Reviewer’s report

Title: Effectiveness of the government cash transfer program in supporting households caring for orphaned children in Kenya: cross-sectional evidence from western Kenya

Version: 2 Date: 26 June 2014

Reviewer: Mariano Kanamori Nishimura

Reviewer’s report:

Major Compulsory Revisions

1. The current title may be too ambitious. I believe it would be more accurate to refer to the association between enrollment in government cash transfer programs and Kenyan orphan children’s household and individual level characteristics.

2. The abstract has 489 words. The maximum number of words for the abstract is 350. Some information can be excluded (e.g., definition of school attendance and malnutrition, descriptive statistics, and no significant results). The tone of the conclusion is adequate. I would suggest using this text in the discussion section.

3. “In conclusion this study suggests that this unconditional cash transfer system to support households caring for orphaned children has a positive effect on several key socioeconomic and health-related factors.” You may want to change to the sentence included in the abstract “Children and adolescents in households receiving the CT-OVC appear to have improved nutritional status, school attendance, and optimism about the future, compared to those in households not receiving the CT, in spite of some evidence of continued material deprivation. Consideration should be given to expanding the program further.”

4. Table 4A. The title is a little confusing. I am not sure if the table can be modified. For instance, it seems like the categories in the left column are the outcomes and the exposure is enrollment in the cash transfer program. So the left column should be enrolled in the cash transfer program Yes and NO (four times). And a line above the middle and right columns should include each outcome (e.g., all children have at least one blanket).

5. Table 4B. See my previous comments on how to modify this table. Enrollment in the cash transfer program is the exposure and each factor include in the left column is an outcome. If that is not the case, then the result section is incorrect. For instance the current text includes “Adolescents aged at least 10 years in CT-households were more likely to have a positive future outlook (AOR: 1.68, 95% CI: 1.10-2.54)” Here, enrollment in the CT program is the exposure and the outcome is positive future outlook.

Minor Essential Revisions
1. The following sentence included in the introduction is an important statement and should be cited “A majority of orphaned children and adolescents in Kenya live in extreme poverty, often with relatives or guardians of limited means.”

2. Modify or delete this sentence “This study addresses this gap by evaluating the effectiveness of the CT-OVC program and its direct impact on the health and well-being of orphaned children.” This study cannot evaluate the effectiveness nor the impact of the CT-OVC program.

3. This sentence can be changed from “The aim of this paper is to describe household and individual level characteristics of children living in households receiving the CT-OVC (CT) compared to those not receiving a CT in UG County, Kenya” to “The aim of this paper is to explore associations between orphan children’s enrollment in the CT-OVC program with household and individual level characteristics in UG County, Kenya.”

4. The following sentence should be modified because the manuscript cannot assess the impact of the program. “We specifically compared household socioeconomic characteristics, and the school attendance, nutritional status, and the future outlook of children and adolescents living within them to determine the impact of the CT-OVC program in ameliorating the health and well-being of these children.”

5. Please include information on how the random selection was performed (e.g., using software or another method).

6. In the statistics section you did not address how the selection of potential confounders was performed (e.g., assessing multicollinearity).

7. Page 10. A better explanation regarding differences in the recruitment of participants for the CT-OVC Program and the inclusion criteria for this study should be included. This information can be found on the answer to Erica Pufall’s first comment.

8. It is not clear if all children in the household were interviewed. Please clarify.

9. Page 16. Change “Logistic regression models were created to examine associations….. “ (not the effect).

10. It is important to clarify that some of the CT families were also receiving support from religious institutions (5%) and individual support (15%). This information should be included as a limitation in the discussion section. Religious support and individual support could have been controlled in the regression models.

11. You should consider eliminating the first paragraph under “adjusted poisson and logistic regression models.” Findings are not significant and the statement suggesting that CT households are less likely to be food insecure compared to non-CT households” may be an overstatement.

12. In the result section under “household characteristics and children characteristics you may want to change “proportion” to “percentage.”

13. Page 17 “CT households were less likely to have all children possessing at
least 2 pairs of non-school uniform clothing (76% compared to 88% of SSL and 95% of DSL) can be changed to “a lower percentage of CT households have all children possessing at least 2 pairs of non-school uniform clothing (76% compared to 88% of SSL and 95% of DSL).

14. The mean score for each category of household was 12.7-13.8, and the differences were non-statistically significant. Something is missing.

15. “Children in CT households were as likely as those in DSL and SSL households to have been hospitalized in the past year, and to be currently attending school. Children in CT missed significantly fewer days of school in the past month compared to the other two categories.” Should be changed to “a similar percentage of children in CT households than in those in DSL and SSL households reported having been hospitalized in the past year and current school attendance.

16. “Adolescents aged at least 10 years in CT-households were more likely to have a positive future outlook (AOR: 1.68, 95% CI: 1.10-2.54).” This is the first time you are including a specific period of time of enrollment in the CT program. Were you able to assess that? If so, more descriptive information regarding their period time of enrollment should be added.

17. “Children in CT missed significantly fewer days of school in the past month compared to the other two categories” This may not be the best way to interpret this section of the table. This p-value only tell you the presence of an overall significant difference.

18. Children living in CT households were proportionately more likely to be normal height- or length- for their age (0-18 years). Can be changed to “a higher percentage of Children living in CT households than (you are missing the comparison groups) had normal height- or length- for their age (0-18 years)”

19. After adjusting for child age, sex and intra-household correlation in the individual level models (Table 4B), there were no differences in school attendance (AOR: 0.94, 95%CI: 0.50 - 1.80), but children in CT households were less likely to have missed any days of school in the preceding month (AOR: 0.62, 95%CI: 0.42-0.94). You are missing the comparison group in the last part of the sentence.

20. “Adolescents aged at least 10 years in CT-households were more likely to have a positive future outlook (AOR: 1.68, 95% CI: 1.10-2.54); this association held when utilizing inverse probability weighting to account for missing data (AOR: 1.72, 95% CI: 1.12-2.65).” You are missing the comparison group.

21. “We did however find significant household food and economic insecurity in all participating households, with only 2% of households reporting being food secure in spite of the high agricultural productivity of this region demonstrating that their remain large gaps in human rights in relation to access to adequate food.” You can add that the majority of households reported mildly food insecure. Or you can highlight that more than 20% of these households were in the moderately food insecure category. Discussion and future direction text will depend on which result you decide to present.
22. Delete this sentence “Our data add to the growing body of evidence supporting cash transfers and offer new data on the effect of unconditional cash transfers received by households caring for orphaned children.” You can add that some of your findings mirror what the literature is saying. But then, you need to discuss the reasons why you did not find significant difference in some indicators.

23. Table 2A. The title should be expanded. You may also want to include the definition of CT, DSL and SSL. You include two rows “score” and “overall score” but it is not clear which score you are referring to. You may want to include the name of the score and its definition.

24. Table 2B. The title can be expanded.

25. Table 3. The title includes children and adolescents. You may want to be consistent. You are only talking about children in the text. You may also want to add age of the child, gender of the child, current school enrollment, hospitalized in the past 1 year (who was hospitalized…the child?). You may want to include in the footnote how the quality of diet was assessed.

26. In the discussion section, you can elaborate on the reasons why children in CT households were less likely to miss any school days. A literature review should be performed to identify some reasons why they were less likely to miss any school days. For instance some of them may be working. Others may be sick or may be in charge of a sick person at home. Some girls may be afraid to go to school because it is not safe to walk to their schools; some children may not have transportation.

27. Findings show significant differences related to “height for age” and “weight for age” and non-significant differences for “weight for height” and “BMI”. You may want to discuss the implications of these findings. The following information came from a World Bank publication. You may be able to find similar information.

Weight-for-height (W/H)
- Indicator of current nutritional status
- Used for screening kids at risk & to identify short-term changes in nutritional status
- Low W/H = “thinness”, extreme = “wasting”
- Wasting can be due to starvation or severe disease (especially diarrhea)
- At other extreme, identifies obesity

Height-for-age (H/A)
- Reflect cumulative linear growth
- H/A deficits indicate past inadequate nutrition and/or chronic/frequent illness
- Not measure of short-term changes
- Low H/A = “shortness”, extreme = “stunting”
- Mainly used as population indicator, not for individual monitoring

Weight-for-age (W/A)
• Composite measure of H/A and W/H
• So, interpretation difficult. Confounds short- and long-term problems
• Low W/A="lightness” extreme="underweight”
• Used for monitoring growth and change in malnutrition over time
• Indicator used for MDG1 (Target 2)

28. You may consider adding these limitations:

a. The large period of time for data collection (June 2010 to April 2013). Information on how this issue could have introduced some bias. For instance, some participants who were interviewed at the end of the baseline may have received more support from the government cash transfer program. Some participants may have graduated from the program as they reached the age limit for being enrolled.

b. You could not assess for how long each family was enrolled in the CT program.

c. Some families may have graduated from the CT program (for example when the child reached 18 years of age).

d. You could not assess (or controlled) for family composition. The number of adults in the household, the number of orphans in the households, etc could have impacted your households and individual indicators.

e. You could not address the reason why a household was considered as having an orphan (a mother or father could have died or two parents could have adopted an orphan. Addressing the reasons why a family was considered as having an orphan child may be important as some families may have decided to adopt a family to be included in the CT program.

29. You may consider adding these strengths:

a. A large number of hard to reach participants.

b. Community based participation

c. Involvement of community health workers who collected nutritional information (e.g., height, weight)

Discretionary Revisions

30. The following text included in the “Eligibility, Sampling and Recruitment” section can be moved to the “statistical analysis” section “100 households were sampled from each category (CT, SSL, and DSL) and weighted to reflect the number of households required per location based on the number of households in each Location caring for orphaned children as provided by the local officials including the District Children’s Officer, to ensure appropriate distribution.” (Don’t start a sentence with a number).

31. Table 1. Please include the definition of “no external support.” Change “children having >= 1 pair of shoes, 2 pairs of clothes, 1 blanket” to “all children in the household having…. You may also want to include in the footnote the
definition of CT, DSL and SSL.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests'