

## Revisiting traditional small for gestational age risk factors applying measures of discriminatory accuracy

Being small for gestational age has been shown to have long-standing implications for the newborn's health and well-being, so the identification of modifiable risk factors is a top research priority in order to make tailored policy recommendations. Multiple maternal characteristics are considered to be small for gestational age risk factors. This knowledge is derived from measures of associations that quantify differences in average risk between exposed and unexposed groups. However, average associations do not assess the capacity of a particular exposure to predict which mothers will give birth to a small, as opposed to a non-small for gestational age newborn (i.e., its discriminatory accuracy). At the Unit of Social Epidemiology at Lund University, researchers have revisited some of the traditional small for gestational age risk factors applying measures of discriminatory accuracy to assess their predictive capacity.

This study was conducted using information from the Swedish Medical Birth Register during the period 1987-1993. Smoking and hypertension during pregnancy, maternal age and birth order are examples of the variables under scrutiny.

The results of this study confirm that traditional risk factors are strongly associated with the outcome. Nevertheless, all of them (both alone and in combination) have a very low capacity to predict the outcome at the individual level. This result alerts us to the importance of conducting future studies that better identify mothers who are susceptible to giving birth a small newborn. The study discusses the importance of combining measures of association with measures of discriminatory accuracy in future studies in order to design policymaking recommendations in a more informed way and to conduct interventions based on the principle of *primun non nocere*.

Corresponding author:

Sol P Juárez

Centre for Economic Demography, Lund University, Sweden

Department of Clinical Sciences, Unit of Social Epidemiology, Lund University, Malmö, Skåne University Hospital (SUS Malmö)

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