Household Food Insecurity and Dietary Diversity Among Kenyan Households During the COVID-19 Pandemic

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Objectives: This study compares 1) household food insecurity and 2) household dietary diversity before and during the COVID-19 pandemic, and 3) examines self-reported coping strategies among three communities around Lake Victoria, Kenya.

Methods: We conducted in-person with 90 randomly selected households in March 2020 prior to the first reported case of COVID-19 in Kenya and followed up with 88 of these same households by phone in June 2020 during COVID-19. We assessed household food insecurity status using the Household Food Insecurity Access Scale (HFIAS) and assessed dietary diversity using the Household Dietary Diversity Score. We compared differences in household food insecurity scores and prevalence across time using the paired T-test and McNemar's test, respectively. We compared household dietary diversity scores and the proportion of households consuming each food group across time using the Wilcoxon signed rank test and McNemar's test for paired samples, respectively.

Results: The prevalence of severe food insecurity increased from 82% before COVID-19 to 91% during COVID-19 (P = 0.03) and household dietary diversity scores fell from 9.5 \pm 1.5 to 8.6 \pm 1.5 (P < 0.001). Households coped by reducing their food intake at mealtimes, borrowing money from family and friends, and purchasing food on credit.

Conclusions: These findings demonstrate a high and growing level of vulnerability faced by these communities. Strategies to address food insecurity and access to diverse foods during the COVID-19 pandemic are urgently needed.

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