COMBATING CHILD MALNUTRITION IN POST-CONFLICT ZONES:
Assessing an Intervention in the Democratic Republic of Congo

Skyler Barlow . Gavin Finnegnan . Brandon Pichanick
Kishore Gawande
Summary

- Background
- Partners and Pre-Survey
- Research Design
- Results
- Conclusion
The Democratic Republic of the Congo

Butembo
Conflict in North Kivu

- Crossroads for armed groups
- Butembo population
- Stability of Butembo
Partner Background

– Giorgio Cerruto
  Therapeutic Nutrition Center Personnel
– Our Team
Pre-Survey

• **Purpose**
  – Train enumerators
  – Identify potential weaknesses of the surveys
Methodology

• Research Questions
  – Prevalence of child malnutrition in Bunyuka Parish?
  – Does the nutrition treatment positively affect health outcomes in children?

• Evidence
  – Prevalence: Graphical
    • WHO Standardized Measurements
  – Average Treatment on the Treated (ATT)
    • Dependent Variables: Height, Weight
Control Survey
Treatment Survey
Nutrition Sample

Untreated
- 714 mothers surveyed
- 1,750 children measured

Treated
- 215 mothers surveyed
- 351 children measured
Prevalence of Malnutrition

Comparison of Below Average WHO Outcomes w/ Above Average Bunyuka Outcomes
Results

• Height as outcome
  o Weight can overstate health (cassava is main food)

• Treatment effects: By Gender, Age
  o ATT
  o Lower Quartile
  o Upper Quartile
1. Does this imply that the treatment does not work? Except for the first age group, all control groups have better nutritional status than the treatment group.

zchen.tamu,
Lowest Quartile: FEMALES

Lower Quartile Treatment Effect. FEMALES: By Age Group

NOT SO GOOD

GOOD

Below 3 yrs. [3, 6) years [6, 9) years [9, 12) years
Does this imply that the treatment does not work? Except for the first age group, all control groups have better nutritional status than the treatment group.

zchen.tamu,
Highest Quartile: FEMALES

Upper Quartile Treatment Effect. FEMALES: By Age Group

- **GOOD**
- **NOT SO GOOD**
Does this imply that the treatment does not work? Except for the first age group, all control groups have better nutritional status than the treatment group.

zchen.tamu,
ATT: MALES

Average Treatment Effect. MALES: By Age Group

NOT SO GOOD
Does this imply that the treatment does not work? Except for the first age group, all control groups have better nutritional status than the treatment group.
Lowest Quartile: MALES

Lower Quartile Treatment Effect. MALES: By Age Group

NOT SO GOOD
Does this imply that the treatment does not work? Except for the first age group, all control groups have better nutritional status than the treatment group.
Highest Quartile: MALES

Upper Quartile Treatment Effect. MALES: By Age Group

NOT SO GOOD
Does this imply that the treatment does not work? Except for the first age group, all control groups have better nutritional status than the treatment group.

zchen.tamu,
One Explanation: Early Treatment Helps
Bottom Line

- Research Questions
  - Prevalence of child malnutrition in Bunyuka Parish?
    - Very prevalent
  - Does the treatment positively affect child health?
    - Yes, especially for Female children
    - However, only for children under 3 years
    - Reason is poverty and inability to sustain treatment
Future Steps

- Limitations of current Study:
  - Not a perfect control
  - Post-treatment survey only

- Future Design
  - Randomization
  - Across villages
  - Experiments with better treatments
    - Economic help to sustain treatment