

Does kin support protect against food insecurity? New findings from Nairobi, Kenya

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Introduction

- In summer 2023, Kenyan residents held days-long protests around the country against the high price of basic necessities, particularly food (1).
- Understanding factors in food security have implications for later child developmental outcomes (2,3).
- In cities like Nairobi, as the precarity of informal settlement households heightens with cost of living, identifying factors in resilience against food security in vulnerable settings is critical.
- While there is research on financial interventions on food security (4,5,6) and educational support from kin in improving child health (7), there is limited research on the role of material support by kin on food security.

Methods

- Study site:** Korogocho and Viwandani - high population density, poor quality housing and services, minimal sanitation, high crime, high unemployment, informal economy.
- Data:** JAMAA na AFYA ya MTOTO (JAMO), a longitudinal, mixed methods study examining relationships among union formalization, kinship and child outcomes. The project includes 6 waves of surveys and 3 rounds of qualitative data collection. Here, we focus on waves 1 – 3.
- Baseline sample:** children aged 0-24 months with co-residing mothers aged 18-29, N=1,203.
- Analytical sample:** Waves 1 – 3, N=2,648
- Measures:**



Kin support

Number of kin who have given any type of support in the past month: financial, emotional, childcare support, nonmonetary support



Socioeconomic status

Predicted probability of income under 5000 Ksh/month, using reported income for formally and informally employed women and household assets, divided into three categories: low (poorest), middle, and high SES (least poor).



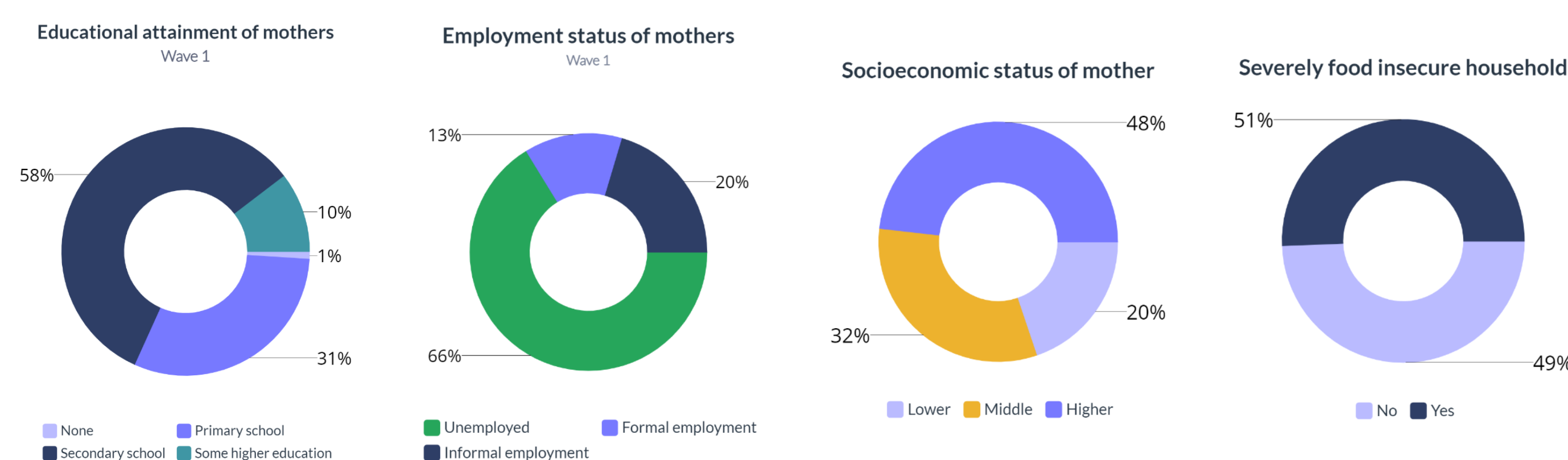
Food insecurity

Household Food Insecurity Access Scale (8): frequency of food resources and intake in the past month. Score was summed and categorized with weights, recoded as a binary variable

- Analysis:** 1) Logistic regression predicting severe food insecurity as a function of kin support 2) and moderated by SES
- Controls in adjusted models include mother's marital status, mother's educational attainment, mother's kin network size, household size, number of children, mother's employment status, and mother's location.

Results

Figure 1: Sample characteristics of mothers, wave 1 (N=1,203)



	Household size	Number of kids	Number of kin	Number of kin who give any type of support
Mean	4.3	1.2	13.1	6.2
SD	1.7	0.54	4.1	3.3

Reciprocal kin support networks can help food insecurity in poorer households, but can burden them in times of economic crisis.

- In wave 1, risk of severe food insecurity **decreases** as kin support **increases** among the middle SES mothers, while it **increases** with larger kin support networks for high SES mothers (Fig. 2a)
- Pooled across waves in a random effects model, among those with zero kin support, higher SES mothers had significantly lower odds (0.19) of severe food insecurity than middle SES (the reference group). However, with every one person **increase** in kin providing support, higher SES mothers' odds of severe food insecurity **increased** by 1.12 as compared to the middle poor group. Among middle SES mothers, kin support was not significantly associated with odds of severe food insecurity.

Fig. 2a. Predicted probabilities of severe food insecurity by SES, per wave

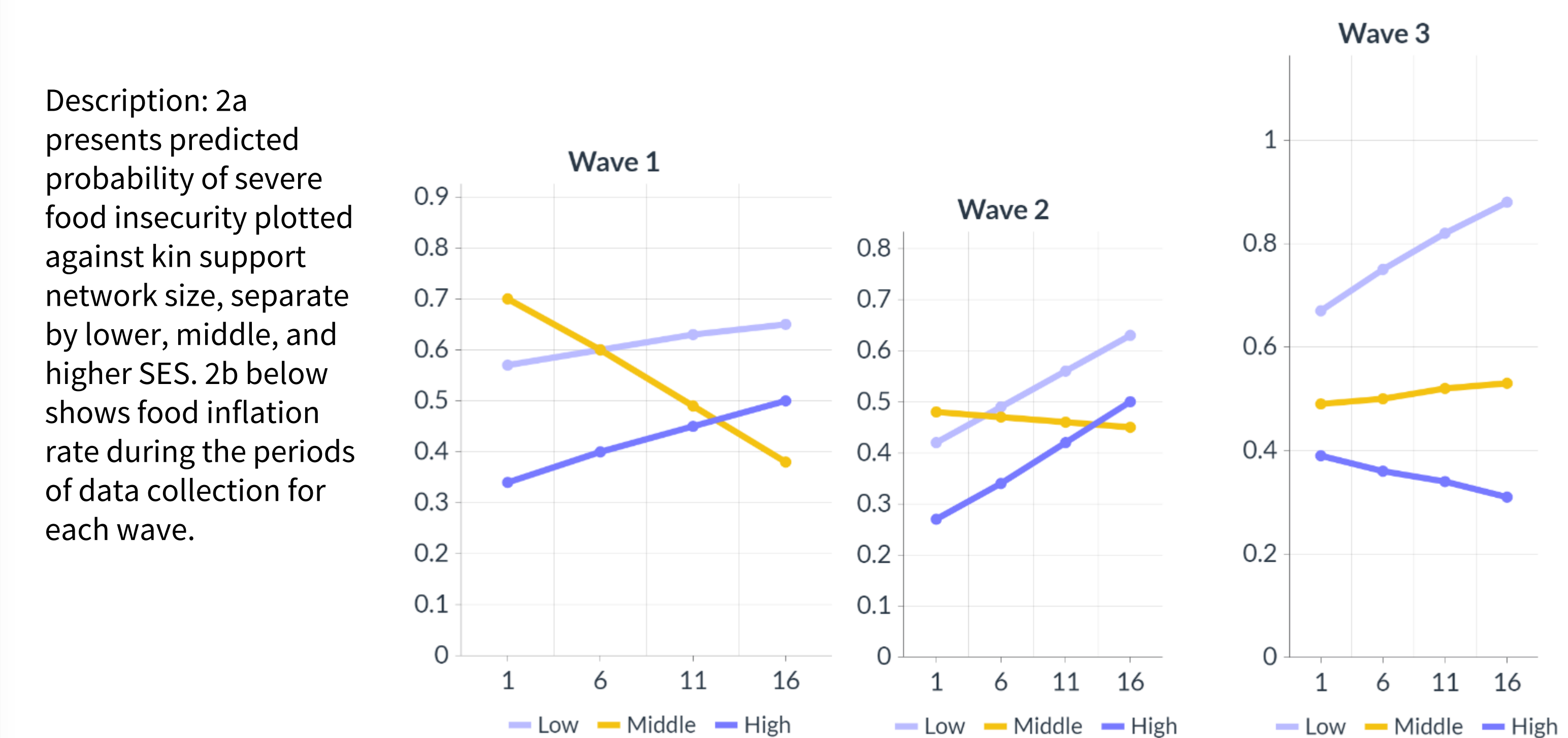
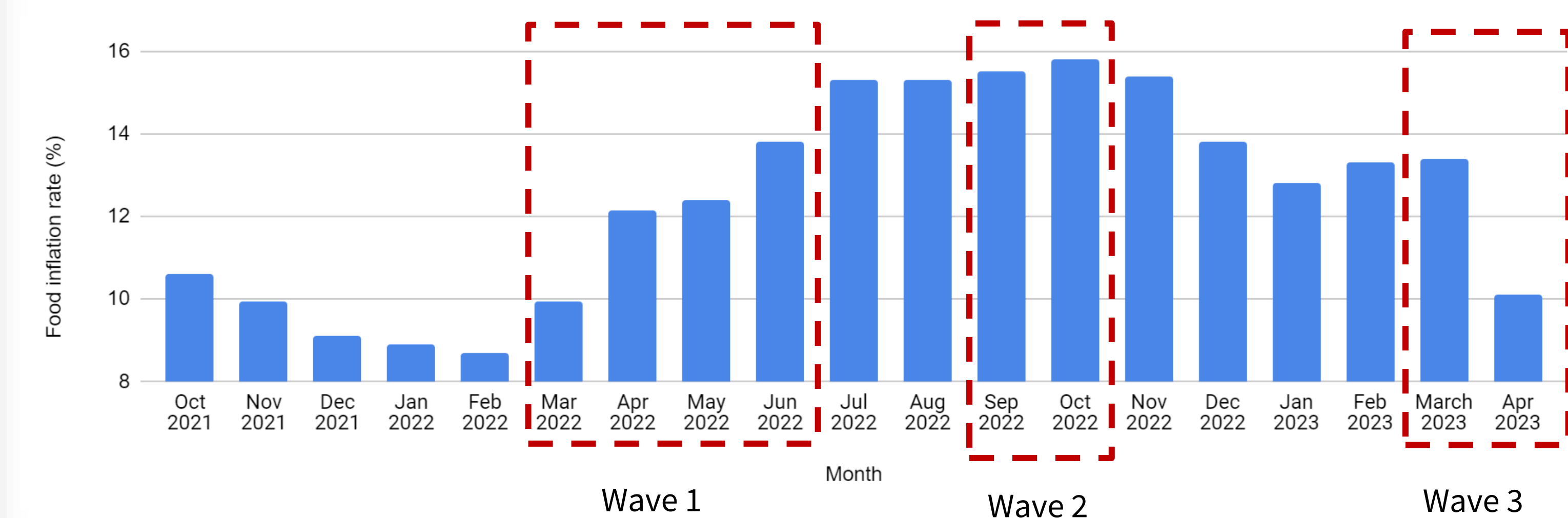


Fig 2b. Food inflation rate over time



Discussion

- Kin-based support networks in low-income contexts are usually *reciprocal exchanges* (9)
- Pooled across waves, no households, regardless of SES, benefit from larger kin support networks. It may be that households use "extra" resources to protect their kin at the expense of improving their own food security.
- Higher SES households may experience kin burden and are expected to give more or different kinds of support than what they receive
- Kin support may be protective during periods of normal food prices, but is likely to be less protective in the context of high inflation, particularly around food prices (10,11).
- Obligations to support kin may increase as the accessibility of food decreases among mothers' kin networks.

Acknowledgments

We thank the following funders: Eunice Shriver National Institutes of Child Health and Human Development (1R01HD101613-01A1), Maryland Population Research Center, University of Maryland, University of Maryland Office of Research, BSOS Dean's Research Initiative award, University of Maryland. This poster design was adapted from the 'betterposter' poster design template by Fabio Cramer based on Mike Morrison's initiative (<https://osf.io/ef53g/>) is available from the s-Ink.org collection.