

## Climate Change impact in Age of Menarche

*Prelims: Current events of national and international importance | Health*

### Why in news?

*Recently, a study was published, it highlights how climatic factors influence the age of menstruation in girls across the world, especially India.*

- The study specifically highlights how **climatic factors** profoundly influence the age at which girls in India experience their **first menstrual period**.

***Age of Menarche** or a girl's first menstrual period, typically occurs between ages 9 and 15, with the average age varying by location and population.*

- **Data collected from** - The researchers analyzed the data gathered through '**Demographic and Health Surveys**' (**DHS**) during 1992-93 and 2019-21, along with climate data from **NASA**.
- **Published in** - (Public Library of Science) **PLOS Global Public Health**, analyzed data from over 68,000 responses across India.
- **Findings - Influencing factors** - It shows changing menarcheal ages influenced by
  - **Environmental factors** like climate change and air pollution,
  - **Demographic factor and socio-economic factors** such as obesity and education levels.
- **Humidity & Temperature** - Higher humidity linked with advances the age of menstruation and higher temperatures with a delayed one.
- **Situation in India** - Most Indian states are indeed observing an **earlier onset of menarche** among girls **except Maharashtra**, where girls experienced a delayed onset of menstruation.
  - **In Maharashtra** - Higher temperatures may induce physiological stress, disrupt hormonal regulation and thereby delay the onset of puberty.

- Higher education could be linked with an earlier menarche, indicating demographic influences.
- **Measures to overcome the issue -**
  - ***Comprehensive public health interventions and collaborative efforts*** across various sectors are vital to address the health impacts.
  - Public health initiatives ***must prioritize*** improved nutrition, better healthcare access, and robust educational programs.

## Quick fact

### Demographic and Health Surveys (DHS) Program

- A major international initiative that collected, analyzed, and disseminated accurate and representative data on population, health, HIV, and nutrition.
- Over 90 low- and middle-income countries.
- It is conducted for ***every 5 years*** once.
- **Implemented by** - The consulting firm ICF International.
- **Funded by** - United States Agency for International Development (USAID).

## References

1. [The Hindu | Climate change impacting when girls get their period](#)
2. [OC Academy | How Humidity and Heat Impact Girls' First Periods](#)