



**SMARThealth Pregnancy:** Pregnancy as an opportunity to improve lifelong health – November 2023

**The George Institute**  
for Global Health India

## **Facts:**

- India is the diabetes capital of the world, with a prevalence of 8.9% according to the International Diabetes Federation.
- 1 in 7 pregnant women will develop gestational diabetes and 1 in 10 will develop preeclampsia globally.
- Over half of Indian women are anaemic during their pregnancy.
- There is a need to integrate non-communicable disease screening and prevention into established health programs such as maternity care.

## **Project Cycle:**

2021-2024

## **Partners:**

*The George Institute for Global Health, United Kingdom*

*The University of Oxford, United Kingdom*

## **Supporters:**

*The George Institute for Global Health, India*

*UKRI Future Leaders Fellowship, UK*

## **Principal Investigators:**

*Prof Jane Hirst (United Kingdom)*

*Prof D Praveen (India)*

*Dr N Votruba*

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## **Background:**

- Pregnancy complications such as hypertension, gestational diabetes and anaemia increase risks to the mother and baby during pregnancy.
- They can also have longer-term consequences after birth. After gestational diabetes, up to 50% of women will develop type 2 diabetes within 5-10 years. Following preeclampsia, women are at increased risk of cardiovascular complications. Chronic anaemia can affect a woman's wellbeing, energy and productivity in society.
- Non-communicable diseases such as cardiovascular diseases and diabetes are two of the leading causes of death for women in India. Prevention strategies are needed.

## **Aims:**

- To generate evidence-based recommendations to improve the detection and management of high-risk conditions during pregnancy, and to screen and treat women for ongoing problems in the first year after birth.
- Quantify the impact of using community health workers to identify the prevalence of anaemia among pregnant and postnatal high-risk patients on the prevalence of anaemia, and follow up these patients for diabetes and hypertension after birth.

## **Methods:**

- This is a randomised cluster trial comparing usual care during pregnancy and after birth to the SMARThealth Pregnancy intervention across 60 villages and 30 primary health centres in two states in India (Haryana and Telangana), involving approximately 3,500 women.
- SMARThealth Pregnancy trains and equips community health workers (known as ASHAs) to conduct point-of-care screening tests on all pregnant and postnatal women in their village to detect high-risk conditions. New technologies such as ChatGPT will also be explored.
- Work with communities to co-develop an intervention to support women's perinatal mental health in rural communities in India (the PRAMH study).

## **Impact:**

- The program will produce the first evidence from rural India on the benefits of targeted high-risk pregnancy screening using ASHAs, and the value of extended postnatal follow-up.
- The program will lead to the development of a new approach to postnatal care that integrates a life course approach.

## **Contact:**

To find out more about this project and its principal investigators or The George Institute please contact contact Abhishhek Shandilya +91 11 4158 8091-93 or AShandilya@georgeinstitute.org.in

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