Call for Data Contribution: Understanding Gestational Weight Gain and Maternal-Neonatal Outcomes in India

Background

Gestational weight gain (GWG) is an important factor that may influence pregnancy outcomes. Inadequate or excessive weight gain during pregnancy has been linked to an increased risk of adverse maternal and neonatal outcomes, particularly in studies from high-income countries. Existing GWG recommendations such as those from the Institute of Medicine (IOM) and INTERGROWTH-21st are largely from non-Indian populations or selected subgroups within India, and may not fully reflect the needs of Indian women, who often have different nutritional and physiological profiles. There is limited evidence from India on how patterns of weight gain during pregnancy relate to maternal and neonatal outcomes. Building this evidence base is crucial for developing context-specific recommendations for clinical care and public health in India.

The Indian Council of Medical Research (ICMR) is inviting researchers and institutions to contribute to a national collaborative effort aimed at generating evidence on GWG in Indian populations. The objective is to study the patterns of weight gain during pregnancy and assess their relationship with key maternal and neonatal health outcomes.

Primary Objective:

To examine the patterns of gestational weight gain among Indian women and assess their association with key maternal outcomes (including preeclampsia, gestational diabetes) and early neonatal outcomes (including gestational age at delivery, birth weight, stillbirth, and early neonatal mortality).

Secondary Objective:

To explore the relationship of gestational weight gain with additional maternal and neonatal health indicators, where data are available (such as anemia or hemoglobin levels, place of delivery, mode of delivery and other late neonatal outcomes).

Data Contribution Requirements

To be included in the pooled analysis, contributing datasets must meet the following mandatory criteria:

- ✓ Prospective cohort study or randomized controlled trial.
- ✓ Study period: Data collected after 2010.
- ✓ Sample size: At least 300 pregnant women, or evidence of an appropriate power calculation for smaller studies.
- ✓ A data dictionary must be provided.

Mandatory data elements:

1. Gestational age (GA) assessed by ultrasound or using last menstrual period (LMP) or clinical/obstetric records before 20 weeks of GA (Specify the method used to assess).
2. Maternal pre (early)-pregnancy weight (measured before 20 weeks gestation), or early pregnancy weight and height to calculate BMI
3. At least one additional subsequent antenatal weight measurements with gestational age recorded (ideally one per trimester, are encouraged but not mandatory)
4. Date of delivery or gestational age at delivery
5. Birth weight
6. Pregnancy outcome (live birth, stillbirth, early neonatal death)
7. Maternal outcomes such as hypertensive disorders of pregnancy, gestational diabetes mellitus
8. Data must be directly collected by the study team

Optional (if available):

Place of delivery, mode of delivery, hemoglobin levels or anemia status (with gestational age of measurement), postpartum weight (with timing), and late neonatal outcomes.

Approach to Inclusion Criteria

Final criteria for pooled analysis will be developed collaboratively by ICMR, contributing partners, and the Technical Advisory Group (TAG) after review of the contributed datasets.

Participation Benefits

This is a collaborative scientific initiative. **No funding is provided for data contribution**. However, contributors will receive academic recognition through co-authorship in all resulting publications, in accordance with ICMJE criteria and be acknowledged in policy briefs and guideline documents arising from the project.

Data Sharing and Confidentiality

All contributions will be governed by a formal Data Use Agreement between ICMR and the contributor. Contributors will retain full ownership of their data. Only de-identified datasets will be used. Institutional ethics approval must be confirmed or obtained as per contributor's institutional requirements.

When and how to submit:

The data should be submitted through ONLINE MODE ONLY by the Principal Investigator. Interested PIs should fill out the Google Form available at the link below:

https://docs.google.com/forms/d/e/1FAIpQLSdI4wMfhEYNGSYTCyAv_TL3NfHj_Jp0K3B_bd9icoj9qRp2mg/viewform?usp=dialog

Please note: Only **shortlisted PIs** will be contacted via email for data submission.

Submission Timeline:

- **Start Date:** 05 August 2025 | **Time:** 05:00 PM
- **End Date:** 20 September 2025 | **Time:** 05:00 PM

For any inquiries please contact: **Dr. Reema Mukherjee, Scientist-E** at **gwgicmr@gmail.com**