Community Directed Intervention: Innovative Malaria Service Delivery

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History of CDI

- 1980s – ivermectin was found safe for treatment of human onchocerciasis (river blindness)
- Early 1990s – community based mass distribution of ivermectin found feasible
- 1995 – TDR sponsored a study that showed community directed treatment with ivermectin (CDTI) achieves better coverage than distribution organized by the health system
- 1996 – African Program for Onchocerciasis Control launched adopting CDTI as approach
Basic CDI Processes

1. Community entry and meeting chiefs
2. Community orientation and facilitation meeting
3. Community selects community directed distributors (CDDs)
4. CDDs trained
5. Community conducts census
6. Community plans dates, approach
7. Community collects ivermectin
8. Community distributes ivermectin
9. Monitor, treat and/or refer reactions
10. Community submits treatment records
11. Community evaluates its efforts and improves
Communities Chose – house to house, central place distribution

- Communities chose as many CDDs as they want for different tasks
- CDDs are accountable to the community
Ivermectin CDI Roll Out

- By 2009 ...
- 19 Countries
- 111 Projects
- 120,000 Villages
- At least one CDD per village
- 55,000,000 Treatments annually
- Communities sustain the process

APOC countries
Additional Responsibilities Added

- The availability of community directed distribution encouraged other programs to involve communities and CDDs in other health interventions.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Immunization</td>
<td>55%</td>
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<tr>
<td>Community Development</td>
<td>49%</td>
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<tr>
<td>Water/Sanit</td>
<td>44%</td>
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<tr>
<td>Agriculture</td>
<td>10%</td>
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<tr>
<td>HIV/AIDS</td>
<td>6%</td>
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<tr>
<td>Fam. Planning</td>
<td>6%</td>
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<tr>
<td>Guinea Worm</td>
<td>2%</td>
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<tr>
<td>Vitamin A</td>
<td>2%</td>
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<tr>
<td>Other</td>
<td>27%</td>
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<tr>
<td>Mix</td>
<td>82%</td>
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# Testing Intentional Add On Activities - 2005-2007

<table>
<thead>
<tr>
<th>Study Phase</th>
<th>Interventions delivered through the CDI process</th>
<th>Comparison District</th>
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<tbody>
<tr>
<td></td>
<td>CDI District 1</td>
<td>CDI District 2</td>
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<tr>
<td>Phase I (Year 1)</td>
<td></td>
<td></td>
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<tr>
<td>(Aug 04 to July 05)</td>
<td>CDTi + Vit A</td>
<td>CDTi + DOTS</td>
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<tr>
<td>Phase II (Year 2)</td>
<td></td>
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<tr>
<td>(Aug 05 to July 06)</td>
<td>CDTi + Vit A</td>
<td>CDTi + DOTS</td>
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<tr>
<td></td>
<td>+ ITN</td>
<td>+ HMM</td>
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<tr>
<td>Phase III (Year 3)</td>
<td></td>
<td></td>
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<tr>
<td>(Aug 06 to July 07)</td>
<td>CDTi + Vit A</td>
<td>CDTi + DOTS</td>
</tr>
<tr>
<td></td>
<td>+ ITN</td>
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Malaria Interventions – Nets and Treatment

In each case CDI does better than regular districts, even by 3rd year
ITN Use Coverage

Children sleeping under ITN

Pregnant women sleeping under ITN

RBM target

% < 5 years sleeping under a bednet the previous night

% of pregnant women sleeping under ITN the previous night

Comparison districts
ITN through CDI in Year 3
ITN through CDI in Year 2 and Year 3

Year 2
Year 3

Year 2
Year 3

8% 4%
37% 49%
8% 4%
33% 57%
9% 16%
36% 35% 33%
Appropriate Malaria Treatment

**Appropriate treatment of children with fever**

- Comparison: 21%
- HMM through CDI in Year 3 only: 28%
- HMM through CDI in Year 2 and Year 3: 69%

RBM target: 60%

**Appropriate treatment of children with fever in Nigeria and Uganda**

- Comparison: 30%
- HMM through CDI in Year 3 only: 62%
- HMM through CDI in Year 2 and Year 3: 77%

RBM target: 80%
Conclusions from TDR Study

- Community directed interventions more effective – better coverage
- Integration through CDI more cost-effective
- Greater participation enhances readiness for wider community engagement
- Not all interventions are appropriate for CDI in all countries or communities
Application of CDI to Malaria in Pregnancy

- Intermittent Preventive Treatment in pregnancy (IPTp) is somewhat of a stepchild of national malaria control programs.
- This may lie in the fact that delivery of IPTp is through antenatal care (ANC) clinics managed by maternal and child health/reproductive health units of health services.
- Intra-agency coordination has been a big challenge – e.g. NMCP and RH/MCH.
IPTp – not so easy

- People are also of the attitude that since the drug used for IPTp, sulfadoxine-pyrimethamine is cheap, IPTp is easy to deliver.

- Even cheap drugs have stock-outs, which affects coverage.

- ITNs not often provided during routine ANC.

- Even when provided, ITNs may not be used.

- CDI can get commodities out to the grass roots and monitor and encourage their use.
Akwa Ibom State, Nigeria: Year Round Malaria Risk
Baseline in 2007 - MIP Indicators during Last Pregnancy

60% was RBM Target for 2005

- Any IPTp: 11.6%
- IPT2 or more: 5.8%
- Slept under ITN sometime: 23.3%
- Slept under ITN every night: 11.7%
- Slept under ITN Last Night: 13.8%
Addressing Malaria in Pregnancy in Akwa Ibom State Nigeria with CDI

http://www.jhpiego.org/whatwedo/malaria_story1.htm
Two-Pronged Approach

- As in CDI for Ivermectin Distribution the health facility serves as a base for training, supervision, commodity stocks and record collation
- Therefore performance quality of front line health facilities needs improvement
- CDI will enable communities to play a key role in getting basic MIP control services to pregnant women
- A two-way communication-referral network is developed
Capacity Building at State, District & Facility Levels

- Trained 18 State and 25 LGA core trainers on FANC, MIP, PMTCT, M&E, and CDI
- Stepped down the training to 311 frontline health workers in 27 health facilities – intervention and control for basic MIP, control only for CDI
Community Organization for CDI

- Front line staff conducted community outreach, meetings
- Kin groups formed basis of CDD selection
- Community members in 489 kin groups (clans) chose 734 trained CDDs who were trained by front line staff
- CDD kits provided – medicine, counseling cards, registers
- Communities conducted mapping to identify socio-economic structures that will support MIP programming
- Communities conducted census to estimate quantities of commodities required by each kindred
CDDs equipped

- Counseling Card
- Medicines
- Village Register
- Monthly Tally Sheet
- Referral Form
IPTp distribution during first nine months of project

No IPTp was provided in the 3 months prior to intervention at any clinic

Census showed 6,635 pregnant women in intervention catchment areas at start
Performance Standard Improvement over 3 Rounds

Total Number of Standards = 16
Challenges

- Irregular stocks of commodities
- Transfer of health staff trained by project
- Continued charging of user fees by local governments
- Continued motivation of health staff and CDDs
Advocacy: State Commissioner, LGA Chairs and Legislators
Next Steps

- Refresher training of CDDs
- Continued advocacy for free services and commodity stocks
- Training of health staff in additional facilities in both intervention and control local governments
- Endline survey
Thank you

Acknowledgements:

• African Program for Onchocerciasis Control
• Special Program for Research and Training in Tropical Diseases
• Jhpiego, an affiliate of Johns Hopkins University