mothers2mothers
Enhancing PMTCT Services
In Health Care Facilities:
Supply and Demand Side Approaches

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Founder and Medical Director
mothers2mothers

9 May 2011
<table>
<thead>
<tr>
<th>Supply Side</th>
<th>Demand Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>The goods and services essential to treatment:</td>
<td>“The consumer side:”</td>
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<tr>
<td>Overburdened healthcare systems...</td>
<td>Inability to encourage uptake of basic services to promote PMTCT: behavior change</td>
</tr>
<tr>
<td>Shortage of healthcare workers...</td>
<td>Retention and adherence</td>
</tr>
<tr>
<td>Supply chain for meds and equipment...</td>
<td>Stigma of HIV/AIDS</td>
</tr>
<tr>
<td></td>
<td>Disempowerment of women</td>
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</tbody>
</table>
Global HIV Prevalence
Doctors Working in the World

Sub-Saharan Africa:

25% of global disease burden
3% of world’s health workers

- Population dependent on public health sector: 85%
- Health professionals in public sector:
  - Doctors: 30%
  - Nurses: 44%
  - Vacant posts in public health sector:
    - Doctors: 34%
    - Nurses: 36%
Transmission Rates: 14-16%

PMTCT Program Interventions:

In 2001...

Nurse:

- Has only minutes per patient
- 1) Counsel for HIV test
- 2) Perform HIV test, explain results
- 3) Dispense single dose nevirapine
- 4) Explain how to take
- 5) Discuss infant feeding options
- 6) Reinforce exclusive infant feeding
- 7) Perform infant HIV test at 12-months,
- 8) Explain results
Transmission Rates: 2-5%

PMTCT Program Interventions:

In 2011...

Still has only minutes per patient

Nurse:

1) Counsel for HIV test
2) Perform HIV test, explain results
3) Perform CD4 test, get and explain results. Refer for HAART if CD4<350
4) Dispense cotrimoxazole
5) Discuss infant feeding options
6) Dispense AZT (from 14 weeks), explain how to take
7) Dispense HAART (if eligible), explain how to take
8) Counsel on adherence to HAART
9) Screen for HAART related toxicity
10) Reinforce exclusive infant feeding
11) Where ARVS for breast feeding are available, explain how to use
12) Perform infant HIV test at 6 weeks, 13) Explain results
14) Refer mother to follow-up care,
15) Encourage her to attend
16) RH/FP
To address supply side issues...

...we must seek innovative ways of harnessing and focusing both the financial and the human resources that already exist.
Simple, scale-able model of care

Mothers are a community’s single greatest resource

Mothers living with HIV (Mentor Mothers) educate and support HIV-positive pregnant women and new mothers in health facilities

- Individual and group meetings
- Daily presence for education and support
- Mentor Mothers: professional members of health care team - paid for service
Three m2m goals:

Goal 1. PMTCT

Goal 2. Healthy mothers and infants

Goal 3. Empowerment
Site Coordinators and Mentor Mothers

- Recruited locally

- Selection Criteria:
  - Mothers
  - HIV-positive
  - Attended PMTCT
  - Disclosed

- Basic numeracy and literacy skills

- Site Coordinators manage services

- Mentor Mothers engaged for up to two years
Training

Training Cascade:
National Trainer ➔ Site Coordinator / Mentor Mother ➔ Patients

- Curriculum based education
- 2 weeks - Mentor Mothers
- 3 weeks - Site Coordinators
- Periodic top-up training
Points of Service

• Prenatal clinics
• Labor and delivery
• Postnatal programs
• Targeted community outreach
**m2m Services**

**m2m Does Not:**

- Counsel for, or perform HIV testing
- Provide medication
- Distribute formula

**m2m Does:**

- Support medical services that do
Site Management Plan

Regional or District Program Manager

SC = Site Coordinator
MM = Mentor Mother

Tertiary Care Hospital

Primary Health Center

Site Systems
South Africa: Population Council (2007)

- **PMTCT**
  - 95% of mothers received nevirapine
  - 88% of babies received nevirapine

- **Care**
  - 79% had CD4 counts
  - 88% knew CD4 count results

- **Infant Feeding**
  - 89% chose exclusive infant feeding method

- **Family Planning**
  - 70% using contraception

- **Disclosure**
  - 97% disclosed (4.4x non-participants)
South Africa: Population Council (2007)

Program Participants Report Better Psychosocial Well-Being

- **Pregnant** women felt they could:
  - Do things to help themselves
  - Cope with taking care of baby
  - Live positively

- **Postpartum** women felt less:
  - Alone in the world
  - Overwhelmed by problems
  - Hopeless about future
Demand side...
Kenya: ARV uptake by Number of AN Visits among all pregnant m2m clients (N = 2065)*

<table>
<thead>
<tr>
<th>Visits</th>
<th>Number of Clients (n)</th>
<th>AZT</th>
<th>NVP</th>
<th>NVP+AZT</th>
<th>HAART</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Visit</td>
<td>876</td>
<td>5%</td>
<td>11%</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>2 Visits</td>
<td>449</td>
<td>11%</td>
<td>27%</td>
<td>37%</td>
<td>40%</td>
</tr>
<tr>
<td>3 Visits</td>
<td>264</td>
<td>8%</td>
<td>27%</td>
<td>40%</td>
<td>46%</td>
</tr>
<tr>
<td>4+ Visits</td>
<td>460</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>92%</td>
</tr>
</tbody>
</table>

73% UNGASS 2009
Lesotho: ARV Uptake

Percent AN ARV uptake: m2m clients v. Lesotho national PMTCT data*

<table>
<thead>
<tr>
<th></th>
<th>m2m clients receiving any ARV</th>
<th>Lesotho 2009 PMTCT clients receiving any ARV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 visit</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>2 visits</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>3+ visits</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>71</td>
</tr>
</tbody>
</table>

* Lesotho 2010 UNGASS Progress Report
Lesotho: CD4 Testing

Percent of m2m AN clients with CD4 tests by number of m2m visits

(N = 1246)
Lesotho: HAART Uptake

HAART Uptake among m2m AN clients with known CD4 < 350
(N = 382)

Clients on HAART 87%

Clients with CD4 count < 350 not on HAART 13%
Kenya: Disclosure by Total No. of m2m visits among all m2m clients (N = 4070)*

- 1 Visit: 53%
- 2 Visits: 65%
- 3 Visits: 71%
- 4+ Visits: 84%
- Total: 71%

* Graph excludes n = 7 clients with unknown no. of visits
Attendance profiles

No of visits (total)

Lesotho
Swaziland
Zambia
Kenya
Rwanda
Malawi

4+
3
2
1

0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Early Baby Testing Study

- **Background:**
  - Poor uptake of early infant HIV testing across Africa.
  - Importance of early infant diagnosis for short-term and long-term health of babies.

- **Objective:**
  - To assess feasibility and effectiveness of interventions to promote early infant HIV testing
Early Baby Testing Study

“Standard” intervention
Clinic based care only [Non-ACFU]

• Improved education on importance of early infant HIV testing

“Enhanced” intervention
Clinic based care + active client follow-up [ACFU]

• Improved education on importance of early infant HIV testing
• 8 week telephone call
• 10 week call + home visit if needed
Cellphone Subscribers - 2009

North America: 276m
Africa: 358m
Early Infant Diagnosis Study

Non-ACFU Sites
n = 204

ACFU Sites
n = 214

Eligible 8 week call
Yes = 179 (84%), No = 35 (16%)

Eligible 10 week call & home visit
Yes = 53 (32%), No = 114 (68%)
* Of 167 consenting for home visit

10 week home visit
Reached = 24 (45%)
Not Reached = 22 (42%)
Excluded/too far = 7 (13%)
Early Infant Diagnosis Study

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11% of total (214) reached by home visit
Early Infant Diagnosis Study

Key Findings: EID Study

- **Lost To Follow Up**: 27% (N = 55,133), 6% (N = 55,133)
- **Infants Tested**: 56% (N = 115,167)
- **Tested HIV Negative**: 95% (N = 80,111), 96% (N = 80,111)

p < 0.01
Early Infant Diagnosis Study

Key Findings: EID Study

Lost To Follow Up
(N = 55,133)

Infants Tested
(N = 115,167)

Tested HIV Negative
(N = 80,111)

- Non-ACFU Sites
- ACFU Sites

p < 0.01
Demand and Supply Side

communities

healthcare systems

mothers & babies
## m2m Activities 2011

<table>
<thead>
<tr>
<th>Current Date</th>
<th>March 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites</td>
<td>714</td>
</tr>
<tr>
<td>Field Staff</td>
<td>1765</td>
</tr>
<tr>
<td>Patient Encounters Per Month</td>
<td>263,817</td>
</tr>
<tr>
<td>New HIV-positive Women Per Month</td>
<td>23,680</td>
</tr>
</tbody>
</table>

**Total HIV-positive pregnant women enrolled:**

20% of the global disease burden
Helping Mothers
Saving Babies
LINDA’S QUESTIONS

• How you work with PMTCT programs and health facilities/services.
• What are the opportunities, what are the challenges?
• What does m2m do and what does the health service do?
• How does your work contribute to enrolment, adherence, follow up and effectiveness of PMTCT - do you have data on this?
• And if you do, how do you work with other community groups, with families and with men?