Analysis of the Global Development of Infants in the First Year of Life and the Maternal SARS-CoV-2 Infection Trimester

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My name is **Caroline Alves**. I'm from **Brazil**;

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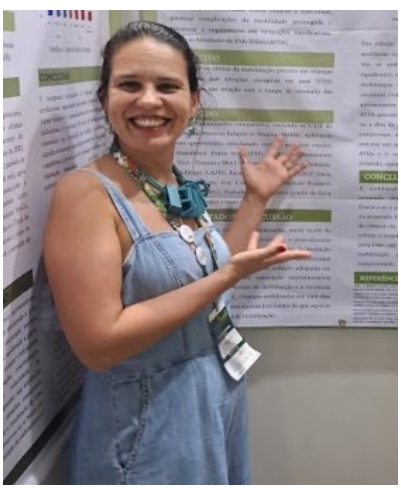

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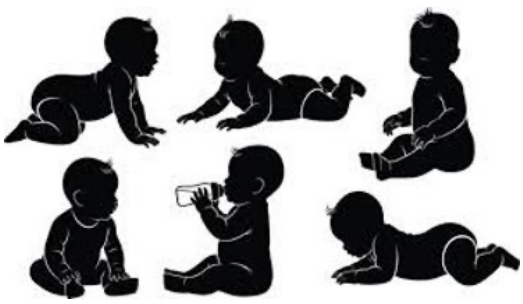
Introduction:

There is a connection between **child development** and **prenatal risk** factors (e.g. **viral infections**) (Ministry of Health, 2013)

However, there is limited information on the impact of maternal **SARS-CoV-2** infection during **pregnancy** and on the **development** of infants up to **12 months** of age. (Miquilussi PA, 2025; Yadav, et al 2022)



Objective:

To examine the **relationship** between the trimester of maternal **SARS-CoV-2** infection and the global **development of infants** during the **first year** of life.

Methodology:

The study included **babies** who were exposed in uterus to **maternal SARS-CoV-2** infection:

- Retrospective **cohort** study **longitudinal follow-up** of infants.
- **Quantitative analysis** of development.
- **Assessment** of babies between 1 **and 12 months** of age.
- **Bayley III: cognition, language and motor skills.**

Discussion and Results:

- A total of **267 babies;**
- **89.5%** of the babies scored within the **normal range**;
- **Language** domain: mild delays (9.2%) and severe delays (2.9%) compared to other domains;

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Discussion and Results:

Language domain may be associated with **mask** use **during the pandemic** .

Infant developmental **delays** were **associated** with **first-trimester maternal** infection. (Mulkey , et al 2022; Santos, et al 2024)

Conclusion:

Infants had **lower scores** in the **language** domain compared to other domains.

There is a **relationship** between **delays** and the **trimester** of maternal **infection**.

Further studies will be important to monitor the **development** of these babies.

Reference:

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