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### Maternal gestational characteristics, perinatal factors and blood pressure of children

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Many studies have found the fetal factors to have effects on long-term health soon after the fetal origin of adult disease was introduced by Barker in 1986. The objective of the study was to explore the effects of maternal gestational and perinatal factors on blood pressure of children. A follow-up study of the birth cohort in Wuxi was conducted in children. Questionnaire survey and physical examination, including height, weight, systolic blood pressure (SBP) and diastolic blood pressure (DBP) in children's included were carried over.  $\chi^2$  test, multi-linear regression and multi-logistic model were used to analyzed data. A total of 2256 children of age from 10 to 13 years old were followed up. Adjusted sex, age and BMI in childhood, life habits of children, maternal gestational and perinatal factors were analyzed in multi-models, which found that maternal occupation had effects on SBP. Children whose mother was a worker or other had lower SBP, compared with those whose mother was peasant. Compared with children who were first parity, those who was not had higher SBP and SBP in childhood increased with the birth length's adding. Compared with children whose mother had no pregnancy-induced hypertension when delivery, those whose mother had it had higher SBP, DBP and the proportion of elevated BP, with OR value was 3.26 (95% CI: 1.91-5.56). This study shows that the mother's lower social economic status might increase blood pressure of children, and pregnancy-induced hypertension when delivery was a risk factor of blood pressure in children. Some effective strategies should be considered to control the pregnancy-induced hypertension.

#### Biography

Yuyan Li has completed her PhD at the age of 34 years from Fudan University. She is an Associate Researcher at Shanghai Institute of Planned Parenthood Research, and has published more than 50 papers in journals and serving as a tutor for master degree students in epidemiology and health statistics at Fudan University.

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