* Population Study Article
* [Published: 31 August 2021](https://www.nature.com/articles/s41390-021-01719-9#article-info)

**Perinatal maternal depressive symptoms and risk of behavioral problems at five years**

* [Maoka Yamada](https://www.nature.com/articles/s41390-021-01719-9#auth-Maoka-Yamada),
* [Keiko Tanaka](https://www.nature.com/articles/s41390-021-01719-9#auth-Keiko-Tanaka),
* [Masashi Arakawa](https://www.nature.com/articles/s41390-021-01719-9#auth-Masashi-Arakawa) &
* [Yoshihiro Miyake](https://www.nature.com/articles/s41390-021-01719-9#auth-Yoshihiro-Miyake)

[*Pediatric Research*](https://www.nature.com/pr) (2021)[Cite this article](https://www.nature.com/articles/s41390-021-01719-9" \l "citeas)

**Abstract**

**Background**

Evidence on the association between perinatal maternal depression and children’s behavioral development is limited. We investigated the association between maternal depressive symptoms during pregnancy and postpartum and the risk of childhood behavioral problems using data from a birth cohort study.

**Methods**

Study subjects were 1199 mother–child pairs. Maternal depressive symptoms were assessed with the Center for Epidemiologic Studies Depression Scale during pregnancy and the Edinburgh Postnatal Depression Scale at 4 months postpartum. Children’s behavioral development at 5 years of age was assessed with the Strengths and Difficulties Questionnaire.

**Results**

Compared with children whose mothers did not experience depressive symptoms during pregnancy, those whose mothers did experience depressive symptoms during pregnancy had increased risk of emotional symptoms, conduct problems, hyperactivity, peer problems, and low prosocial behavior. Maternal depressive symptoms at around 4 months postpartum were associated with increased risk of childhood emotional problems. Compared with children whose mothers did not experience depressive symptoms during the perinatal period, those whose mothers did experience depressive symptoms both during pregnancy and postpartum had a fivefold increased risk of childhood emotional symptoms and a threefold increased risk of peer problems.

**Conclusions**

Our findings suggest that perinatal maternal depression is associated with behavioral problems in children.

**Impact**

* Several epidemiological studies in Western countries have examined the association between perinatal maternal depression and children’s behavioral development, yet the results are conflicting and inconclusive.
* There is limited evidence on this topic in Asia.
* In our study using data from a prospective pregnancy birth cohort, maternal depressive symptoms around 4 months postpartum were associated with an increased risk of emotional symptoms in children aged 5 years.
* Children whose mothers had exhibited depressive symptoms both during pregnancy and postpartum had a fivefold increased risk of childhood emotional symptoms and a threefold increased risk of peer problems.

Source: https://www.nature.com/articles/s41390-021-01719-9