

Letter to the Editor

Letter to the Editor: “Impact of Malaria in Pregnancy on Infant Neurodevelopment and Malaria Susceptibility during the First Year of Life in Kinshasa, the Democratic Republic of the Congo”

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DEAR EDITOR,

We commend the authors for their intriguing work recently published “Impact of malaria in pregnancy on infant neurodevelopment and malaria susceptibility during the first year of life in Kinshasa, the Democratic Republic of the Congo” [1]. This is an important topic, and we appreciate their efforts to explore how malaria in pregnancy affects the infant neurodevelopment. However, this article provides valuable findings, we have concerns regarding several aspects of the study.

This study doesn't specify the gestational timing of maternal malaria infection. This is important, as the stage of exposure may determine the level of adverse outcomes. Prenatal malaria exposure is linked to cognitive deficits, with potential long-term effects on motor and language development. Late pregnancy malaria may have a stronger impact on language development, highlighting the importance of exposure timing [2].

They didn't address the role of the immune system and nor did they explain how malaria during pregnancy might make a baby more likely to get malaria later. Pregnancy-associated malaria, including placental malaria, causes significant morbidity and mortality worldwide. Recently, it has been suggested that in utero exposure of the foetus

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Submitted: 21 November, 2025

Accepted: 29 December, 2025

Published: 30 December, 2025

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ISSN: 2573-1637

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Keywords

- Malaria in pregnancy
- Infant neurodevelopment
- Malaria susceptibility
- Malaria transmission
- Democratic Republic of the Congo

to malaria antigens may negatively impact the developing immune system and result in tolerance to malaria [3]. Some data suggest that in utero exposure to malaria may induce immunologic tolerance that interferes with the development of protective immunity during childhood [4].

CONCLUSION

This study brings attention to an important link between the mother's health during pregnancy and her infant outcomes. We greatly respect the authors of this article for their outstanding work and contributions, despite these comments. I hope future researchers will look closely into these questions and consider additional factors that influence the results particularly, regarding timing of exposure and immunological mechanism.

REFERENCES

1. Tshiongo JK, Kuseke L, Kalonji T, Mitashi, P, Mupuala A, Kayentao K, et al. Impact of malaria in pregnancy on infant neurodevelopment and malaria susceptibility during the first year of life in Kinshasa, the Democratic Republic of the Congo. *Int J Infectious Dis.* 2025; 3: 216-229.
2. Nema S, Singhal R, Bharti, PK, Nitika N. Malaria in pregnancy and its potential impact on neurodevelopment in children: a systematic review. *Pediatr Res.* 2025.
3. Odorizzi PM, Feeney ME. Impact of In Utero Exposure to Malaria on Fetal T Cell Immunity. *Trends Mol Med.* 2016; 22: 877-888.
4. Feeney M. E. The immune response to malaria in utero. *Immunological Rev.* 2020: 29.