



ANAEMIA: SCIENCE & TECHNOLOGY

NEWS: Research questions 'iron deficiency' as key cause of anaemia in India

WHAT'S IN THE NEWS?

A recent study suggests that the high prevalence of anaemia in India, particularly among women and adolescents, is not solely due to iron deficiency but is also influenced by Vitamin B12 deficiency, environmental factors like air pollution, and blood loss from infections. The findings highlight the need for multi-dimensional interventions, including improved nutrition, healthcare infrastructure, and socio-economic support.

Key Findings of the Study

1. Anaemia Prevalence:

- **Women aged 15-49 years:** 41.1%, significantly lower than the 60.8% reported in NFHS-5.
- **Adolescent girls aged 15-19 years:** 44.3%, compared to 62.6% in NFHS-5.

2. Methodology of the Study:

- Conducted by researchers from institutions like St. John's Medical College and the National Institute of Nutrition.
- Tested 4,500 individuals across eight states.
- Used **venous blood draws** for testing, which are considered more precise than the **capillary blood testing** used in NFHS.

3. Broader Causes of Anaemia Identified:

- In addition to iron deficiency, other potential contributors include:
 - **Vitamin B12 and folate deficiencies.**
 - **Environmental factors**, such as **air pollution.**
 - **Blood loss** due to infections like malaria, hookworm infestations, or tuberculosis.

Underlying Causes of Anaemia in India

1. Nutritional Deficiencies:

- Inadequate consumption of iron-rich foods (e.g., green leafy vegetables, legumes, meat).



- Poor maternal nutrition and inadequate feeding practices for infants.

2. Infections and Diseases:

- Hookworm infections and malaria cause chronic blood loss, worsening iron depletion.
- Other conditions like tuberculosis also play a role.

3. Socio-economic and Cultural Factors:

- **Poverty and food insecurity** restrict access to diverse diets.
- **Cultural beliefs** in some regions discourage the consumption of iron-rich foods, especially for women and children.

Challenges in Tackling Anaemia

1. Healthcare Accessibility:

- Rural areas face a lack of healthcare facilities for early diagnosis and treatment of anaemia.

2. Public Awareness:

- Limited knowledge about anaemia, its causes, and preventive measures.

3. Economic Barriers:

- High costs of nutritious foods and supplements make it difficult for economically disadvantaged populations to combat anaemia.

Way Forward

1. Nutrition Education:

- Conduct mass awareness campaigns about balanced diets, emphasizing the importance of consuming iron, Vitamin B12, and folate-rich foods.

2. Government Initiatives:

- Strengthen existing programs such as:
 - **Anemia Mukh Bharat Abhiyan** (Anaemia-Free India).
 - Food fortification with iron, Vitamin B12, and folic acid.
 - Iron and folic acid supplementation programs in schools and anganwadis.

3. Strengthening Healthcare Infrastructure:



- Establish diagnostic centers in rural areas for early detection of anaemia.
- Train healthcare workers to address anaemia comprehensively.

4. Socio-economic Development:

- Address poverty, ensure food security, and improve sanitation to combat root causes of anaemia.

2 ANAEMIA | THE GOAL

By 2025, achieve a 50% reduction in the rate of anaemia in women of reproductive age

WHY IT MATTERS

Anaemia increases the risk of **adverse maternal & neonatal outcomes**

causes **fatigue and lethargy**, and impairs physical capacity and work performance

Impairs the health and quality of life for **millions of women**, and the development and learning of their children

Anaemia reduction can help drive progress against the other global nutrition targets

- **stunting**
- **wasting**
- **childhood overweight**
- **breastfeeding**
- **low birth weight**

RECOMMENDED ACTIONS

INTEGRATED PLANNING

WHAT? Address nutritional and non-nutritional causes of anaemia and their determinants

HOW? Include interventions with an effect on anaemia in national health, education, agriculture and development plans

MULTI-SECTORAL APPROACH

WHAT? Use a multi-sectoral approach to anaemia prevention and control

HOW? Ensure that development policies and programmes beyond the health sector include nutrition and other major causes of anaemia relevant to the country context

STRENGTHEN HEALTH SYSTEMS

WHAT? Provide hospital and health facilities-based capacity for anaemia prevention and treatment

HOW? Support antenatal iron and folic acid supplementation (daily or intermittent) as part of routine antenatal care

COMMUNITY SUPPORT

WHAT? Raise awareness of the value of iron supplementation in women of reproductive age

HOW? Support community mobilization and social marketing strategies

Source: <https://www.thehindu.com/sci-tech/health/research-questions-iron-deficiency-as-key-cause-of-anaemia-in->



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india/article69109969.ece#:~:text=The%20conventional%20wisdom%2C%20that%20iron,was%20published%20earlier%20this%20week.



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