

Summary of Key Findings

mothers2mothers Internal Programme Evaluation 2013



July 2014

Department of Programmes and Technical Support
mothers2mothers

An evaluation of the prevention of mother-to-child transmission (PMTCT) through peer education and psychosocial support services in Kenya, Lesotho, Malawi, Swaziland, South Africa, and Uganda in 2012/2013

“Mentor Mothers are better able to help us because they are in our shoes; they understand better what we go through.” – m2m client

2013 Programme Evaluation

The 2013 Programme Evaluation shows an upward trend in healthy maternal and child health behaviours and outcomes among mothers2mothers (m2m) clients since 2011 when m2m began to conduct in depth annual reviews. Comparing 2013 with 2012 alone, the uptake of prevention of mother-to-child (PMTCT) services and client outcomes improved for seven out of fourteen indicators tracked on a quarterly and annual basis by m2m.

They include the percentage of:

- pregnant m2m clients with postnatal (PN) visits
- clients with a second antenatal (AN) m2m visit during pregnancy
- m2m clients who have disclosed their HIV status
- m2m AN clients who took a CD4 test
- m2m AN clients who received their CD4 test result
- pregnant m2m clients receiving any antiretroviral (ARV) drugs or antiretroviral therapy (ART) to reduce mother-to-child transmission of HIV
- infants born to HIV-infected women breastfeeding with ARVs (mother or infant) to reduce risk of HIV transmission during breastfeeding

The other indicators remained constant, with no decrease between 2013, 2012, and 2011.

They include the percentage of:

- m2m clients who delivered in a health facility
- clients with a second m2m visit after delivery
- m2m clients receiving ARVs (ART or ARV to reduce mother-to-child transmission) during delivery
- HIV-exposed infants of m2m clients receiving antiretroviral prophylaxis to reduce the risk of MTCT
- infants who were administered an early infant diagnosis (PCR) test for HIV at 6-8 weeks
- infants who received their PCR test results
- paediatric ART coverage

Perhaps even more noteworthy, the 2013 evaluation reveals that women who saw a Mentor Mother two or more times were significantly more likely to adopt behaviours to improve their health and that of their babies than clients who saw a Mentor Mother only once – showing an association between exposure to Mentor Mothers and maternal and child behavioural and health outcomes. Clients who saw a Mentor Mother two or more times have higher rates of disclosure and exclusive breastfeeding, as well as higher uptake of maternal and infant PMTCT services such as antenatal uptake of ARV/ART for prevention of mother-to-child transmission, and uptake of infant HIV testing for early infant diagnosis.

m2m also compared our in-country performance with national rates. Where comparative statistics are available within countries, m2m clients exceeded key national outcomes reported in the UNAIDS Global AIDS Pandemic report in 2013, including ARV uptake during pregnancy, HIV-exposed infants who received ARV prophylaxis, uptake of cotrimoxazole, early infant diagnosis for HIV, and infant ART uptake.

The following are highlights from our 2013 Programme Evaluation.

m2m's Footprint in 2013

In 2013, m2m operated 348 sites in seven countries: Kenya, Lesotho, Malawi, South Africa, Swaziland, Tanzania, and Uganda. Operations in Tanzania were closed in September, 2013, due to funding constraints. m2m employed 981 HIV-positive women as Mentor Mothers and Site Coordinators. Additionally, m2m provided technical assistance to 250 sites managed by other implementing organisations in Kenya as part of the national Kenya Mentor Mother Program; these sites employed an additional 275 Mentor Mothers. The total number of sites where m2m provided services or supported service delivery in 2013 was 598 and the number of Mentor Mothers employed at those sites was 1,256, compared to 427 and 999, respectively, in 2012.

m2m site staff enrolled 99,450 HIV-positive pregnant women and new mothers, which was seven percent more than the 2013 enrolment target. Mentor Mothers interacted with an even larger proportion of HIV-negative women, particularly when leading group sessions prior to HIV testing. By sharing their experiences of living with HIV, Mentor Mothers are highly effective in communicating the importance of frequent testing, exclusive breastfeeding, and protection against opportunistic infections.

Overall across the countries where we operate, 62% of clients who were enrolled into m2m care during their antenatal period were retained in m2m care into the postnatal period. Retention is a key focus for mothers2mothers as outcomes are optimal for women retained in comprehensive PMTCT services throughout and post-pregnancy. Eighteen percent of all m2m clients had eight or more visits with a Mentor Mother. Of these clients with eight or more visits, almost all (92%) were clients enrolled in m2m care antenatally, and retained in care postnatally.

Maternal Behavioural Outcomes

Disclosure of HIV Status:

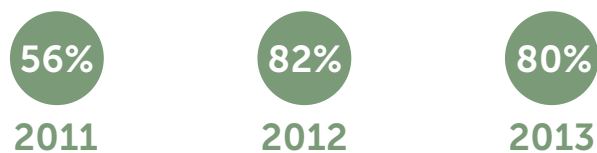
Studies show that disclosure of HIV status increases the likelihood of women taking advantage of prevention of mother-to-child transmission (PMTCT) services. Overall across our country programmes, there was enormous improvement in disclosure rates among m2m clients in 2013 compared to 2012 and 2011.



Infant Feeding:

While replacement feeding (feeding infants with formula) is the only 100% effective way to prevent mother-to-child transmission of HIV after birth, in many parts of the world safe formula feeding is not feasible. This is due to a range of factors, including the high price of formula, unsafe drinking water, and cultural stigma associated with not breastfeeding. Therefore, the World Health Organization recommends that HIV-positive mothers in low and middle-income countries breastfeed exclusively for the first six months of their child's life while simultaneously taking a regimen of antiretroviral drugs to prevent transmission of the virus.

The number of m2m postnatal clients who reported exclusive breastfeeding in 2013 was higher than 2011.



There is a statistically significant association between exposure to m2m services and positive maternal behavioural outcomes. Compared to clients with only one visit with a Mentor Mother, clients with two or more visits were five times more likely to report having disclosed their HIV status, and almost twice as likely to report exclusive breastfeeding up to six months.

Maternal Uptake of PMTCT Services

CD4 Test Results:

CD4 tests, which indicate the stage of an individual's HIV infection, are an important criterion for determining eligibility for ART in countries that have not yet adopted Option B+. On the other hand, in Option B+ countries, all HIV-positive pregnant women are offered lifelong ARV drugs, irrespective of their CD4 count. Overall across countries, excluding Malawi which had implemented Option B+ nationally by 2013, 90% of m2m antenatal clients reported having a CD4 test, an improvement over both 2012 and 2011.



Furthermore, across all m2m sites, significantly more antenatal m2m clients obtained their test results in 2013 (97%) than in 2012 (92%).

ARV uptake during pregnancy:

It is important for HIV-positive women to take ARVs during pregnancy in order to prevent transmitting HIV to their babies in utero. Studies show that 5-10% of women who do not receive ARV prophylaxis during pregnancy transmit the virus to their babies¹. The percentage of m2m clients taking ARVs during pregnancy in 2013 improved over 2011 and 2012. The improvement over 2012 was modest but statistically significant.



National Comparisons: Uptake of ARV/ART antenatally among m2m clients is higher across the board than national rates in the countries where we operate.

| | Nationally* | m2m clients |
|--------------|-------------|-------------|
| Kenya | 53% | 96% |
| Lesotho | 58% | 94% |
| Malawi | 60% | 92% |
| South Africa | 83% | 98% |
| Swaziland | 83% | 94% |
| Uganda | 72% | 97% |

*UNAIDS Report on the Global AIDS Pandemic 2013 ²

ARV uptake during delivery:

This is another important intervention to reduce mother-to-child transmission of HIV. Studies show that when no ARVs are taken during delivery, the mother-to-child transmission rate is between 10-15%³. Across all countries, 95% of m2m antenatal clients reported taking ARVs during delivery – a high level of service uptake maintained when comparing 2012 programme outcomes to 2013 programme outcomes.



Facility delivery:

Pregnant women living with HIV are urged to deliver their babies in health centres as that has been shown to improve the uptake of ARVs during labour for mothers and infants and reduce the risk of maternal and child mortality associated with birth. The number of m2m clients who delivered in health facilities between 2011 and 2013 increased by 14%. Programme performance on this indicator is high, and remained constant from 2012 to 2013.



ARV uptake postnatally:

It is important for mothers living with HIV to take ARVs while breastfeeding to further reduce the risk of mother-to-child transmission of HIV. It is now estimated that half of all new episodes of HIV transmission to children occur during the breastfeeding period when the majority of lactating women are not receiving the prophylaxis necessary to prevent HIV transmission.

UNAIDS reports that in 2012, antiretroviral coverage was substantially lower during the breastfeeding period (49%) than during pregnancy and delivery (62%)⁴. The same trend is observed among m2m clients, although m2m rates are an improvement on global rates. Overall 83% of m2m clients received ARVs postnatally, compared to 95% of m2m clients during pregnancy and delivery. This was higher than the percentage of clients who took ARVs after birth in 2011 and 2012.



A statistically significant association between exposure to Mentor Mothers and uptake of maternal PMTCT services was observed when comparing clients with only one visit with a Mentor Mother to clients with two or more m2m visits. Women who saw a Mentor Mother more than once were almost three times more likely to use PMTCT prophylaxis (ARVs or ART) antenatally.

Infant Uptake of PMTCT Services and Health Outcomes

HIV-exposed infants who received ARV prophylaxis:

It is highly recommended that infants born to HIV-positive mothers receive ARV prophylaxis within the first 24 hours of birth to protect them from infection. Overall across countries, 95% of m2m clients with at least two postnatal visits reported infant uptake of ARV prophylaxis, which was consistent with results in 2012, and higher than in 2011.



National Comparisons: Where comparative statistics are available on the uptake of infant ARV for prevention of mother-to-child transmission (PMTCT), m2m clients greatly outperformed national uptake rates.

| | Nationally* | m2m clients |
|--------------|-------------|-------------|
| Kenya | 57% | 91% |
| Lesotho | not avail. | 96% |
| Malawi | 54% | 95% |
| South Africa | 84% | 99% |
| Swaziland | 69% | 91% |
| Uganda | not avail. | 85% |

*UNAIDS Report on the Global AIDS Pandemic 2013 ⁵

Uptake of Cotrimoxazole:

The drug cotrimoxazole is important in the prevention of opportunistic infection among HIV-exposed infants. In 2006, the World Health Organization recommended that infants born to mothers living with HIV should receive cotrimoxazole prophylaxis starting at four to six weeks of age, or in their first encounter with the healthcare system, and continue to take it until the possibility of HIV infection is excluded. The results show high uptake (86%) of infant Cotrimoxazole among m2m clients with at least two postnatal visits.

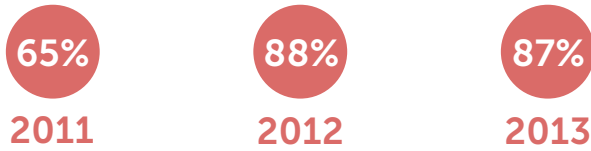
National Comparisons: Uptake of infant cotrimoxazole among m2m clients compares favourably to national rates where available. In Malawi, uptake is substantially higher among m2m clients than reported nationally.

| | Nationally* | m2m clients |
|--------------|-------------|-------------|
| Kenya | not avail. | 88% |
| Lesotho | not avail. | 88% |
| Malawi | 26% | 89% |
| South Africa | 73% | 88% |
| Swaziland | 74% | 76% |
| Uganda | not avail. | 91% |

*UNAIDS Report on the Global AIDS Pandemic 2013 ⁶

Early infant diagnosis (PCR test):

The global failure to expand access to the PCR test, which is the first test done at 6-8 weeks to determine if an HIV-exposed infant is infected with HIV, is an important reason why only three in ten HIV-positive children receive HIV treatment in Global Plan priority countries (UNAIDS, 2013). Overall in 2013, there was high uptake of infant PCR test at 6-8 weeks after birth (87%) among m2m clients with at least two postnatal visits, which was comparable to the outcome in 2012 and higher than 2011.



National Comparisons: In South Africa and Swaziland uptake of infant PCR testing among m2m clients is comparable to national uptake. In Kenya and Malawi, uptake among m2m clients is considerably higher than national rates.

| | Nationally* | m2m clients |
|--------------|-------------|-------------|
| Kenya | 39% | 92% |
| Lesotho | not avail. | 90% |
| Malawi | 4% | 85% |
| South Africa | 85% | 92% |
| Swaziland | 81% | 76% |
| Uganda | not avail. | 96% |

*UNAIDS Report on the Global AIDS Pandemic 2013 ⁷

Second Infant HIV Test at 18 Months:

It is standard protocol across all countries in which m2m operates that HIV-exposed babies receive a second HIV test by the time they are 18 months old. 35% of m2m clients with at least two postnatal visits had their infants given a second HIV test. In addition to retention in care and adherence for HIV-positive women, this is another great area of focus for mothers2mothers and the PMTCT field overall. It is critical that second PCR tests are conducted, and if the infant is HIV-positive, s/he is linked to appropriate care and treatment. National and/or regional data to compare mothers2mothers client outcomes are not available.

Mother-to-child transmission (MTCT) rate:

Mother-to-child transmission rates among m2m clients as measured by the PCR test at 6-8 weeks after birth were lower across countries in 2013



These reductions are likely due to increases in ART uptake among m2m clients in 2013, compared to 2012. In 2013, 62% of m2m antenatal clients who were on ART, commenced ART during pregnancy, compared to 15% in 2012. Not surprising, m2m's Malawi programme showed the greatest decrease in transmission rates, from 4.3% in 2012 to 2.1% in 2013 (a 51% decrease) due to the roll out of Option B+ in Malawi in 2011/2012. In 2013, 71% of m2m antenatal clients were on ART—for their own health, or under Option B+.

Infant ART Uptake:

The World Health Organization 2013 treatment guidelines state that all children under age of 5 who are diagnosed with HIV should begin antiretroviral treatment immediately, regardless of their CD4 count. Yet, according to the 2014 UNAIDS Gap Report, only 24% of the children who could be benefiting from this therapy in low and middle-income countries were receiving it.

Among m2m clients with two or more postnatal m2m visits, 85% of HIV-positive infants were placed on ART for life.

National Comparisons: Uptake of infant ARV among m2m clients compared very well with national uptake.

| | Nationally* | m2m clients |
|--------------|-------------|-------------|
| Kenya | 38% | 75% |
| Lesotho | 25% | 59% |
| Malawi | 36% | 82% |
| South Africa | 63% | 97% |
| Swaziland | 54% | 90% |
| Uganda | 33% | 82% |

*UNAIDS Report on the Global AIDS Pandemic 2013 ⁸

Infants of mothers with two or more m2m visits postnatally were more than twice as likely to take Cotrimoxazole, five time more likely to have a PCR test, and almost four times more likely to receive their PCR test results compared to infants of mothers with only one m2m visit postnatally.

With regard to the mother-to-child transmission rate, infants of mothers with two or more visits with a Mentor Mother were four times more likely to be HIV-negative, compared to infants of mothers who had only one visit with a Mentor Mother (90% vs. 54%). This result is encouraging, but must be interpreted with caution and verified through future evaluations with a stronger design.

PMTCT Cascade

The m2m PMTCT Cascade analysis, which examines how m2m clients enrolled in the programme antenatally and retained in care postnatally adhered to every point of care, shows the success that m2m is having in encouraging clients to adhere to treatment during pregnancy and birth in order to protect their babies from HIV transmission. It also reveals that m2m still needs to improve upon the numbers of babies tested for HIV at both 6 to 8 weeks and again at 18 months, as well as ensuring that women get the results to determine if their babies need treatment for HIV.

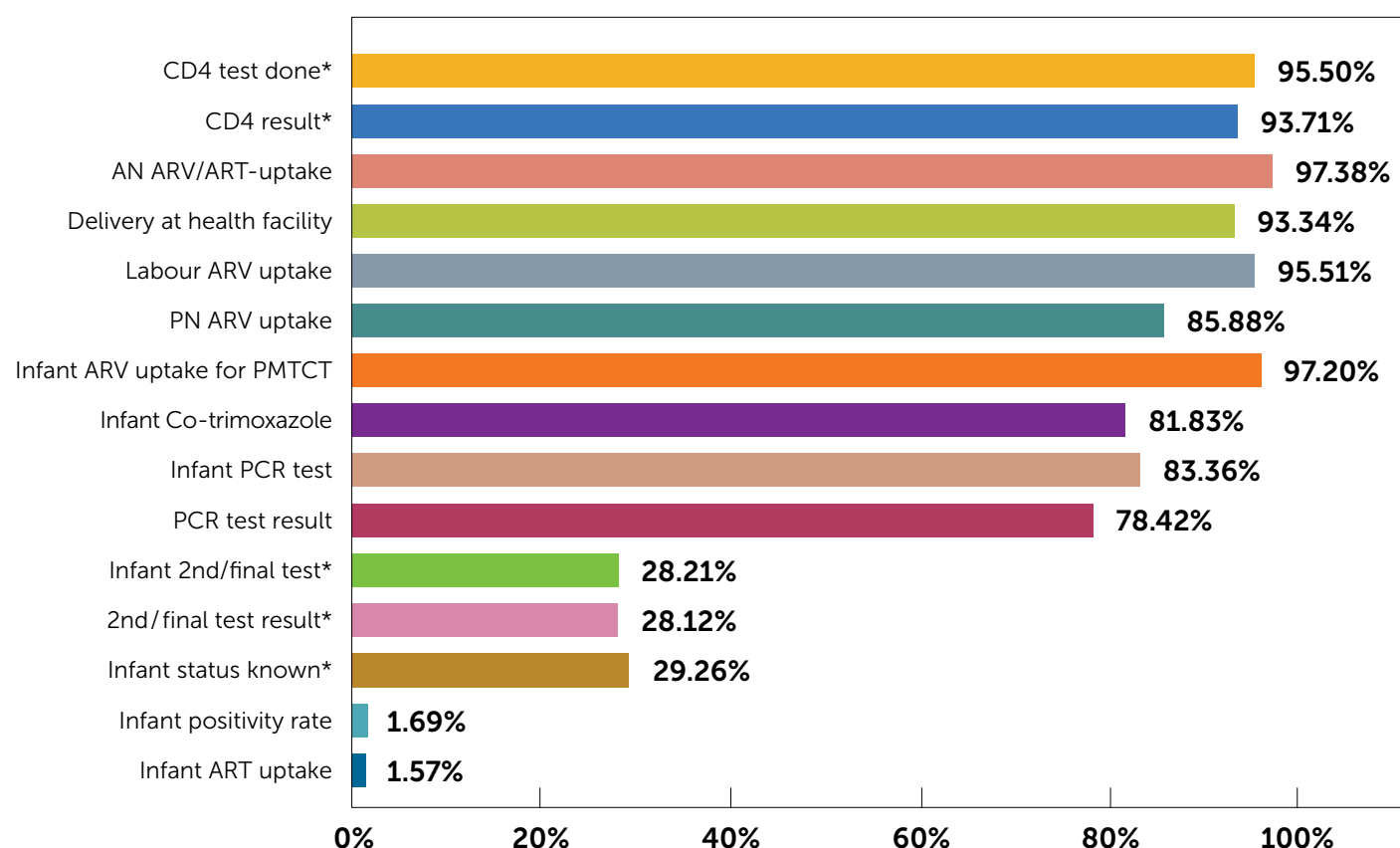
Globally, coverage of early infant diagnosis tests for HIV-exposed infants varies widely, and access of HIV-positive infants to treatment is still inadequate. Overall early infant diagnosis testing rates for infants remain low. Only 39% of children in low- and middle-income countries were estimated to have access to HIV testing within the recommended two months of birth in 2012. This is due in part to the fact that tests to determine HIV infection in children under 18 months must be sent to central laboratories for processing which can delay the results⁹. The failure to expand access to infant HIV testing in resource poor countries is an important reason why HIV treatment coverage remains much lower for children than for adults. In Global Plan priority countries, only three in ten HIV-positive children receive HIV treatment, less than half the rate for adults¹⁰.

On a positive note, diagnostic technologies are advancing rapidly. In the coming years, early infant tests should become available that can be done by nurses and other health workers at lower-level health facilities, without the

need to send them out. Furthermore, WHO guidelines recommend that ART should be initiated and maintained in eligible infants in maternal and child health care settings, as opposed to specialised paediatric HIV clinics or adult HIV clinics as is widely the case now. This should expand access to treatment for HIV-positive infants¹¹.

m2m finds it unacceptable that more HIV-exposed and HIV-positive infants are not receiving the medical care and treatment that is so critical for their health. m2m is committed to making sure that these infants get the care that they need.

Retention in care along the PMTCT Cascade among m2m antenatal and postnatal clients



* excluding Malawi and excluding clients who started ART before pregnancy

Conclusion:

The improvement of maternal and child behaviour and health outcomes among m2m clients between 2011 and 2013 suggests that the two major performance and M&E initiatives that were rolled out across the organisation in 2012 – Active Client Follow up (ACFU) and Strengthening Outcomes by Analysing Results (SOAR) – have been effective. These initiatives enhanced m2m’s ability to follow up with clients to keep them in treatment, collect data, track programme results, identify problems, quickly develop action plans to address them, and link Mentor Mother activities to final health outcomes. The 2013 Annual Evaluation findings demonstrate that clients attending the m2m programme multiple times are more likely to disclose their status and practice exclusive breastfeeding than clients with only one m2m visit. They are also more likely to adhere to maternal and infant PMTCT services if they repeatedly see an m2m Mentor Mother compared to clients with only one visit, including taking ARV or ART during pregnancy to prevent transmitting HIV to their babies, and test their babies for HIV at 6-8 weeks.

m2m is committed to engaging HIV-positive women in care and ensuring that they are retained in care and adhere to their treatments. m2m believes that the newly adopted Enhanced Programme Model (EPM) will strengthen our clients' engagement with the health system. The enhancement is designed to enable m2m to retain more clients in care through the antenatal and postnatal period, providing structure and linkages to across each point of care along the PMTCT cascade. Furthermore, m2m's Community Mentor Mother (CMM) programme, currently being piloted, will enable Mentor Mothers to reach out into the community to engage women in PMTCT and other critical health services, thereby retaining those who might otherwise be lost to care. CMMs are also able follow up with m2m clients—from the healthcare facility into the community and back into healthcare facilities—making sure they continue accessing the medical services so necessary to keeping them and their babies healthy. With the addition of these two new initiatives, m2m looks forward to getting closer to achieving the goals of the Global Plan to end paediatric AIDS and keep mothers alive.

“When you discover that you are [HIV] positive and you are counseled by someone who is [HIV] positive too, you get that motivation and encouragement because you can see that this person is alive, you also tell yourself that you will live too. When the Mentor Mother tells you that she started with a CD4 of nineteen, then you really tell yourself that you will live.” - m2m client

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 3. De Cock KM et al. (2000). Prevention of mother-to-child HIV transmission in resource-poor Countries: translating research into policy and practice. *Journal of the American Medical Association*, 283:1175–1182.
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