

Preterm birth, unplanned hospital contact and mortality in infants born to teenage mothers in five countries: a cross-country comparison using linked administrative data

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Introduction

Children born to teenage mothers have greater healthcare needs than those born to mothers in their 20s and older, including higher rates of childhood hospitalisations. We performed a direct cross-country comparison of maternal age-related inequalities in infant outcomes in England, Scotland, Sweden, New South Wales (NSW; Australia) and Ontario (Canada).

Objectives and Approach

We used administrative hospital data capturing 3,002,749 singleton births surviving to discharge between 2010–2014 (2008–2012 for Sweden). We derived risk ratios and risk differences to compare rates of preterm birth (24–37 weeks of gestation), unplanned hospital admissions, emergency department (ED) visits, and mortality within 12 months of postnatal discharge, for infants born to mothers aged 15–19, 20–24, 25–29 and 30–34 years.

Results

Infants born to teenage mothers experienced higher rates of preterm birth, unplanned admissions, ED visits, and mortality compared with older mothers in all countries. Despite variation in the distribution of maternal characteristics between countries, inequalities according to maternal age were similar. Infants of teenage mothers were between 1.37 (95% CI for risk ratio 1.28–1.47, Sweden) and 1.56 (95% CI 1.49–1.64, NSW) times more likely to have ≥ 1 unplanned hospital admission and between 2.25 (95% CI 1.92–2.64, England) and 3.87 (95% CI 2.07–7.36, Sweden) times more likely to die, compared with those born to mothers aged 30–34.

Conclusion/Implications

A similar excess of adverse outcomes was observed for teenage mothers in all five countries, despite different prevalence rates and support for young families. Public health strategies are needed to address these inequalities, which may be due to social risk factors associated with both young motherhood and adverse infant outcomes.

