Evaluation of a dedicated postnatal contraception clinic for women living with HIV: 5 years post-implementation

Samuel M1, Mabonga E2, Nabaggala M-S3, Sullivan V1, Taylor C1
1 Kings College Hospital, 2 Lewisham & Greenwich NHS Trust, 3Infectious Disease Institute

Background
Prevention of unplanned pregnancies is the second of the World Health Organisation’s (WHO) four element strategy for perinatal HIV prevention (Figure 1). A model undertaken in 2008 projected that current contraceptive use at that time may already be preventing more than 220,000 HIV-positive births per year in countries hardest hit by the HIV epidemic.2

The Third National Survey of Sexual Attitudes and Lifestyles (NATSAL 3) found 16% of pregnancies in the UK were unplanned, of which 57% ended in abortion. Selected studies suggest that 51-91% of pregnancies in women living with HIV (WLWH) are unplanned. Unplanned pregnancies are associated with poor maternal and neonatal outcomes.

The postnatal period is an opportune time to implement effective contraception, and is recommended by the Faculty of Reproductive and Sexual Health and the WHO. A doctor-led dedicated postnatal contraception clinic was set up in July 2013 at our service. An initial review at two years found an increase in all contraception uptake with nearly a 50% increase in long-acting reversible contraception (LARC).

Following this demonstrate, improvement midwives were encouraged to routinely book patients into the postnatal contraception clinic on the same day as booking other routine post-partum appointments. In addition the doctor who conducted the clinic would confirm attendance by phone-call (Figure 2).

Aim
To evaluate the dedicated postnatal contraception clinic five and a half years following implementation to assess if this increase in uptake of contraception has been maintained.

Methods
This was a retrospective case note review of women attending for HIV antenatal clinic (ANC) at the Caldecot Centre, King’s College Hospital between January 2016 to December 2018 (a 24 month period), five and a half years following the implementation of the dedicated postnatal contraception clinic.

Data was obtained on planning of pregnancy, contraception advice and uptake of contraception methods, to be compared with a 35 month period prior to establishment of the clinic (September 2009 – July 2012) and a 24 month period just after the establishment of the clinic (July 2013 – June 2015).

Data was analysed with SPSS v22. Chi-square was used to compare percentages between the time periods.

Results
There were 94 pregnancies in 85 women. 77 (91%) were of black ethnicity; median age 36 years; 69 (81%) partner negative or of unknown HIV status; 29 (34%) had a history of a TOP. Of the pregnancies 48 (51%) of pregnancies were unplanned. 74 of the 94 pregnancies had a live birth outcome at the hospital of which 58 attended post-partum. 16 (17%) pregnancy outcomes were miscarriage which reflects the general population.

Table 2 demonstrates the comparison of contraception discussion and provision prior to setting up the clinic and the two 24 month time periods following the establishment of the clinic.

In a sub analysis of 58 patients that attended the dedicated postnatal clinic 35 (60%) took up a LARC method.

Table 1: Characteristics of the women in the 3 time periods

<table>
<thead>
<tr>
<th>Material characteristics</th>
<th>Pre-intervention 123 women (%)</th>
<th>Post-intervention 120 women (%)</th>
<th>5 years Post-Intervention 85 women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>Black</td>
<td>115 (93.5)</td>
<td>109 (91.0)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>13 (10.7)</td>
<td>15 (12.5)</td>
</tr>
<tr>
<td>Median age</td>
<td>33</td>
<td>35 (28.5)</td>
<td>34 (28.3)</td>
</tr>
<tr>
<td>Mode of HIV acquisition</td>
<td>Hemorrhoidal</td>
<td>332 (97.6)</td>
<td>335 (94.8)</td>
</tr>
<tr>
<td></td>
<td>Vertical</td>
<td>1 (0.7)</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td></td>
<td>Vertical</td>
<td>1 (0.7)</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>43 (31.0)</td>
<td>29 (24.8)</td>
</tr>
<tr>
<td>Timing of diagnosis</td>
<td>Know HIV via care</td>
<td>101 (74.0)</td>
<td>86 (68.3)</td>
</tr>
<tr>
<td></td>
<td>HIV diagnosed this pregnancy</td>
<td>100 (77.9)</td>
<td>85 (69.5)</td>
</tr>
</tbody>
</table>

Discussion
This evaluation has demonstrated a sustained and significant increase in uptake of contraception from 36% pre-intervention to 76% five and a half year post clinic implementation.

Increased uptake is a reflection of the strong working partnerships established with the HIV midwifery team.

All women who attended the dedicated postnatal contraception clinic left with a contraception method, the majority (45%) with an intrauterine technique.

Just over 50% of pregnancies were unplanned; a dedicated service led by appropriately trained staff with an understanding of antiretroviral therapy presents an excellent intervention to address contraception access and provision for WLWH.

As HIV and Sexual Health Services become increasingly fragmented due to changes in commissioning, there needs to be effective cross disciplinary-working to provide effective contraception for WLWH.

References:

Figure 1: Four-element strategy for perinatal HIV prevention

Element 1: Prevention of HIV in women, especially young women
Element 2: Prevention of unintended pregnancies in HIV-infected women
Element 3: Prevention of transmission from pea to HIV-infected woman to her infant
Element 4: Support for mother and family

Figure 2: The Intervention

Antenatal period
Future contraception discussion
Leaflet/ information provided for chosen method

Postnatal Contraception Clinic

Midwife books appointment for mum at 6 weeks
The morning of the appointment the doctor had a telephone consultation with mum

Postnatal 6 week follow-up
Mother attends for review
Babes 2nd blood test
Contraception offered +/- provided

Table 2: Discussion and uptake of contraception over the 3 time periods

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention 2012 (35 months)</th>
<th>Post-intervention 2015 (24 months)</th>
<th>5 years post-intervention 2018 (24 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraception discussion</td>
<td>60/140 (41%)</td>
<td>58/77 (75%)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Attendance 6 weeks postpartum</td>
<td>123/140 (88%)</td>
<td>68/77 (88%)</td>
<td>0.54</td>
</tr>
<tr>
<td>Uptake all contraception</td>
<td>44/123 (36%)</td>
<td>34/68 (50%)</td>
<td>0.055</td>
</tr>
<tr>
<td>Uptake LARC</td>
<td>21/123 (17%)</td>
<td>22/68 (32%)</td>
<td>0.015</td>
</tr>
<tr>
<td>Uptake IUD/SIUS</td>
<td>11/123 (9%)</td>
<td>18/68 (26%)</td>
<td>0.001</td>
</tr>
<tr>
<td>Uptake implant</td>
<td>0/123 (0%)</td>
<td>1/68 (1%)</td>
<td>0.356</td>
</tr>
</tbody>
</table>

Conclusion

When women who attended the dedicated postnatal contraception clinic left with a contraception method, the majority (45%) with an intrauterine technique. Just over 50% of pregnancies were unplanned; a dedicated service led by appropriately trained staff with an understanding of antiretroviral therapy presents an excellent intervention to address contraception access and provision for WLWH.

As HIV and Sexual Health Services become increasingly fragmented due to changes in commissioning, there needs to be effective cross disciplinary-working to provide effective contraception for WLWH.

References: