VIRAL LOAD AFTER ART INITIATION AMONG WOMEN IN A PMTCT B+ PROGRAMME IN ZIMBABWE

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BACKGROUND

• The WHO 2013 guidelines-all HIV-infected pregnant and breastfeeding women take ART to prevent mother-to-child transmission (PMTCT B+).

• Routine VL monitoring adopted in Zimbabwe allowing for timely monitoring of PMTCT B+ women initiated on ART.

• A high viral load (VL) (>1000 copies/ml) is associated with higher rates of MTCT.
PMTCT B+

- All HIV positive (pregnant/breastfeeding)
- At first contact/Rapid initiation
- For life
- For mother and child
Setting

Gutu District,
Masvingo Province
Population: 203,533
HIV Prevalence: 14.5%

Buhera District,
Manicaland Province
Population: 257,318
HIV Prevalence: 15.7%
Testing and ART initiation coverage in Antenatal Clinic

Buhera: 100% Tested antenatally, 99% Initiated antenatally
Gutu: 100% Tested antenatally, 96% Initiated antenatally

Legend:
- % Tested antenatally
- % Initiated antenatally
Viral Load Algorithm

**Frequency of Viral Load Monitoring:**
- Month 3, then yearly for all on ART;
- CD4 monitoring stopped; Triggered CD4 if VL > 1000 copies/ml

**PMTCT B+**
- As above
- *Then every 6 months instead of annually*

**Women already on ART who fall pregnant**
- *Every 6 months*

**Threshold for action**
- 1000 copies/ml, (counselling and switch)
OBJECTIVE AND METHODOLOGY

OBJECTIVE: To determine:
• Retention of women initiated on ART in PMTCT
• % of PMTCT B+ women with a VL >1000 copies /ml at 3 months and associated risk factors
• % of women already on ART who get pregnant, with a VL >1000 copies/ml

METHODOLOGY
• Laboratory and routine cohort records of women aged 15 to 45 years having routine VL testing done.
• Logistic regression was used to determine factors associated with a VL >1000 copies/ml.
FINDINGS: Retention

RETENTION IN CARE

% in care

Time in Months

Pregnant at ART initiation
Not pregnant at ART initiation
Category of women at enrolment

TOTAL = 9225 women

NUMBER OF PATIENTS BY CATEGORY

- Pregnant: 454
- Breastfeeding: 1083
- Neither pregnant nor breastfeeding: 7688

TOTAL = 9225 women
## FINDINGS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>PMTCT B+ women</th>
<th>Non PMTCT B+ women</th>
<th>PREGNANT while on ART</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Pregnant n=454</td>
<td>Breastfeeding n=1083</td>
<td>n=7688</td>
</tr>
<tr>
<td>Median Age (years)</td>
<td>31 (IQR 26-35)</td>
<td>36 (IQR: 30 – 40)</td>
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<tr>
<td>Median Period on ART (months)</td>
<td>12 (IQR: 3 – 35)</td>
<td>27 (IQR: 12 – 42)</td>
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<tr>
<td>Viral Load Suppression at 3 months on ART</td>
<td>Pregnant 88 %</td>
<td>85%</td>
<td>85%</td>
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<tr>
<td></td>
<td>Breastfeeding 89%</td>
<td></td>
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Risk of non suppression was similar for women in the PMTCT programme and for women not in the programme.

<table>
<thead>
<tr>
<th></th>
<th>Relative risk</th>
<th>Confidence Interval (95%)</th>
<th>P value</th>
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<tbody>
<tr>
<td>pregnant</td>
<td>0.84</td>
<td>0.66 – 1.07</td>
<td>0.153</td>
</tr>
<tr>
<td>breastfeeding</td>
<td>0.90</td>
<td>0.77 – 1.05</td>
<td>0.181</td>
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• Risk of non-suppression was related to age: suppression was less likely among those aged 15 – 25 years and those aged 25 – 35, compared to >35 years.

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>Risk Ratio (aR.R)</th>
<th>Confidence Interval (95%)</th>
<th>P value</th>
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<tr>
<td>15-25 years</td>
<td>1.63</td>
<td>1.39 – 1.90</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>25-35 years</td>
<td>1.21</td>
<td>1.08 – 1.35</td>
<td>0.001</td>
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CONCLUSION

- Retention of women started on ART remains a challenge.

- For those remaining in care, no difference in VL outcomes compared to those who are not in PMTCT B+ programme.

- A significant number of women failed to suppress their VL within 3 months of starting ART, putting their infants at ongoing risk of HIV infection.
RECOMMENDATIONS

- Increased support is needed for counseling at ART initiation and during the first months on ART.
- Furthermore, adapted counseling needed particularly among younger women.
- Guidance needed on optimal timing and frequency of VL testing for women in PMTCT programmes.