**IMPACT OF INTERVENTIONS ON THE UPTAKE OF ANTIRETROVIRAL THERAPY BEFORE PREGNANCY AND PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV - FINDINGS FROM FOUR SCALE-UP LOCAL GOVERNMENT AREAS OF LAGOS, NIGERIA**

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The Option B-Plus strategy recommends lifelong antiretroviral therapy (ART) for all pregnant women with the premise that this will serve to protect the current and future babies from acquiring HIV infection amidst other reasons. Being on ART before a new pregnancy is important for suppressing viral replication thereby preventing mother to child transmission of HIV (MTCT). In 2015, there were 400 new HIV infections among children in Nigeria daily. This abstract describes the impact of interventions on ART uptake before pregnancy and PMTCT.

**BACKGROUND**

Our findings show that there was a three-fold increase in proportion of pregnant women receiving ART prior to first ANC post intervention. This was accompanied with a drop in HIV-positivity rates among HEIs, though not statistically significant. These findings suggest that efforts to increase uptake of antiretroviral among HIV-positive women of reproductive age, will not only benefit individuals but may also contribute to reducing new paediatric HIV infections.

**METHODS**

We conducted a pre- and post- intervention analysis of uptake of ART before index pregnancy across health facilities in 4 scale-up Local Government Areas (LGA) in Lagos state, Nigeria. Between October 2015 and September 2017, under the USAID-funded Strengthening the Integrated Delivery of HIV/AIDS (SIDHAS) project implemented large-scale strategic community testing and strengthened provider-initiated testing and counselling (PITC) at hospitals in these LGAs. In April 2016, implementation of the option B plus and treat-all policy was commenced across these LGAs, with the advent of the new national guidelines. We selected six months before (April 2015-September 2015) and after (October 2017-March 2018) this intervention period for our analysis. Our main outcome indicators were the percentage of women with previously known HIV-positive status or on ART at antenatal care (ANC) booking and positivity rate for DNA-PCR among HIV exposed infants (HEI). Data was extracted from District Health Information System (DHIS) and descriptive analysis done using STATA.

**RESULTS**

Before the intervention, 4,628 pregnant women were tested at first ANC visit compared to 8,674 after the intervention. Of the 148 and 175 pregnant women who tested positive to HIV pre- and post-intervention, 24% and 71% knew their HIV-positive status before ANC booking, respectively. HIV positive women on ART prior to ANC booking increased from 20% of total positive(n=30) pre-intervention to 66% (n=115) post-intervention (p<0.001). DNA-PCR results for HEI under 2 months showed 2 of 134 were positive pre- while none of the 165 results was positive post-intervention (p>0.1).

<table>
<thead>
<tr>
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<th>Pre-intervention</th>
<th>Post-intervention</th>
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<tbody>
<tr>
<td>Pregnant women tested at first ANC</td>
<td>4,628</td>
<td>8,674</td>
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<tr>
<td>HIV positive pregnant women</td>
<td>148</td>
<td>175</td>
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<tr>
<td>% on ART prior to ANC booking</td>
<td>20%</td>
<td>66%</td>
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<tr>
<td>MTCT rate at 2 months - (DNA PCR determined)</td>
<td>1.5%</td>
<td>0%</td>
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We implemented a mix of:

- **Community HIV testing & facilitated referrals**
- **In-facility provider initiated counseling & testing**

**CONCLUSION**

Our findings show that there was a three-fold increase in proportion of pregnant women receiving ART prior to first ANC post intervention. This was accompanied with a drop in HIV-positivity rates among HEIs, though not statistically significant. These findings suggest that efforts to increase uptake of antiretroviral among HIV-positive women of reproductive age, will not only benefit individuals but may also contribute to reducing new paediatric HIV infections.