CONDITIONAL CASH TRANSFERS AND HEALTH: UNPACKING THE CAUSAL CHAIN

Marie Gaarder, 3ie
with Amanda Glassman and Jessica Todd

CGD, Washington DC, May 4th 2010
Study Rationale

- CCTs are unique in their use of a multiplicity of interventions to reach their objectives.

- However, until recently, the evaluations focused on the impacts of the package of interventions – the proverbial ‘black box’ approach.

- Which components of the programs, or combination thereof, are important in achieving health and nutritional outcomes?

- Contribution of this paper:
  - adds the results of the most recent rigorous impact evaluations (10 only from 2009 and 2010!)
  - discusses whether available evidence supports the assumptions behind the expectation that the CCT interventions will have a measurable impact on health and nutrition outcomes.
Methodology

• Theory-based approach, i.e. spelling out implicit assumptions and using existing evidence to illustrate our state of knowledge around said assumptions

• Following most of the Campbell collaboration criteria for systematic review
  
  – Rigorous search of multiple databases
  
  – Inclusion criteria:
    
    ➢ Studies assessing the effect of CCT interventions (with health conditionalities) in low and middle-income countries on health care utilization and health and nutrition outcomes

    ➢ Study designs: Experimental (randomized controlled trials) and quasi-experimental (matching techniques, regression discontinuity design, interrupted time-series)
### Programs / Interventions

<table>
<thead>
<tr>
<th>Program / Intervention</th>
<th># of studies</th>
<th>Eval. Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil’s Bolsa Alimentacao/Bolsa Familia</td>
<td>1</td>
<td>PSM</td>
</tr>
<tr>
<td>Colombia’s Familias en Acción</td>
<td>1</td>
<td>PSM</td>
</tr>
<tr>
<td>Honduras’ Programa de Asignacion Familiar (PRAF)</td>
<td>2</td>
<td>RCT</td>
</tr>
<tr>
<td>Jamaica’s Programme Advancement Through Health and Education (PATH)</td>
<td>1</td>
<td>RDD</td>
</tr>
<tr>
<td>Mexico’s Progresa/Oportunidades</td>
<td>29</td>
<td>various</td>
</tr>
<tr>
<td>Mexico’s Programa de Apoyo Alimentario</td>
<td>1</td>
<td>RCT</td>
</tr>
<tr>
<td>Nicaragua’s Red de Protección Social</td>
<td>2</td>
<td>RCT</td>
</tr>
<tr>
<td>Paraguay’s Tekopora</td>
<td>1</td>
<td>PSM</td>
</tr>
<tr>
<td>Turkey’s CCT Program</td>
<td>1</td>
<td>RDD</td>
</tr>
<tr>
<td>Malawi Diffusion and Ideational Change Project (MDICP)</td>
<td>1</td>
<td>RCT</td>
</tr>
<tr>
<td>Nepal’s Safe Delivery Incentive Programme (SDIP)</td>
<td>1</td>
<td>ITS</td>
</tr>
</tbody>
</table>
Theory-based approach

'Black box' approach to program impact evaluation

CCT → Co-responsibility
  # visits to clinic
  # health talks

Cash

Nutritional supplement

Health behavior/demand:
- visits to clinic
- health talks
- improved nutrition
- medicines

Health effect

Measurement of health effect

Supply of health services

Inputs to the supply side
Theory-based approach

A1: CCT interventions lead to an increase in use of preventive health services

A2: Increase in utilization of preventive health care will improve health status

CCT

Co-responsibility
  # visits to clinic
  # health talks

Health behavior/demand:
- visits to clinic
- health talks
- improved nutrition
- medicines

Health effect

Supply of health services

Measurement of health effect

Cash

Nutritional supplement

Inputs to the supply side
A3: Cash affects service utilization and food consumption mainly

- Cash is found to affect growth and chronic disease independently of health care utilization in Mexico’s Oportunidades program
  - Doubling of cash transfers associated with higher height-for-age score, lower prevalence of stunting, lower body-mass index for age percentile, and lower prevalence of being overweight among children in the ages of 24-68 months old
  - Doubling of cash transfers associated with higher BMI, higher diastolic blood pressure, and higher prevalence of overweight and obesity among adults (although program has been found to lower obesity and diabetes rates) (Fernald et al., 2008)
- Poverty alleviation is found to affect mental health in Mexico’s Oportunidades program
  - Lowering of stress-level (measured through cortisol) in children of mothers with depressive symptoms (Fernald and Gunnar, 2009)
  - 10% decrease in aggressive/oppositional symptoms but no significant decrements in anxiety/depressive symptoms (Ozer et al., 2009)
  - Negative association between higher cash transfers and children’s behavior problems (Fernald et al., 2009)
A4: Information induces behavior change

- Knowledge of healthy practices improved more than the practices themselves (Duarte et al, 2004)
- Consumption of more diverse, high nutritional quality foods increased (fruits, vegetables, animal products) (Hoddinott et al, 2000)
- Youth in rural areas consumed less alcohol and more cigarettes than control groups, but no effect on adults (Duarte et al, 2004)
- Knowledge of family planning methods in both urban and rural areas increased, but higher use only found in rural areas (Prado et al, 2004)
- Communication to improve household utilization of nutrition supplement led to improved recommended behaviors (Bonvecchio et al, 2007)
No comparative study exists to date, but....

- Agüero et al (2006) finds that a SCT program in South Africa increases nutritional status as measured by height-for-age

- Paxson and Schady (2007) find that Ecuador’s SCT program improves children’s nutrition, but no significant impact on visits to the health clinics for growth monitoring

Thus, initial tentative findings indicate that conditionality is not required for a cash transfer program to have some nutritional impact, but without conditionality visits to health clinics are less likely to increase
A6: Supply-side of services is in place or will follow demand

- Most programs assume that existing supply side capacity is sufficient to meet CCT beneficiary demand
- ..or that the beneficiaries can use their additional cash from the monetary transfer to incentivize the supply-side (no evidence)
- ..or that by learning that access to health care is a right, beneficiaries will begin to demand services and provider accountability
- Incipient evidence suggest supply-side constraints, but quality may be improved by more informed clients
  - Barber and Gertler, 2008, find lower incidence of low birth weight and attribute it to program women insisting on higher quality pre-natal care
  - Nevertheless, a recent study of rural Oportunidades (Bautista et al.; forthcoming) finds that in the presence of supply constraints, the incentive scheme is less effective in stimulating increased utilization of health services
Concluding remarks

- Financial incentives work to increase utilization of key health services by the poor (particularly when conditioned)
- However, once at the health center, the measured performance in terms of coverage of basic interventions, such as immunization, is bleaker
- The mixed picture with respect to health outcomes suggests that encouraging utilization when services are of poor quality may not produce the expected effects
- More evidence on health and nutrition outcomes from programs other than Oportunidades (Mexico) required
- Well-designed and delivered information about the program itself and about health-promoting behavior important for improving program performance
- Recent findings suggest that the poverty alleviation achieved with the cash transfers may affect health directly, by affecting mental health and life-style choices related to chronic diseases
Final thoughts

- What is the relative cost effectiveness of investing in the supply versus the demand-side within the health system?
- What are the implications if quality decreases or non-beneficiaries are crowded out as a result of increased demand without adequate investment in the supply-side?
- Are there any marginal benefit of conditioned over unconditioned transfers?
Thank you

Visit:
www.3ieimpact.org