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Re-engagement in HIV care among Mothers Living with HIV in South Africa over 36 Months Post-birth

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Summary

PMTCT services are integrated into antenatal care in South Africa, but post-birth care is at HIV clinics. Almost all Mothers Living with HIV (MLH) in 24 township neighborhoods (N=324) reported engagement in HIV care from pregnancy to 36 months post-birth. Less than half re-engaged in HIV care at 6 months (45%), 52.5% at 18 months, and 62.5% at 36 months. Most were prescribed ARVs if reengaged in care, yet only about half (53%) are on ARVs at 36 months post birth. Implementation of Option B+ will require substantially better engagement in care.

In Cape Town, South Africa, 26-30% of pregnant women are infected with HIV. Fortunately, South Africa has broad availability and uptake of HIV testing and ARV therapies during the perinatal period for both mothers and children [1]. The country is planning to implement the B+ protocol which will guarantee all Mothers Living with HIV (MLH) lifelong ARV [2]. The B+ protocol will heighten the importance of maintaining HIV care over time. Services to Prevent-Mother-to-Child-Transmission (PMTCT) are generally integrated into antenatal care. However, following the birth of their child, MLH must re-engage in HIV care at HIV specialty clinics [3]. During pregnancy, about 99% of pregnant women in Cape Town are tested for HIV [4]. While the rates of uptake of tasks to PMTCT are known, it is difficult to estimate how many new MLH transition to HIV care post birth. In trials evaluating PMTCT the loss to follow-up ranges from 19% to 89% [5]. Loss to follow-up among adults in Johannesburg indicate that 30% are disengaged from care by 12 months [6]. This article summarizes MLH's reports of their re-engagement in care over the 36 months following their children's birth, suggesting the scope of the challenge service providers face in implementing B+ protocols.

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Trial Registration. ClinicalTrials.gov registration # NCT00972699

No Conflicts of Interest are declared.

The data on MLH's re-engagement in care were gathered in the context of a cluster randomized controlled trial (RCT) in 24 township neighborhoods [7]. No intervention effects were observed on any measure of re-engagement in care and, therefore, the RCT is not described in this brief report. Other papers summarize the maternal and child outcomes from this RCT [4,8]. The Institutional Review Boards of University of California Los Angeles, Stellenbosch University, and Emory University approved the study [ClinicalTrials.gov (NCT00996528)].

Neighborhood clusters (N=24) of 450-600 households were matched outside Cape Town, and 98% of pregnant women were recruited from May 2009 to September 2010 at an average 26 weeks of pregnancy (range, 3–40 weeks).

We assessed 1238 women at baseline. Follow-up assessments were conducted at two weeks post-birth (92%; mean=1.9 weeks; SD=2.1 weeks; median=1.1; range=0.1-14.9); six months (88%; mean=6.2 months, SD=0.7; median=6.0; range=4.2-11.7); 18 months (84%; mean=19.1 months; SD=3.0; median=18.0; range=13.6-34.4); and 36 months (86%; mean = 37.3 months; median =37; SD = 2.2 months; range = 34 to 42 months). All assessments were completed by 72% of mothers.

MLH were on average about 26 years old, with about a 10^{th} grade education, and 18.8% were employed [4]. More than half (56%) were living with a partner, although 89% had recent sexual partners. Most mothers lived in informal housing (shacks, 68.7%), 53.3% had water, 55.2% had a toilet, and 89.8% had electricity on their premises. Almost half the mothers (49.5%) and 29.1% of their children had gone hungry in the last week. Most mothers had previously had children (65.9%) and 76.9% had attended an antenatal clinic at the time of recruitment. Among non-primiparous mothers, 15.9% had previously had a low birth weight infant (<2500 grams).

Almost all women had been tested for HIV (99.2%). At recruitment, 26.2% (n=324) of women were HIV seropositive, with 92% learning of their serostatus during this pregnancy at the antenatal clinic. Information regarding HIV status was self-reported and was able to be validated post-birth on the child's government issued Road to Health card which documents maternal HIV status, as well as clinic visits and hospitalizations. Information on linkage and retention in HIV care and ARV utilization was only obtained by maternal self-reports. At completed follow-up assessments, some MLH did not report HIV-related clinic utilization, even though they reported other aspects of their health status and care utilization.

By 36 months post birth, 13 MLH had died, 23 of their children (6.2%) children were seropositive, and an additional 47 mothers identified themselves as HIV seropositive. Almost all MLH (93%; 279/300) had received antenatal care and PMTCT, as previously reported [4]. By six months post-birth 45% of MLH (126/278) had sought care at an HIV clinic and 70.6% of these MLH (89/126) had been prescribed ARV (32% of the overall MLH [89/278]). At 18 months, 52.5% (147/280) had sought HIV care; 89% of these were receiving ARV (46% of the overall MLH [130/280]). At 36 months, 62.5% (n=165/264) were receiving HIV care, with 85% of these receiving ARV (140/165). Only 31% of MLH had been linked to HIV care at the 6, 18, and 36 month assessments (86/280). From 18-36

months, 43% (119/275) had been receiving care. Among surviving MLH, 53% are receiving ARV at 36 months following their children's birth.

These are disturbing data, given the broad accessibility of ARV in the Western Cape of South Africa and the relatively high quality of medical care in the region. B+ regimens may improve re-engagement, but the poor follow-up rates in PMTCT trials [5], the failure to integrate HIV into primary health care clinics in Africa, and HIV stigma (which may be responsible for this study's missing self-reports) must be anticipated.

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