

Dietary diversity among 5-9 years old children in Bangladesh: Findings from a nationally representative survey

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RATIONALE & OBJECTIVE

- ❑ Middle childhood (5-9 years) is a time of growth, requiring a diverse diet for proper physical and cognitive development. Nationally representative data on dietary diversity for this age group is limited.
- ❑ Objective: To assess dietary diversity and factors associated with inadequate dietary diversity (IDD) among 5-9 years old children in Bangladesh

METHODS

Study design and areas: Cross-sectional study implemented in all eight divisions of Bangladesh

Sampling procedure: Multi-stage cluster sampling (90 clusters): 64 rural, 16 non-slum urban, 10 slum cluster

Sample size: Total 5,764 children (2,850 boys and 2,914 girls)

Outcome variable: IDD using the minimum dietary diversity for women (MDD-W) questionnaire

Data analysis: Stata (v17.0) software was used. Methods included weighted prevalence with 95% CI and Poisson regression

RESULT

More than half of the children (52.7%, 95% CI: 49.4%, 56.1%) had IDD. The prevalence among boys was (50.1%, 95% CI: 47.0%, 53.3%) and the girls was (49.9%, 95% CI: 46.7%, 53.0%).

About (83.6%, 95% CI: 80.3%, 86.7%) of children consumed at least one animal-source food item, and (87.7%, 95% CI: 85.1%, 89.9%) consumed at least one type of vegetables or fruits.

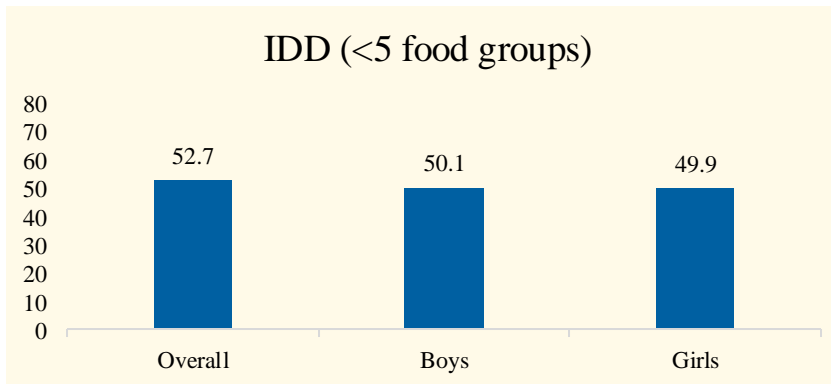


Figure 1: Prevalence of IDD among children

Factors associated with IDD

Lower parental education, household non-consumption of fortified oil, mild food insecurity, severe food insecurity, and lower household wealth were associated with IDD

Explanatory variables	Adjusted PR [95% CI]
Age in years	0.99 [0.97, 1.02]
Religion	Ref
Islam	1.05 [0.97, 1.13]
Other than Islam	Ref
Completed years of education of the child	0.98 [0.94, 1.01]
Screen time	Ref
<=2hrs	1.05 [0.98, 1.11]
>2hrs	Ref
Nutritional status	Ref
Underweight	Ref
Normal	0.97 [0.92, 1.03]
Overweight and obese	0.81 [0.71, 0.93] *
Area of residence	Ref
Rural	Ref
Non-slum urban	0.97 [0.89, 1.06]
Slum	1.06 [0.98, 1.15]
Maternal education	Ref
Grade 0-4	1.21 [1.09, 1.34] *
Grade 5-9	1.15 [1.05, 1.26] *
Grade 10 and above	Ref
Paternal education	Ref
Grade 0-4	1.11 [1.01, 1.22] *
Grade 5-9	1.07 [0.97, 1.17]
Grade 10 and above	Ref
Occupation of father	Ref
Salaried	0.96 [0.88, 1.04]
Non-salaried	Ref
Access to improved sanitation	Ref
Improved	Ref
Not improved	1.05 [0.99, 1.11]
Consumption of fortified oil	Ref
No	1.14 [1.08, 1.20] *
Yes	Ref
Food security	Ref
Food secure	Ref
Mild food insecure	1.08 [1.01, 1.15] *
Moderate food insecure	1.06 [0.96, 1.16]
Severe food insecure	1.1 [1.02, 1.19] *
Household wealth	Ref
Poorest	1.18 [1.08, 1.29] *
Poorer	1.17 [1.07, 1.27] *
Middle	1.06 [0.97, 1.17]
Richer	0.99 [0.9, 1.09]
Richest	Ref

IMPLICATIONS

Interventions targeting general education, food insecurity and macro-economic improvement are needed to address dietary diversity of 5-9 years old children in Bangladesh.