Possible Effect of Paternal Migration on Child Nutrition in Nepal

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Background

- Nepal has made significant progress in reducing the prevalence of child under-nutrition between 1996 and 2011 (*Cunningham et al., 2016*)
- The effect of paternal migration on women's labor and decision-making depends on place of migration, amount of remittances, and household composition and dynamics (*Kaspar 2006*).
- The amount of remittances and who has control over the money sent home may influence the relationship of migration, household economics and the nutritional well-being of the migrant's young child back home.
- Paternal migration may threaten the quality of child care provided. Recent studies have linked maternal care resources and empowerment with the nutritional status of her children in Nepal (*Cunningham et al., 2015*).
- Some important maternal resources for child care, such as control of resources, workload and time constraints, psychosocial status, and social support (*Engle et al., 1999*), may be compromised when the father of the child is absent.

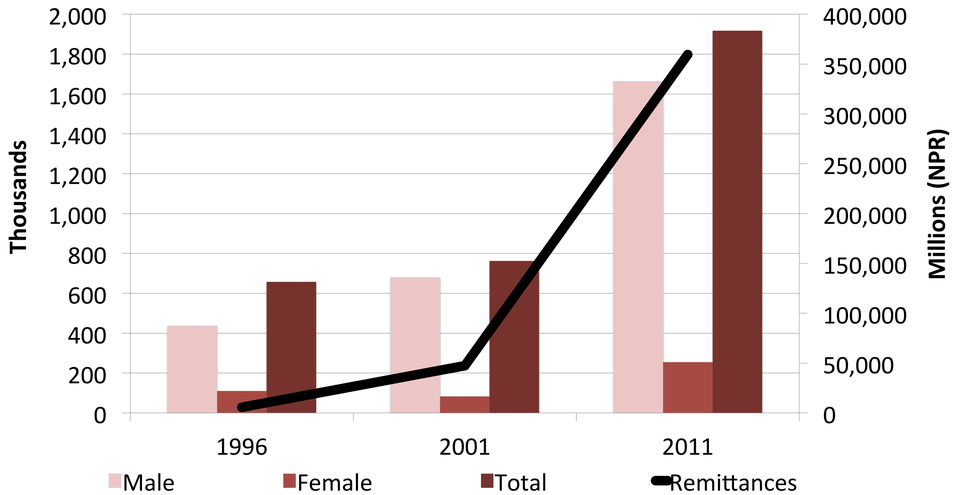

Figure 1. Number of external migrants (*Sijapati et al., 2015*) and remittances sent back (*Sharma et al., 2014*) to Nepal from 1996 to 2011

Research Aims and Hypothesis

The study will pursue the following research aim using natinally representative secondary data:

Aim #1: To examine the possible effect of paternal migration on the nutritional status of children under 5 years of age residing in rural Nepal
Hypothesis 1a: Paternal migration is significantly and negatively associated with nutritional status of children under 5
Hypothesis 1b: Remittances will be a positive mediator while child care will be a negative mediator of the relationship between paternal migration and nutritional status

Methods

Nationally representative data gathered for the Policy and Science of Health, Agriculture and Nutrition Community Study conducted by the United States Agency for International Development funded Nutrition Innovation Lab in 2013 and 2014 will be used for this study.

- **Primary outcome variables:** height-for-age Z scores and weight-for-height Z scores (continuous)
- **Primary explanatory variable**: whether the father migrated (binary)
- **Mediating variables**: remittances (amount of remittances received in last 12 months) and childcare (household composition: single parent vs. living with other adult family members).
- **Covariates**: diet diversity (child), sex (child), age (child), diarrhea (child), age (maternal), education (maternal), height (maternal), food security (household), # children under 5 (household), open defecation status of village (household)
- **Confounding variables:** village, agro-ecological zone, wealth quintile, caste

Fixed effects regression models will be used to assess the relationship between the primary explanatory and outcome variables. For any significant associations between migration and child nutritional status found, a formal causal mediation model will be constructed to estimate whether remittances and/or childcare mediate the association(s).

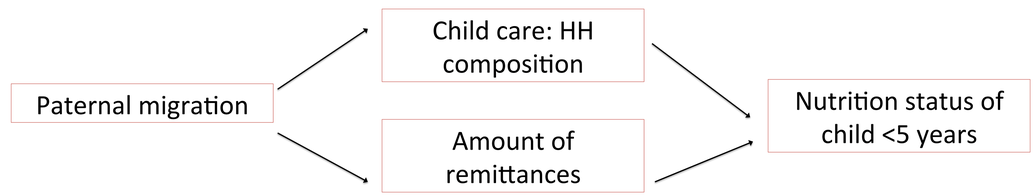

Figure 2. The pathway for the association between paternal migration and child nutrition status mediated by household composition and amount of remittances sent back in past 12 months

Implications

While remittances from migrants likely contribute to improvements in child nutrition in Nepal, a rigorous quantitative analysis on the net effect of migration on child nutrition has yet to be undertaken. Findings from this analysis may serve to strengthen policies to assist families of migrants in Nepal and in other low-income settings with high rates of migration.

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