and non-violent criminal convictions in men and women.

Methods: All singleton births between 1973 and 1995 ($n = 1,146,570$ men, $n = 1,085,217$ women) were identified through Swedish population-based registers. Information about adverse perinatal events was retrieved from the Medical Birth Register. Outcomes were criminal convictions collected from the National Crime Register. We estimated absolute and relative risks of being convicted of criminal convictions using the Kaplan-Meier method and survival analyses for men and women separately. We also tested for differences in magnitudes of associations for men versus women.

Results: Several adverse perinatal events were associated with an increased risk of violent and non-violent criminal convictions in both men and women. Associations between low birth weight, smallness relative to gestational age and preterm birth with non-violent criminal convictions were statistically significantly higher for men than for women. There was a dose-dependent association between adverse perinatal events with violent and non-violent criminal convictions for both men and women, indicated by the strengthened magnitude of HR estimates with exposure to an increasing number of adverse perinatal events.

Conclusions: Adverse perinatal events are associated with violent and non-violent criminal convictions in men and women, with some differences in risk estimates between sexes. Findings are compatible with theoretical accounts implicating disruption of the neurodevelopment during the perinatal period.