

Protecting Nutrition of Pregnant and Lactating Women and Children in Acute Food Crises

Objectives and Research Questions

**Objective 1:**Increase the understanding of how different transfer modalities affect nutrition and food security outcomes and health seeking behaviors among pregnant and lactating women (PLWs) and children under five (CU5) and their households.

**Objective 2**:Characterize contextual factors, notably migration and role of men, and challenges of cash transfer programing in Somalia with the aim of developing actionable recommendations to inform future food and nutrition programming in Somalia and elsewhere.

***Primary Research Questions:***

* Is provision of unconditional cash assistance in addition to vouchers more effective than vouchers alone for preventing acute malnutrition and among PLWs and CU5s?
* What is the added value of unconditional cash transfers with respect to household food security?

Rationale

* Cash transfers are significant change to humanitarian assistance. Major commitments to scale up have been made by donors and humanitarian agencies.
* Cash-based approaches can be more efficient than in-kind assistance and more supportive of local economies, human agency and dignity.
* There is evidence from non-crises settings of the positive impact of cash-based approaches on dietary diversity and use of health services; but the link between these and improved nutrition outcomes has not been adequately researched in emergencies.
  + Most data has been collected at a household level, thus there is an evidence gap for commonly targeted vulnerable groups such as PLWs and CU5s.
  + There is little evidence for individual nutrition outcomes (ex: SAM/MAM) – with the exception of recent REFANI findings, most evidence from emergency settings is limited to food security.



Study Design

* **Conducted in Wajid, Somalia**—drought and conflict affected, many IDPs
* **Mixed Methods Approach:** both quantitative and qualitative data were collected. Quantitative component used a pre/post design and sought to measure change over the intervention period. Qualitative findings were intended to enrich understanding of quantitative results and their implications, which is important for application to ongoing programming.
* A **3-comparison group quasi-experimental design** was required because humanitarian programs were already ongoing. To be eligible, households need to have a non-malnourished PLW and meet vulnerability criteria.
  + Mixed transfers (in-kind, voucher, unconditional cash) - US$106 monthly
  + Vouchers – US$106 monthly
  + No household level food or cash assistance
* The planned intervention period of 6 months was reduced to 4 months.
* Statistical analysis included difference-in-difference analysis and propensity score weighting to account for the non-randomized design and baseline differences between groups.





CU5 Food Security and Nutrition

* **Dietary diversity** was significantly better at baseline in the mixed transfer group; at endline, dietary diversity was similar between groups with ~30% achieving the target; diversity declined in the mixed transfer group.
* **Mid-Upper Arm Circumference** was significantly greater in the mixed transfer group at endline and baseline. Mean MUAC increased by 0.5cm in the voucher group and 0.1cm in the mixed transfer group, however, increases were not statistically significant.
* **Acute malnutrition prevalence** was greater at baseline and endline for CU5s in the food voucher group. Prevalence decreased over time in both groups, but differences were not significant from baseline.

Limitations

* Security and beneficiary numbers made it difficult to recruit large samples of PLW households; the intervention period was shorter than planned; and many in the non-assistance group began receiving aid. These factors limited the ability to detect statistically significant differences between groups.

Household Food Security

* Household food security at baseline was significantly better in the mixed transfer group (Household Hunger Score). Household food security decreased—by study end, most households were experiencing moderate hunger.

PLW Food Security & Nutrition

* **Dietary Diversity** was significantly better in the mixed transfer group at both baseline and endline. Increase in dietary diversity was similar between mixed transfer and voucher groups at approximately 0.6 food groups daily.
* **Mid-Upper Arm Circumference** (MUAC) was significantly better in the mixed transfer group at both baseline and endline. Mean MUAC increased by 0.9cm and 1.3cm in the voucher and mixed transfer groups, respectively.
* **Acute malnutrition prevalence** at baseline was 0% (due to eligibility criteria); at intervention end, 3.1% (CI: 1.0-7.1%) of voucher recipients and 0.0% (CI: 0.0-1.4%) of mixed recipients were acutely malnourished (MUAC<21.0cm). Despite lack of statistical significance in magnitude of change over time between groups, mixed transfers were fully successful in preventing acute malnutrition.



Conclusions

* Despite decreases in household food security, PLW dietary diversity and mean mid-upper arm circumference improved. No PLWs in the mixed transfer group became malnourished by the end of the study period.
* Transfers were not protective for children’s diet diversity. However, child nutrition status improved in both intervention groups in terms of mean MUAC (statistically significant) and acute malnutrition prevalence (not statistically significant). This compares to a large decline in nutrition status in the non-assistance group.
* Results show promise but do not indicate a clear benefit for mixed transfers as compared to food vouchers – likely a result of study limitations. More research or program evaluations needed to deepen understanding – in particular with larger sample sizes and longer intervention periods.