

# Determinants of Wasting among Children 0-23 months in India- Analysis of National Family Health Survey- 5

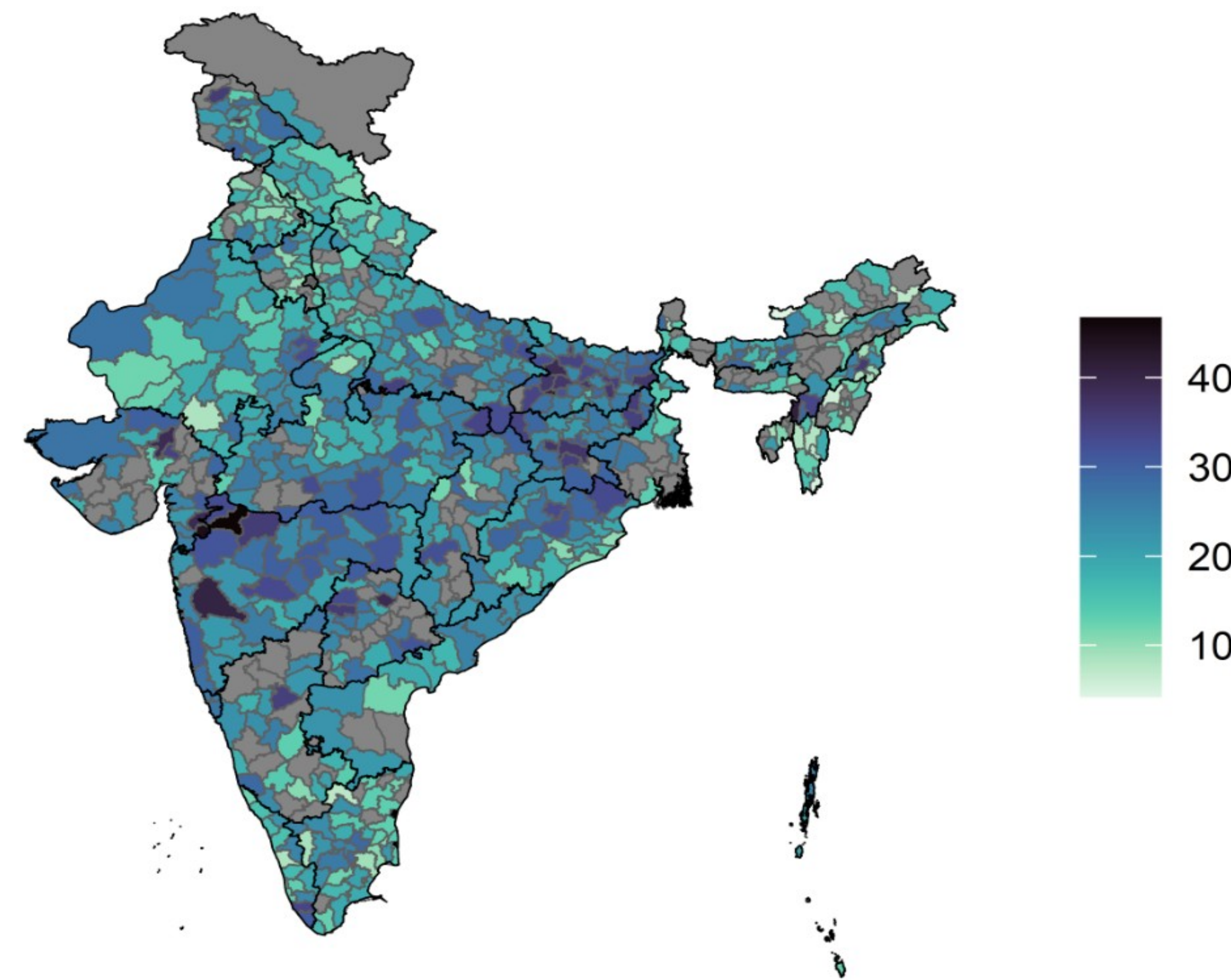
Jyoti Sharma<sup>1\*#</sup> Shivam Pandey<sup>2#</sup>

1. Indian Institute of Public Health Delhi, Public Health Foundation of India

2. Department of Biostatistics, All India Institute of Medical Sciences

## Back ground

- Persisting high levels of child wasting (weight for height -2SD) in India is a major concern for India.
- This study aims to map child wasting in districts to identify wasting hot spots and analyze the socio-economic, maternal as well as child level factors associated with wasting among children 0 -23 months in India.



## Results

- 81 districts had >30% prevalence of wasting.
- Prevalence of wasting among children of 0-23 months was higher than the national average.
- Adjusted analysis suggested that poorest households, without accesses to improved sanitation facilities, children belonged to other backward class families and mothers with had higher odds of wasting in children.
- Odds of wasting increases by 27% among low birth weight children
- Minimum acceptable diet and female gender had protective effect on wasting in children 6-23 months.

## Methods

- National family health Survey-5 data was used to identify the hot spots at the district level and individual level data was analyzed to identify determinants of child wasting among 0-23 month children in India.
- Wasting (low weight-for-height-2SD) was the primary outcome variable of the study.
- Socio-demographic characteristics, maternal factors and child level factors were considered independent factors.
- logistic regression analysis was conducted to identify the most significant factors associated with wasting for 0-23 months

## Conclusions

- We call for action to strengthen the care of low birth and premature babies and promote optimal child feeding practices
- Nutrition services should focus on early identification of wasting and its management.

Sub groups*	AOR (95% CI)*	p-value
<b>Socio-economic factors</b>		
<b>Place of residence</b>		
Urban (ref)	1.0	
Rural	0.92 (0.86 to 0.99)	0.02
<b>Wealth quintile</b>		
Lowest	1.60 (1.43 to 1.79)	<0.001
Second	1.32 (1.19 to 1.47)	<0.001
Middle	1.28 (1.16 to 1.42)	<0.001
Fourth	1.16 (1.04 to 1.28)	0.005
Highest (ref)	1.0	
<b>Improved Sanitation</b>		
No	1.18 (1.11 to 1.25)	<0.001
Yes	1.0	
<b>Caste</b>		
Scheduled caste/ Scheduled tribe	1.01 (0.94 to 1.10)	0.6
Other backward class	1.12 (1.04 to 1.20)	0.002
Others (ref)	1.0	
<b>Maternal BMI (kg/m<sup>2</sup>)</b>		
Normal (18.4-24.9) (ref)	1.0	
undernourished (<18.5)	1.30 (1.23 to 1.37)	<0.001
Overweight or Obese (≥25.0)	0.80 (0.74 to 0.85)	<0.001
<b>Maternal Anaemia<sup>§</sup></b>		
Non-anaemic (ref)	1.0	
Anaemia	1.11 (1.05 to 1.15)	<0.001
<b>Gender</b>		
Male (ref)	1.0	
Female	0.89 (0.85 to 0.93)	<0.001
<b>Birth weight</b>		
<2500 grams	1.27 (1.20 to 1.36)	<0.001
≥2500 grams (ref)	1.0	
<b>Diarrhoea in last 2 weeks</b>		
No (ref)	1.0	
Yes	1.13 (1.05 to 1.21)	0.002
<b>Minimum acceptable diet</b>		
Yes	0.82 (0.76 to 0.89)	<0.001
No (ref)	1.0	