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

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Background

Prevention of unplanned pregnancies is the second of the World Health Organisation's (WHO) four element strategy for perinatal HIV prevention (Figure 1).[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)[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 demonstrable 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).

Figure 1: Four-element strategy for perinatal HIV prevention

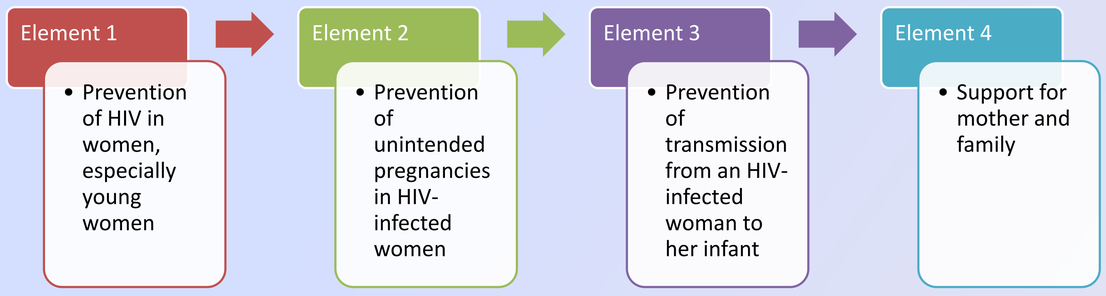
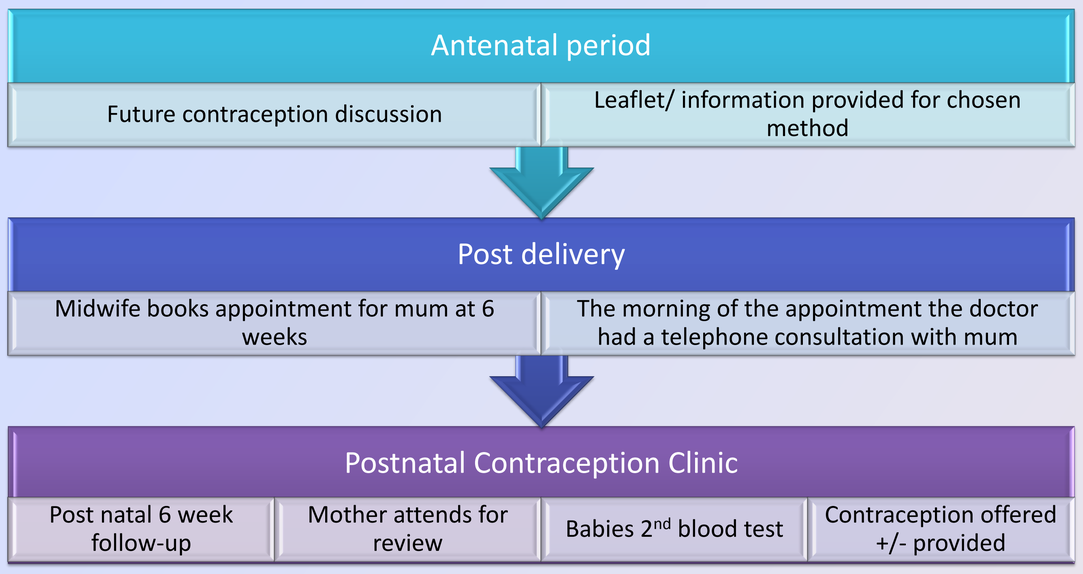


Figure 2: The Intervention



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 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

Maternal characteristics		Pre-intervention 135 women (%)	Post-intervention 102 women (%)	5 years Post-intervention 85 women (%)
Ethnicity	Black	116 (85.9)	90 (88.2)	77 (91)
	Other	19 (14.1)	12 (11.8)	8 (9)
Median age		33	34	36
Mode of HIV acquisition	Heterosexual	132 (97.8)	98 (98)	84 (98.9)
	Vertical	1 (0.7)	1 (1)	0 (0)
	IVDU	2 (1.5)	1 (1)	1 (1.1)
Sero-status of partner	Negative	54 (40)	48 (47.1)	34 (40)
	Positive	38 (28.2)	25 (24.5)	16 (19.8)
	Unknown	43 (31.8)	29 (28.4)	35 (41.2)
Timing of diagnosis	Known HIV +ve in care	101 (74.8)	84 (84.3)	81 (95.3)
	HIV diagnosed this pregnancy	34 (25.2)	16 (15.7)	4 (4.7)
Previous history of TOP		29 (25)	34 (38)	29 (34)

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

	Pre-intervention Sep 2009 – July 2012 (35 months)	Post-intervention July 2013 – June 2015 (24 months)	p-value	5 years post-intervention Jan 2016 – Dec 2018 (24 months)	p-value
Contraception discussion	60/140 (41%)	58/77 (75%)	<0.0001	60/74 (81%)	<0.0001
Attended 6 weeks postpartum	123/140 (88%)	68/77 (88%)	0.554	58/74 (78%)	0.125
Uptake all contraception	44/123 (36%)	34/68 (50%)	0.055	45/58 (76%)	<0.0001
Uptake LARC	**21/123 (17%)**	**22/68 (32%)**	**0.015**	**35/58 (60%)**	**<0.0001**
Uptake IUD/IUS	**11/123 (9%)**	**18/68 (26%)**	**0.001**	**27/58 (47%)**	**<0.0001**
Uptake Implant	0/123 (0)	1/68 (1%)	0.356	4/58 (7%)	0.006

Conclusion

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 contraceptive 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:

1. Wilcher R, Cates W. Reproductive choices for women with HIV. *Bull World Health Organ* 2009; 87:833–839.
2. Reynolds et al. Contraception to prevent HIV-positive births: current contribution and potential cost savings in PEPFAR countries. *Sex Transm Infect 2008*; Oct;84 Suppl 2:ii49-53. doi: 10.1136/sti.2008.030049
3. Wellings et al 2013. The prevalence of unplanned pregnancy and associated factors in Britain: findings from the third National survey of Sexual Attitudes and Lifestyles (Natsal-3). *The Lancet* Vol 382 November 2013 pp 1807-1816.
4. Sutton, M et al. 2014. Unplanned pregnancies among HIV infected women in care- United States. *Journal of acquired immune deficiency syndromes.* Volume 65, Number 3 pp350-358.
5. Loutfy, MR et al. 2012. High prevalence of unintended pregnancies in HIV-positive women of reproductive age in Ontario, Canada: a retrospective study. *HIV medicine 13, 107-117*
6. Elgalib A et al 2011. Pregnancy in HIV-infected teenagers in London. *HIV medicine 12 118-123.*
7. Kenny J et al 2012. .Pregnancy outcomes in adolescents in the UK and Ireland growing up with HIV. *HIV Medicine. 13, 304-308*