

### The Impact of COVID-19 on Household Food Insecurity and Interlinkages With Child Feeding Practices and Coping Strategies in Uttar Pradesh, India

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**Objectives:** The Coronavirus (COVID-19) pandemic has profound negative impacts on people's lives, but little is known on the effect of COVID-19 on household food insecurity (HFI) in poor setting resources. This study aimed to assess the changes in HFI during the pandemic and examine the interlinkages between HFI with child feeding practices and coping strategies in Uttar Pradesh, India.

**Methods:** We conducted a longitudinal quantitative survey with 569 mothers with children <2y in December 2019 (in-person) and August 2020 (by phone). We measured HFI by using the Household Food Insecurity Access Scale and examined the changes in HFI during the pandemic using the Wilcoxon matched-pairs signed-rank tests. We

then assessed child feeding practices and coping strategies by HFI status using multivariable regression models.

**Results:** HFI increased sharply from 21% to 80% before and during COVID-19, with 62% households changing the status from food security to insecurity and 17% remaining food insecure. Children belonging to newly and consistently food-insecure households were less likely to consume a diversified diet (adjusted odds ratio, AOR: 0.56,  $P = 0.03$  and AOR: 0.45,  $P = 0.04$ , respectively) compared to those in food-secure households. Households with food insecurity were more likely to engage in coping strategies for obtaining foods including reducing other essential non-food expenditures (AOR: 1.7–2.2), borrowing money to buy food (AOR: 3.6–4.3), selling jewelry (AOR: 3.0–5.0), and spending savings or selling other assets (AOR~2.0), all  $P < 0.05$ .

**Conclusions:** COVID-19 had a significant negative impact on HFI, which in turn had implications for child feeding practices and coping strategies. Our findings highlighted the need for further investment in targeted social protection strategies and safety nets as part of multisectoral solutions to improve HFI during and post-COVID-19.

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