Social deprivation and adverse perinatal outcomes in France: national study of preterm and SGA birth
Nolwenn Regnault

Y Barry[1], A Gallay[1], N Regnault[1]
[1]Non-Communicable Diseases and Trauma Division, Santé Publique France, Saint-Maurice, France
Contact: nolwenn.regnault@santepubliquefrance.fr

Introduction:

A slow but steady increase in preterm birth (PTB) rate has been reported in France in the last decades while decreasing in some European countries. Studies suggest PTB and small for gestational age (SGA) show a social gradient. Our objective was to determine whether this social gradient is changing in France over the study period.

Methods:

We selected all births records after 22 weeks of gestation in France between 2010 to 2017 (N = 6, 439, 355) in the French National Health Data System (SNDS). PTB was defined as birth before 37 completed weeks and SGA as birth weight below the 10th percentile according to the French intrauterine growth references curves. The SNDS includes an ecological social disadvantage index in quintiles (Q1:least deprived, Q5:most deprived). PTB and SGA rates were estimated in each deprivation quintile. Trends were quantified using a Poisson regression model.

Results:

The prevalence of PTB was 7.4% and SGA 11.9 % in 2017. French overseas regions (FOR) had the highest rates (7.2 vs. 10.9% and 11.5 vs. 18.0%, mainland France vs FOR respectively for PTB and SGA in 2017). Although we identified annual fluctuations, there was a significant average annual percentage change in prevalence of PTB and SGA respectively, +0.65% [IC95%:+0.1%; +1.2%; p = 0.03]; 0.66% [IC95%:+0.26%; +1.06%; p = 0, 01]. There was a marked but relatively stable social gradient over the study period. When combining all study years, PTB was more frequent among deprived women (Q5: 7.6% vs Q1: 6.8%) as well as SGA (Q5: 10.6% vs Q1: 12.1%).

Conclusions:

PTB and SGA prevalence trends are still increasing in France with regional disparities. Social deprivation remains a predictor of PTB and SGA.

Key messages:

- A persisting social gradient is observed in PTB and SGA in France.
- A better understanding of its mechanism will help designing interventions that will reduce social inequalities in health.