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

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