

# Women dietary diversity and child feeding practices amidst COVID-19 in India

Findings from National Family Health Surveys,  
2016-2021

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# Background

- COVID-19 (C19) pandemic jeopardized food security worldwide
  - Mobility restrictions
  - Shortage of resources
  - Disrupted food supply chains
  - Reduced household food demand
- Poor and inadequate diets -> nutrition deficiency
  - Malnutrition and mortality
  - Inter-generational negative effects
  - Exacerbate existing social & health inequities
- India ranks 107/121 countries, with serious hunger levels - Global Hunger Index (2022)



# Objective

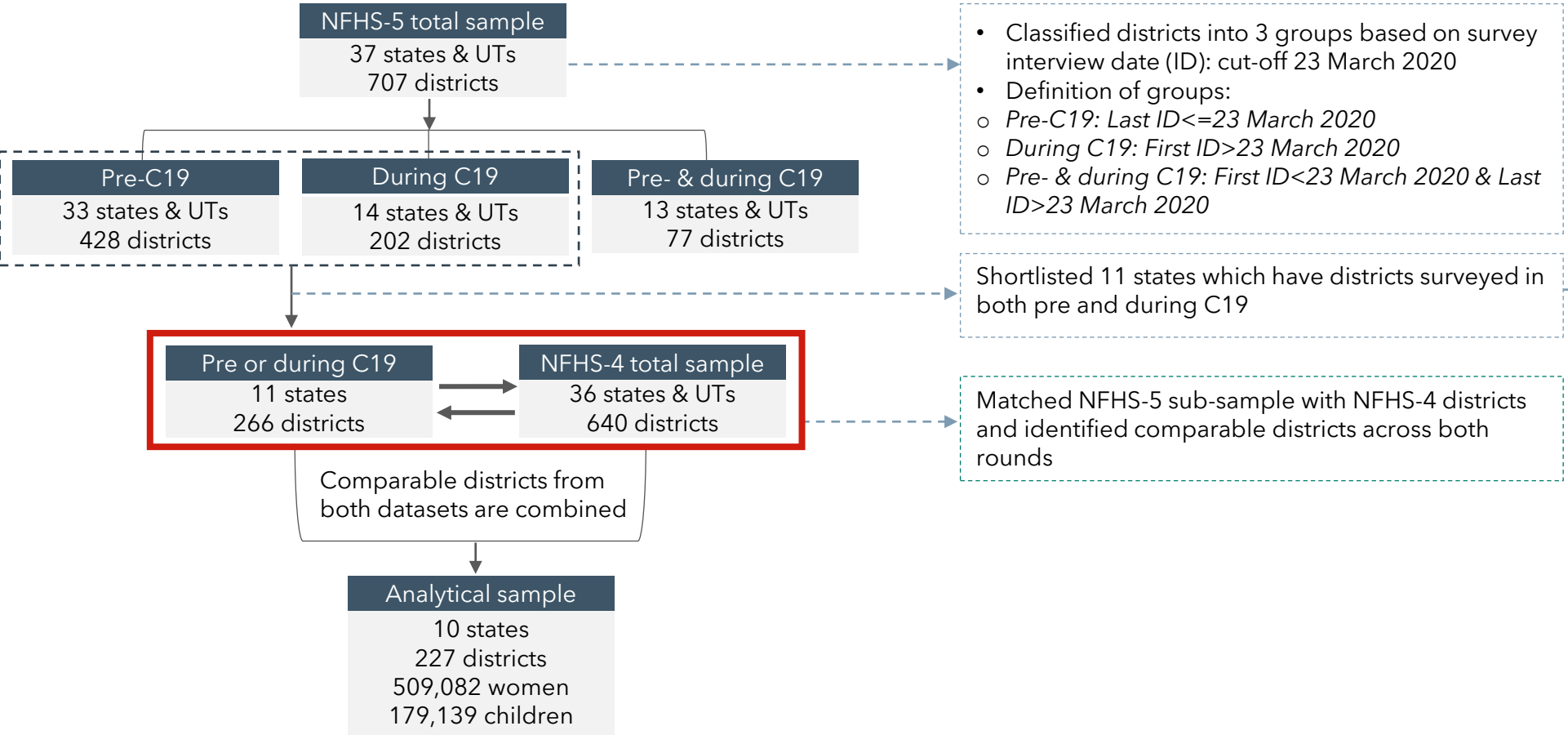
Examine impact of COVID-19 (C19) on diet patterns among women and children in India, in districts surveyed before and during C19, using the National Family Health Survey 2015-16 and 2019-21

- Daily and at least weekly diets among women
- Diet patterns in past 24 hours among children

# Data and methods

**Data:** National Family Health Survey round 4 (2015-16) and 5 (2019-21)

## Sample



- Classified districts into 3 groups based on survey interview date (ID): cut-off 23 March 2020
- Definition of groups:
  - Pre-C19: Last ID ≤ 23 March 2020
  - During C19: First ID > 23 March 2020
  - Pre- & during C19: First ID < 23 March 2020 & Last ID > 23 March 2020

Shortlisted 11 states which have districts surveyed in both pre and during C19

Matched NFHS-5 sub-sample with NFHS-4 districts and identified comparable districts across both rounds

### Example

States	Number of districts		
	Pre-C19	During C19	Pre- & during C19
Bihar	38		
Chandigarh		1	
Chhattisgarh	8	16	3

# Data and methods



## Variables

### Outcomes



#### Women

*(daily & at least weekly)*



#### Children

*(last 24 hours)*

Primary



Diet composite score  
(total 7 food groups)

Minimum dietary  
diversity ( $\geq 4/7$  food  
groups)



Minimum dietary diversity  
( $\geq 5/8$  food groups)



Early initiation of  
breastfeeding (BF)  
Exclusive BF

Note: Breastfeeding indicators and child minimum dietary diversity constructed as per WHO guideline

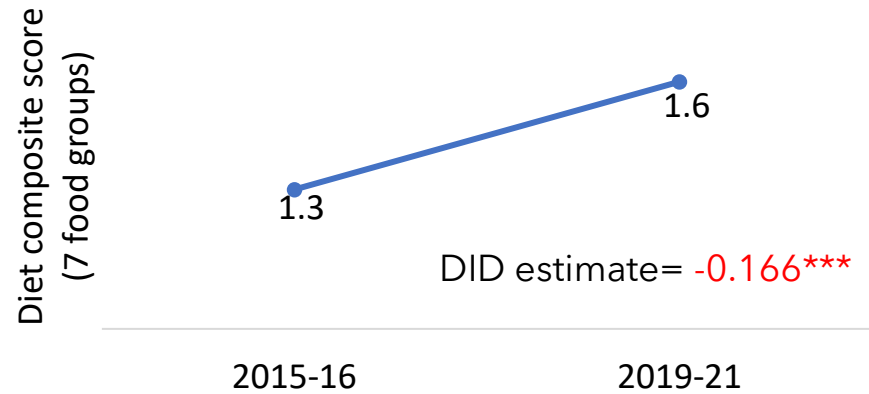


# Results - C19 impact on women diet indicators

## Daily: diversity

—●— No exposure —●— Exposure

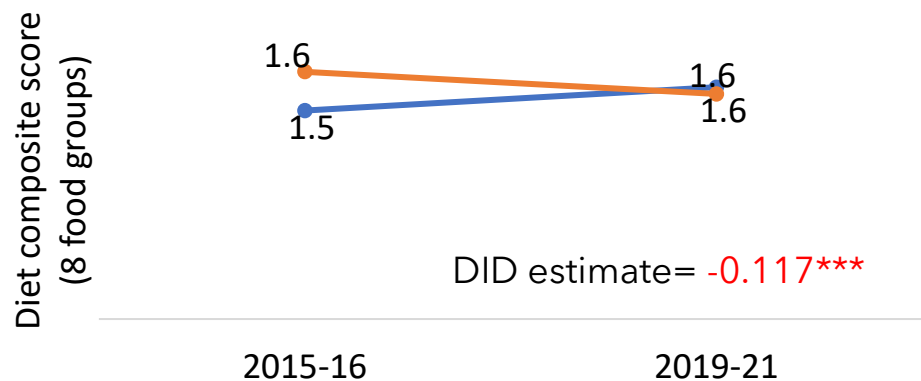
### A. Diet composite score (out of 7 food groups)



# Results - C19 impact on children diet indicators

**Last 24 hours: diversity** — No exposure — Exposure

A. Diet composite score (out of 8 food groups)



# Policy implications

- Dietary diversity among women and children was already poor in several states of India; diet patterns worsened by COVID-19 (C19)
  - Implications for malnutrition and mortality in the country
- Improvement in exclusive breastfeeding in exposure districts - continue the good behavioral practices; poor dietary habits among women may have an influence on breastmilk quality.
- Strengthened multisectoral response is needed to improve diet patterns
  - Strengthen food supply chains
  - Strengthen social protection strategies
  - Ensure effective counselling
  - Reduce inequity in food-specific service provision
- Next step: Examine C19 impact on diet patterns across residence, wealth, & education levels