

# Educational differences in stress during pregnancy: exploring the social mechanisms

Kotimäki Sanni

*University of Turku*

**Background:** There is evidence for socioeconomic disparities in mental health, but educational differences in prenatal stress and the mechanisms producing them are less known. In order to prevent health problems in children and mothers caused by prenatal stress, it is important to understand how and why educational attainment is related to stress.

**Objectives:** This study examines whether mother's educational level predicts the level and development of anxiety and depression during pregnancy. The second aim is to explore if early socioeconomic conditions and adverse childhood experiences account for the educational gradient in prenatal stress. Third, the aim is to analyse the role of other maternal resources in the connection.

**Data and methods:** Based on prospective FinnBrain Cohort Study, linked to Finnish longitudinal registers, panel random-effects regression is used to examine analytical sample consisting of 2685 pregnant women (complete cases). Prenatal stress is measured by Symptom Checklist (SCL-90-anxiety subscale) and Edinburgh Postnatal Depression Scale, observed once at each pregnancy trimester.

**Results:** Results showed less anxiety and depression symptoms in the more educated mothers over gestation, but educational level was not associated with the development of stress. The educational gradient in stress was largely explained by traumatic childhood experiences, but not entirely in the case of anxiety, and childhood family status did not seem to matter. Mother's economic situation showed as potential pathway through which education defines anxiety, and it also predicted stress independently.

**Conclusions:** Educational gradient in prenatal stress was largely attributable to distressing childhood events which related to both education and stress, suggesting that the role of education as such in mental health is smaller than previously thought. In future, more attention to the mechanisms of socioeconomic disparities in mental health is relevant for planning well-targeted health interventions.