

Pregnancy outcomes in women growing up with HIV acquired perinatally or in early childhood

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Introduction

- An increasing number of pregnancies are being reported in the first generation of young women infected with HIV perinatally or in early childhood who have survived to childbearing age.
- There is very little published data on fertility and pregnancy outcomes in this population in the UK.
- HYPNet is a multidisciplinary network of adult and paediatric healthcare professionals and voluntary sector representatives working with young people living with HIV infection in the UK. Focus of the network includes the development of transitional care services and long term follow up and outcomes for this group.
- On behalf of the HYPNet we present multi-centre audit data on pregnancy outcomes in young women with HIV infected perinatally or in early childhood.

Methods

- Audit registered with Imperial NHS Healthcare Trust.
- Questionnaire sent to 19 participating centres networked to HYPNet in the UK and Ireland.
- Retrospective case notes review of women infected with HIV perinatally or in early childhood who had previously reported a pregnancy.
- Demographic, clinical, immunological, virological, and social data obtained. Completed questionnaires returned: data stored on Excel and analysed.

Results

- 172 young women aged 12+ yrs were reported to be under follow up in the 19 participating centres spanning England, Ireland and Wales.
- 36 pregnancies were reported in 27 of 172 women in follow up (15.6%).
- 19 (70%) were black African, 5 (19%) Caucasian and 3 other ethnicities.
- 14 of the 27 women (56%) had previous AIDS defining diagnoses.
- Median age at first pregnancy was 18 yrs (range 14-29 yrs).
- 18 women (67%) had involvement with social services.

Of the 36 reported pregnancies:

- 27 (75%) were unplanned.
- 31 (86%) involved regular partners.
- 22 (61%) partners were aware of the woman's HIV diagnosis.

Table 1 – Characteristics of the 15 young women who had one or more live born infants

Patient	Ethnicity	Age at Delivery	Prior AIDS diagnosis	Previous ART regimes	On HAART at conception	CD4 count at conception / delivery	VL at conception / delivery	Mode of delivery
1	BA	18	YES	7	NO	60 / 140	76216 / 200	ELCS
2	C	16	YES	6	NO	40 / NK	86910 / <50	EMCS
3	C	17	YES	7	YES	320 / NK	97 / <50	ELCS
4	BA	19	YES	5	YES	180 / NK	87 / 300	ELCS
5	BA	21	YES	2	NO	15 / 117	3963 / <50	ELCS
6	C	20	YES	3	NO	330 / 252	30,469 / 282	SVD
7	BA	29	YES	5	NO	40 / 54	588419 / 588844	ELCS
8	BA	17	YES	0	NO	340 / 340	<50 / <50	SVD
9	BA	14	NO	0	NO	64 / 110	66100 / 39400	ELCS
10	C	18	YES	10	YES	339 / 274	11200 / 79	ELCS
11	BA	16	YES	2	YES	290 / 180	<40 / 108	ELCS
12	BA	16	NO	0	NO	236 / 364	3344 / <50	EMCS
13	BA	18	NO	3	NO	266 / 350	99900 / <50	EMCS
14	BA	19	YES	5	YES	228 / 415	28795 / <50	ELCS
15	BA	16	NO	MULTIPLE	NO	520 / 27%	20000 / 7000	EMCS

Abbreviations: BA = Black African, C = Caucasian, NK = not known, VL = viral load, ELCS = Elective Caesarean Section, EMCS = Emergency Caesarean Section, SVD = spontaneous vaginal delivery

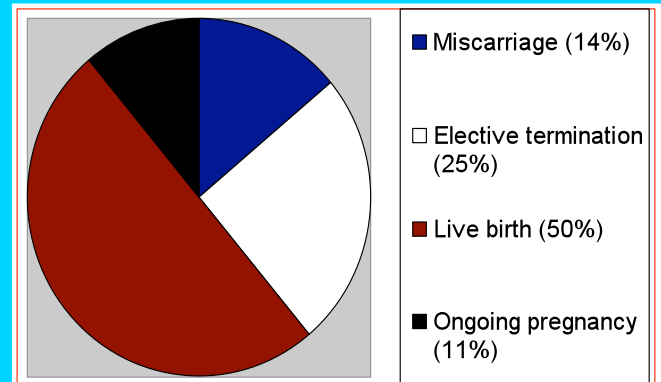


Figure 1 - Outcome of the 36 reported pregnancies

Of the 18 live births in 15 mothers:

- At delivery, in 16 of the 18 pregnancies (89%) the mothers were on HAART with a median CD4 count of 252 cells/ul (range 54-437), median viral load 79 c/ml (range < 50 to 588,844).
- In 8 of the 18 pregnancies (44%) mothers achieved an HIV viral load of <50 copies/ml prior to delivery.
- 6 of the 18 infants (33%) delivered prematurely at <37/40, five of whom required Neonatal Intensive Care.
- Initial HIV PCRs were negative for all infants.
- 5 of the 18 infants (28%) are fostered and 3 have ongoing developmental concerns.
- No congenital anomalies were reported.

Table 2 – Maternal characteristics and infant outcomes

	Yes	No	Not known
Maternal characteristics (15 women)			
Mental health diagnosis	4	11	
Involvement of social services	12	2	1
Dual or triple class resistance	5	9	1
Poor adherence to HAART in pregnancy	12	3	
Required Directed Observed Therapy	2	13	
Infant outcomes (18 infants)			
Premature delivery (<37/40)	6	11	1
Child fostered after birth	5	13	
Birth weight <2 nd centile for gestational age	3	11	4

Conclusions

- The majority of the young women in this cohort had unplanned pregnancies despite access to sexual health education.
- Treatment adherence and virological control was sub-optimal during pregnancy.
- One-third of the infants were born prematurely.
- Two-thirds of the young mothers had complex social needs with one quarter of their offspring requiring foster care.
- However reassuringly all infants are HIV uninfected to date.

- References**
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