Viral load suppression among pregnant woman presenting on ART in antenatal care; Chiredzi District Zimbabwe

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Southern African HIV Clinicians Conference
24-27 October 2018, Johannesburg SA
Conflict of interest

• None to declare
• Women conceiving on ART are presumed to be **virally suppressed**, thus at minimal risk of vertical HIV transmission

• There is limited data on viral load (VL) suppression in pregnancy, among women conceiving on ART in our setting

• Few studies have assessed the proportion of HIV-positive pregnant women (PW) virally suppressed at ANC booking
Objectives

We conducted an assessment:

1. To determine the proportion of HIV infected pregnant women on ART virally suppressed during 1st ANC visit
Methodology

• Implementation research
• Convenient sampling of 3 study sites in Chiredzi district
• Retrospective data *(Apr-Dec 2017)* collection done in Apr 2018
• Routine data sources – ANC register, patient cards, ART register, & electronic records
Viral load monitoring algorithm for PBW

VL anytime when suspicion of clinical or immunological failure

Viral Load:
ANC booking; regardless of ART status

Viral Load:
32 – 36 weeks GA, there-after

Viral Load:
24 weeks post delivery
Results

- 61% of HIV infected PW presented already knowing their status; of these
  ✓ 4% were not on ART
- First line ART (TDF+3TC+EFV)
- 78% of women already on ART at ANC booking had a suppressed VL (<1000 copies/ml)
## VL suppression amongst those on ART disaggregated by: timing of VL test

<table>
<thead>
<tr>
<th>VL test timing in relation to ART initiation</th>
<th>Total</th>
<th>Suppressed VL (&lt;1000 copies/ml)</th>
<th>Unsuppressed VL (≥1000 copies/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>7-12 months</td>
<td>6</td>
<td>4</td>
<td>2 (33%)</td>
</tr>
<tr>
<td>13-24 months</td>
<td>6</td>
<td>4</td>
<td>2 (33%)</td>
</tr>
<tr>
<td>&gt; 24 months</td>
<td>30</td>
<td>23</td>
<td>7 (23%)</td>
</tr>
<tr>
<td>No dates</td>
<td>12</td>
<td>10</td>
<td>2 (17%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>47</strong></td>
<td><strong>13 (22%)</strong></td>
</tr>
</tbody>
</table>
Characteristics of PW with unsuppressed VL: disaggregated by age

The chi-square statistic is 9.5893. The p-value is .047945. The result is significant at p < .05.
Characteristics of PW with unsuppressed VL: disaggregated by parity

The chi-square statistic is 10.4599. The p-value is .005354. The result is significant at p < .05.
Characteristics of PW with unsuppressed VL: disaggregated by timing of ANC booking

The chi-square statistic is 4.2155. The p-value is .121511. The result is not significant at p < .05.
Study Limitations

- Assessment done using routine data hence
  - Incomplete data
  - Missing patient records

- Purposive sampling of high volume sites in one district, hence findings can not be generalized
Conclusion

• Our study found 78% VL suppression among PW already on ART at first ANC visit (84% VL in general population – ZIMPHIA 2016)

• More (beyond current guidelines) needs to be done to suppress VL by the time of delivery and reduce vertical HIV transmission risk

• Achieving eMTCT will require effective identification and clinical management of women at high risk of vertical transmission
Acknowledgements

THANK YOU!