Advancing Pregnancy Care with India-Specific AI Model

Source: TH

Researchers at the **Indian Institute of Technology Madras** and the **Translational Health Science and Technology Institute, Faridabad**, have collaborated to develop an India-specific artificial intelligence model named **Garbhini-GA2**, tailored for accurately determining the gestational age (GA) **of foetus** in the second and third trimesters of pregnancy.

- GARBH-Ini GA-2 is based on **genetic algorithms.** A genetic algorithm is an optimisation technique inspired by evolution and natural selection principles.
    - In addition to aiding neonatal care, Garbhini-GA2 also contributes to precise epidemiological estimates.
    - It minimises the **margin of error** in accurately determining the **age of a foetus** within the Indian population by nearly threefold.
- This initiative is a part of the **GARBH-Ini programme**, addressing the critical need for precision in prenatal care.
    - The **GARBH-Ini** is a flagship programme of the Department of Biotechnology (DBT), Govt of India.
    - It advocates for the health of both mothers and children while also creating predictive tools for identifying **preterm birth** risks.
- Published in the **Lancet Regional Health Southeast Asia,** this research marks a significant stride towards improving pregnancy care in India.

Read more: Medical Termination of Pregnancy (MTP) Amendment Act, 2021