

Community Based Monitoring: Experimental Evidence on Design and Long Run Impact

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Introduction

- Community Driven Development (CDD) is one of the most frequently advocated processes for managing and implementing (local) development programs:
 - The World Bank spends (alone!) 60 billion USD a year on projects where CDD is a key part of the design
- CDD approach views participation (in decision making) as a key component in order to strengthen demand-responsiveness and local accountability
- The core of the CDD strategy is the process through which (local) decisions are made and executed and this process is applied to a broad spectrum of development projects.

- In practise community driven development is achieved through facilitated meetings, where the community are assisted by trained facilitators to:
 - organize management teams
 - decide upon priorities (development planning)
 - and to execute these plans (development implementation)

What we do

- Provide evidence of impact of the CDD approach in a context – primary health care delivery in Uganda – previously shown to be conducive to these kind of process interventions
- Contrast the results of the CDD approach with a more elaborated intervention that in addition raise awareness of what citizens are entitled to and provides of objective information on the current status of service provision (e.g. staff behavior).

Preview of findings

- The standard CDD intervention had little measurable impact on health workers' performance or the quality of health care in the short and medium run.
- The extended intervention, combining *information* and *participation* components, showed significant improvements in both health care delivery and health outcomes both in the short and longer run (after four years).

Preview of findings

- Results provide both encouraging, and less encouraging, news for those promoting the greater exercise of beneficiary control.
 - Enhanced participation alone has little impact without changing the existing informational asymmetries.
 - Interventions that relax the intended beneficiaries' informational constraints, and provide communities with a clear agenda, can result in large and long run improvements in both health service provision and health outcomes.

Contribution

- There is a small and recent literature on the impact of beneficiary control, showing mixed results.
- As pointed out in Banerjee et al (2010), from the available evidence it is difficult to disentangle whether the mixed findings are driven by differences in the details of the intervention or context.

Contribution

- Compare two *process* interventions, with and without information dissemination, in a context which has been shown to be highly conducive to these kind of interventions ("controlling for context")
- Evaluate long-run effects

Experimental Design: Overview

- The experimental study took place in 75 rural communities served by public dispensaries in 9 districts covering all four regions of Uganda.
- Dispensaries are the lowest tier of the health system where a professional interaction between users and providers takes place.
- The standard for dispensaries includes preventive, promotional, outpatient care, maternity, and laboratory services.
- In our sample of facilities, on average, a dispensary was staffed by a clinical officer (doctor), 2-3 nurses (midwives), and three nursing aids.

- The setting for our experimental study is characterized by poor public health service provision:
 - according to baseline data, roughly 50% of the staff were absent from the clinic on a typical day.
 - average waiting time was more than 2 hours
 - only 4 out of 10 report any equipment was used during last visit

Framework: Community based monitoring

- Community based monitoring is viewed as a mechanism to elicit effort from service providers.
 - workers may be intrinsically motivated but hampered and demoralized by a system with weak accountability that frustrates users.
- Illustrate the possible mechanisms (constraints) at work using a simple moral hazard framework:
 - A principal (community) designs and enforces a contract to the agent (health staff)
 - The extent of effort exerted by the agent depends on the principal's ability to assemble information about effort and the compensation scheme.

- The model highlights:
 - (A) the design of the contract that spells out actions and consequences;
 - (B) the cost and availability of information;
 - (C) the ability to reward or punish the agent
- Applying this model to community monitoring:
 - several principals (*the users*) that may disagree on both objectives and awareness about what they can demand, raises two additional points
 - (D) the rules of the game has to be clearly understood by the principals
 - (E) there is an agreement about the objectives.

- Community based monitoring projects differ both in *which* of these five core issues are addressed and exactly *how* they are addressed.
 - The **participatory component** of a community monitoring project as dealing with (A) project design and (E) the process of reaching agreement.
 - The **information component** (if any) as dealing with (B) the assymmetric information problem and (D) citizens' lack of awareness of their entitlements.

- Two experiments:
- **Treatment arm AE**: *A (contractual design) and E (process of reaching an agreement)*
- **Treatment arm ABDE**: *AE + B (information asymmetries) and D (raising awareness)*

- Comparison of *AE* and *ABDE* intervention is important since
 - identify what mechanisms are crucial for community based monitoring to work
 - the *AE* intervention largely mirrors the typical standard CDD intervention
 - *AE* intervention is technically and financially a much simpler intervention.

- Evidence on long-run impact (effects 4 year after the initial intervention of the *ABDE* experiment) is important since
 - any interventions that puts attention on the health providers could have a short-run impact given the large pre-existing X-inefficiencies in the public health care system.
 - process-based interventions like the CDD are primarily meant to influence norms and collective actions and therefore influence local decision making also in the longer run.

Experimental Design: Overview

- The project included 75 project facilities and its users (all in rural areas) drawn from nine districts in Uganda.
- The catchment area (community) of each dispensary is defined as the households residing in the 5-km radius around the facility.

"The standard CDD model" (AE intervention)

- 25 facilities/communities of which half were randomly assigned to the treatment group
- Intervention initiated at the beginning of 2007 and end-line survey in the beginning of 2009.
- A series of meetings facilitated by local community-based organizations (CBO)

Component (E): process of reaching an agreement

- 2-day meeting with community members from all spectra of the society
 - using traditional participatory methods to encourage participants
 - community members scored performance in various dimensions
 - end of the meeting and based on scores \Rightarrow developed a plan for how to improve health service delivery.
- 1-day (afternoon) meeting held at the health facility with the health facility staff
 - providers scored their performance and discussed ideas for improvements.

Component (A): contractual design

- Interface meeting with participants from the community and health facility staff
 - community and health workers presented and discussed their suggestions for improvements.
 - they prioritized their suggestions and jointly agreed upon actions to be taken → the community contract.
 - contract outlined the community's and the provider's joint agreement on what needs be done, how, when, and by whom.
 - the contract also identified how the community was to monitor the provider and a time plan.

- After the initial 5-days meetings which led to the design of the contract the communities were themselves in-charge of establishing ways to monitor the provider
- *Mid-term review:*
 - a one-day repeat engagement (smaller scale) → health workers and community members discussed suggestions for sustaining or improving progress on the issues outlined in the joint contract

"Extended version of the CDD model" (ABDE)

- Program intervention is similar to the standard CDD project:
 - Component (A): contractual design
 - Component (E): process of reaching and agreement
- But before design phase: (D) raise awareness of what citizens are entitled to, and (B) provides objective information on the current status of service provision (e.g. staff behavior).
- 50 facilities/communities of which half were randomly assigned to the treatment group
- Intervention initiated at the beginning of 2005, short run impact survey in 2006, and end-line survey in the beginning of 2009.

Component B: information asymmetries

- At the meetings, the community and the health facility staff were provided with a *report card* summarizing *information* from the baseline survey on key areas subject to improvement (utilization, service quality, and comparisons vis-à-vis other health facilities).
- Aimed to relax the beneficiaries' informational constraint and help build the reform agenda on the "true" (not perceived) status of service provision

Component E: awareness of entitlements

- Communities and health facilities were also provided with information on health entitlements according to the Ministry of Health.
 - e.g. the right to free services, right to confidential treatment, right to fair and human treatment, right to information on drug availability, etc.

- Main intervention in 2005 followed by one repeat engagement in the subsequent four years
- Long run data collected at the end of 2009.
- In total: 12 days active engagement by facilitators over a 4 year period

Comparison allows us to:

- Identify what mechanisms are crucial for community based monitoring to work
 - Does AE work alone: no information needed → cheaper and simpler intervention
 - How important are the BD components (information asymmetries and knowledge about the rules of the game)
- Does community-based monitoring work in the longer run?

Health outcomes

- "*Standard CDD model*" (*AE intervention*): No effects after two years
- "*Extended version of the CDD model*" (*ABDE intervention*):
After four years:
 - Significant difference in the height (0.09 z-scores increase) of infants (2009)
 - Significant difference in the weight (0.22 z-scores increases) of infants (2009)
 - A reduction in infant mortality rate of 28 % in the treatment communities (2006-2009)
 - Results similar in magnitude to those found in the short run (Bjorkman and Svensson, 2009)

Utilization

- *"Standard CDD model" (AE intervention)*: No effects after two years
- *"Extended version of the CDD model" (ABDE intervention)*:
After four years:
 - Utilization higher for all years (2006-2008)
 - Utilization for antenatal and pre-natal care was 28 percent higher in the treatment compared to the control facilities.
 - Shift from self-treatment and traditional healers to treatment at the public clinic (2009)
 - Magnitudes somewhat smaller, and less precisely estimated, than in the short run

Treatment practices

- "*Standard CDD model*" (*AE intervention*): No effects after two years
- "*Extended version of the CDD model*" (*ABDE intervention*):
After four years:
 - Clinic in better condition as viewed by enumerators (2009)
 - Reduction in drug stock-outs (for same supply) (2009)
 - Absence rate for staff living in catchment area is significantly lower (2009)
 - Increased adherence to clinical guidelines (2009)
 - Magnitudes smaller, and less precisely estimated, than in the short run

Monitoring

- Use data collected through visual checks by enumerators during the post-intervention facility survey:
 - suggestion boxes, number waiting cards, staff duty roaster, posters informing about free services and patients' rights
- "*Standard CDD model*" (*AE intervention*): No effects after two years
- "*Extended of the CDD model*" (*ABDE intervention*): After four years:
 - Viewed jointly: large difference between treatment and control group
 - Magnitudes somewhat smaller, and less precisely estimated, than in the short run

Discussion

- Community Driven Development (CDD) is one of the most frequently advocated processes for managing and implementing (local) development programs
- Proposed mechanism

enhanced participation \implies $\left\{ \begin{array}{l} \text{strengthen demand-responsiveness} \\ \text{strengthen local accountability} \end{array} \right.$

- Contrast this process with one that also puts emphasis on raising awareness providing information on performance.

Discussion

- The CDD inspired intervention has two obvious advantages:
 - Technically a simpler intervention
 - Much cheaper intervention
- Key findings:
 - Enhanced participation alone has little impact without changing the existing informational asymmetries.
 - Interventions that relax the intended beneficiaries' informational constraints, and provide communities with a clear agenda, can result in large and long run improvements in both health service provision and health outcomes.

Discussion: Why is information important?

- Informational asymmetries benefit the elite (health clinic staff) on the behalf of the beneficiaries.
- Lack of information on entitlements and objective information on performance:
 - *Makes it more difficult to come to an agreement about what the problem is and how to address it*
 - clinic officer reported that waiting time was about 2 minutes while household survey data revealed it was 2 hours
 - *Makes it more difficult to challenge abuses of the system*
 - clinic officer reported no problems with absenteeism ("staff not present were on training"), while unannounced staff survey showed absence rate close to 50%
 - *Limits the impact of social sanctions and rewards*
 - shirking health workers now know that beneficiaries now know that he/she is shirking

Next step

- Experiment with ways to assemble and disseminate information cheaply, maybe using advances in ICT.