Undernutrition and anaemia among Indian adolescents: role of dietary diversity and hygiene practices

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Part-1

Background and Objective(s)

- ► WHO Global Nutrition Targets 2025
- (UN) Decade of Action on Nutrition (2016-25).
- ➤ SDG-2, Zero Hunger by 2030, and ensuring food and nutrition security for all.
- ► NFHS does not cover 15-19 age group
- The extent of undernutrition (stunting and thinness) and anaemia among adolescents in India
- Association of undernutrition and anaemia with socioeconomic status, dietary diversity, and hygiene practices.

Dietary Diversity and Hygiene Practices

Part-2

- ► Individual dietary diversity score (DDS) using FAO guidelines for adolescent dietary diversity (Kennedy et al., 2013).
- ▶ 17 food items are classified into 7 food groups as per FAO guidelines
- Finally, a cut-off score ≥4 is assumed as adequate dietary diversity (Akter et al., 2021; Isabirye et al., 2020; Kennedy et al., 2013).

Hygiene practices:

- Ten guestions; when it is important to wash your hands?
- ▶ Based on their possible exposure to pathogens, we constructed two hygiene indexes (general [6] and critical [6])

Descriptive Findings

DD and Hygiene practices 1.14 1.05 1.19 0.91 1.00 1.00 1.00 Two or > Zero At one 0.96 Two or >

Part-3

Logistic Regression Results (Odds Ratio)

Data and Methodology

Two or

CNNS 2016–18 Adolescents aged 10-19 years undernutrition (stunting, thinness) valid-BAZ (32,044) valid-BAZ (31,940) blood sample collected (16,585) Stunted (8174) Not-stunted (23,870) thin/wasted (6004) (25,936) anaemia tested (14,669) not anaemic (3692) not anaemic (10,977)

27.8 24.5 28.7 33.5 Two or more Zero 32.9 31.5 At least one

conclusions

- Ownership-based universal open defecation-free (ODF), now target hygiene behaviour
- Focus on adolescence to break the intergenerational malnutrition cycle

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27.4

^{*}Adjusted for age, sex, residence, education, caste, wealth index, region, mother's education