AID EFFECTIVENESS: IMPACT OF AID ON HEALTH OUTCOMES IN UGANDA

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HEALTH DEVELOPMENT AID (HDA) TO UGANDA

Ugandan health sector has over the years received substantial aid - relatively stable.
Most of the aid channeled to develop health infrastructure/system - vital for Universal Health Coverage agenda.

<table>
<thead>
<tr>
<th>Major health sector donors</th>
<th>Commitment (mn $)</th>
<th>Disbursement (mn $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>UNICEF</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>GFATM</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>USA (including PEPFAR)</td>
<td>250</td>
<td></td>
</tr>
</tbody>
</table>

Globally, most studies on aid effectiveness are cross-country and at macro level with mixed evidence:
- Aid is ineffective (Williamson, 2008; Wilson, 2011; Gebhard et al., 2008)
- Aid is effective (Mishra & Newhouse, 2007; Bendavid & Bhattacharya, 2014)

UGANDAN CONTEXT AND MOTIVATION
✓ Aid effectiveness evidence remains anecdotal.
✓ There is substantial HDA inflow BUT most health indicators remain unimpressive & below desirable global health standards.
  - (1) Maternal Mortality Rate is one of the highest in Sub-Saharan Africa at 438 per 100,000 livebirths.
✓ This study is the first of its kind in Uganda based on panel analysis and geo-referenced data.
✓ Study provides insights for policy makers and development partners/practitioners to improve targeting of HDA.

OBJECTIVE: To analyze the impact of health aid on health outcomes in Uganda.
Policy Questions:
(a) How effective is HDA in improving health outcomes and how can effectiveness be enhanced?
(b) How can HDA targeting be improved?

DATA AND METHODS
(a) Uganda National Household Survey (UNHS – 2005)
(b) Uganda National Panel Survey (UNPS – 2011/12); Balanced panel of 10,354 individuals
(c) Geo-referenced foreign aid data – AidData (Aid projects effective 2006-2010)

Analysis
(1) Descriptive statistics
(2) Difference-In-Differences estimation (Diff-in-Diff) with Fixed Effect

Treatment: Health aid
Outcome: Disease severity & disease burden

FINDINGS

AID TARGETING
Location of HDA & survey areas
- Aid allocated to Better-off areas

Those who received aid were associated with relatively better welfare status.

EMPirical results - impact of aid on health outcomes

<table>
<thead>
<tr>
<th></th>
<th>Sub-Sample (Only sick)</th>
<th>Full Sample</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>3km</td>
<td>5km</td>
</tr>
<tr>
<td><strong>Disease severity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aid Impact</td>
<td>-0.1009</td>
<td>-0.0749</td>
</tr>
<tr>
<td>(0.0717)</td>
<td>(0.0722)</td>
<td>(0.0727)</td>
</tr>
<tr>
<td>Observations</td>
<td>8920613</td>
<td>8920613</td>
</tr>
<tr>
<td>(weighted)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Disease burden**

|                          |                        |             |             |     |     |     |
| Aid Impact               | -0.2345**              | -0.1414     | -0.0208     | -0.0504** | -0.0529** | -0.0391* |
| (0.1048)                 | (0.1074)               | (0.1074)    | (0.0220)    | (0.0222) | (0.0223) |             |
| Observations             | 6557885                | 6557885     | 6557885     | 27798525  | 27798525  | 27798525 |
| (weighted)               |                        |             |             |     |     |     |

CONCLUSION
- Aid was not preferentially targeted to localities with worst health conditions.
- Health aid is instrumental in reducing disease burden (both in the sub & entire population). But estimates are lower in full sample.
- Relationship between aid & disease severity is less robust, as it is only significant using full sample.
- Aid impact is stronger for individuals closer to aid projects - aid is more effective if channeled closer to intended beneficiaries.

RECOMMENDATION
- Results point to the need for development partners to better target health aid into areas with higher disease prevalence.
- Aid ought to be channeled as close to intended beneficiaries as possible – additional advantage of driving Universal Health Coverage strategy of “close to client” health system.