Girls (24%) tended to be less underweight than boys (36%). Similarly, younger children (5–7 years, 27%) tend to be significantly less underweight than older children (8–11 years, 32%). In HD Kote and Yadgir, the difference between social groups was worth noting: in KD Kote, only 62.6% of tribal children were within the normal range as compared to 72.9% of non-tribal children; in Yadgir, 63.5% of tribal children were in the normal range as compared to 72.6% of non-tribal children.

When considering stunting, variance becomes more pronounced: 16% of children are stunted in Mandya district, as compared to almost 34% in Yadgir.

Mapping measures of malnutrition with the social composition of the *Gram Panchayat* (GP) revealed interesting patterns. We ranked GPs along two parameters: (1) their proportion of tribal population; and (2) their children's level of undernutrition. We found a high level of overlap between these two categories: in GPs that appeared in the top 10 of predominantly tribal population, we found 8 also ranked in the top 10 for those with the highest levels of underweight children. Similarly, 5 appeared in the top 10 for stunting.

Overall, there was a clear linkage between gender, age and caste and both underweight and stunting.

Conclusions The study concludes that a very large proportion of primary school children are malnourished as regards their height and weight in the study districts. Social determinants such as gender, caste and age are significant contributors to the nutritional outcomes of the children. While the nutritional risks of children in the first 1,000 days and in the under-5 age group are relatively well documented, and policies and programmes have targeted these at-risk populations, the needs of school-going children remain less studied. There is a need to go beyond the Mid-Day Meal Scheme and micronutrient supplementation programmes for this age group, to tackle this problem with a multi-pronged strategy.

Recommendations At the policy level, there needs to be specific recognition of the vulnerability of specific groups of school children, the socio-economic determinants of their nutritional vulnerability and a commitment to taking multi-sectoral action with appropriate coordinating mechanisms.

At the programme level, large-scale interventions to reduce child and adult malnutrition need to be better designed, based on robust empirical evidence of what works.

Within the education and health systems, stronger mechanisms to monitor and support the nutritional levels of children at risk should be put in place.

At the community and household level, there is a need to understand the dietary needs of growing children, and ensure that available resources are targeted at providing a well-balanced and nutritious meal.

No competing interest.

OP-10 | SOCIAL DETERMINANTS OF CHILDHOOD MALNUTRITION: THE LOSS OF INNOCENCE

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Background National survey data provides information regarding undernutrition among children under 5 years of age, but there is a big gap in data on school-age children, despite evidence that hunger and malnutrition significantly affect learning outcomes and are critically linked to social determinants such as caste, class and gender. The present paper is based on the study 'Do we know what they eat and why? A study on school-level dietary adequacy and impact of cultural beliefs on dietary choice', examining the prevalence of malnutrition and their associated social determinants among school-going children in three districts of Karnataka.

Methods Our study population consisted of government primary school children (both boys and girls) attending grade 1–5 in HD Kote taluk (Mysore), Shorapur (Yadgir) and North block (Mandya), Karnataka. We applied a cross-sectional design. Sample size was 5,340 children from 100 schools across three districts. Schools were randomly selected. Children not present on the day of examination were excluded from the study. A structured questionnaire was used for data collection. Study variables were height and weight of the children, plus their gender, caste and age. Ethical approval was taken from relevant authority.

Findings Nutritional outcomes were measured using WHO references for 5–19 years: BMI-for-age (underweight) and height-for-age (stunting). Overall 29.7% of the children were underweight and 26.2% stunted. The distribution of underweight was similar across the districts but stunting was significantly higher at Yadgir (34%).